WWW.MILL-MAX.COM



MAXIMUM RELIABILITY

Quality and engineering support would be meaningless if Mill-Max could not deliver your components on schedule. We work hard to ensure that the integrity of both your products and your schedule will never be compromised.

Mill-Max maintains the largest inventory of stock products in North America to ensure our ability to fill orders rapidly and consistently. The expansive scale of our manufacturing operations ensures that we can meet the requirements of custom component runs quickly, efficiently and on time.

"We found knowledgeable people with a good understanding of quality control – if we have a problem they respond right away."

–Senior Quality Engineer, Energy & Water Metering Equipment

MAXIMUM SERVICE

Call on Mill-Max and you will find that we will do everything possible to make your job easier. Our newly designed website features the most robust and easy-to-use product search engine in the industry. Responsive customer service and technical support are company hallmarks, and we specialize in quick turnaround quotes, one-hour order confirmation, on-time delivery, free samples and fast prototyping.

Put Mill-Max to the test and see how hard we will work to satisfy your needs. Mill-Max products are sold directly through our sales representative organizations as well as a network of 25 authorized distributors in the U.S. and throughout the world. Maximum satisfaction: it is both our policy and our promise.

"When they make a promise, they keep that promise... when they say they will deliver, I know I can count on it."

–Senior Purchasing Specialist, CATV/Broadband Equipment Manufacturer

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

TABLE OF CONTENTS



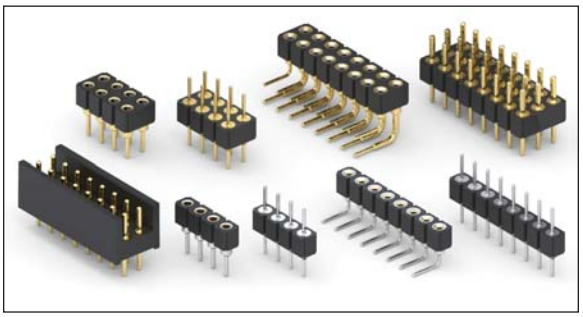
SPRING-LOADED CONNECTORS..... PAGES 4-22

- Introduction ..... Pages 4 - 5
- Surface Mount (.100" Grid) ..... Pages 6 - 9 and 12
- Horizontal Surface Mount (.100" Grid) ..... Page 10
- Surface Mount with Alignment Pins (.100" Grid) ..... Page 11
- Through-Hole Mount (.100" Grid) ..... Pages 13 - 15
- Right Angle Mount (.100" Grid) ..... Page 16
- Soldercup Header (.100" Grid) ..... Page 17
- Surface Mount & Through-Hole Mount (.050" Grid) ..... Pages 18 - 19
- Target Connectors for Spring-Loaded Assemblies ..... Pages 20 - 22



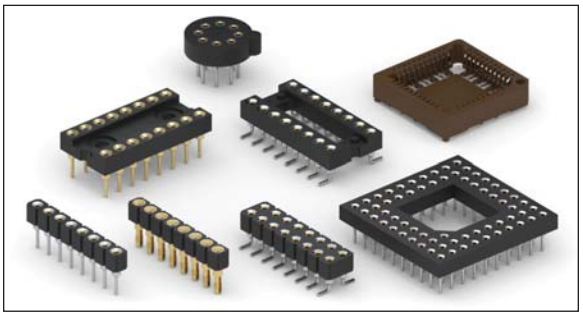
SPRING-LOADED PINS..... PAGES 23-28

- Surface Mount ..... Page 23
- Discrete Spring-Loaded Contacts ..... Page 24
- Through-Hole Mount ..... Page 25
- Horizontal and Large Base Surface Mount ..... Page 26
- Through-Hole Mount, Soldercup, Wire Termination ..... Page 27
- Power Spring Pins ..... Page 28



INTERCONNECTS..... PAGES 29-87

- Introduction ..... Pages 29 - 30
- Custom Insulators Overview ..... Page 31
- 1mm Grid Interconnects ..... Pages 32 - 33
- .050" Grid Interconnects ..... Pages 34 - 37 and 40 - 41
- Horizontal Surface Mount Overview ..... Pages 38 - 39
- .070" Grid Interconnects ..... Page 42
- 2mm Grid Interconnects ..... Pages 43 - 45
- .100" Grid Interconnects ..... Pages 46 - 63
- .200" Grid Interconnects ..... Page 64
- .100" Grid SIP Sockets ..... Pages 65 - 77
- .100" Grid SIP Headers ..... Pages 78 - 87



IC SOCKETS / TO SOCKETS..... PAGES 88-145

- Introduction and Quick Selector Chart ..... Pages 88 - 89
- DIP Sockets and Carriers ..... Pages 90 - 115
- Mil-DTL-83734 Approved DIPs ..... Pages 100 - 103
- DIP Headers ..... Pages 116 - 124
- .070" Grid Shrink DIP Sockets and Headers ..... Pages 125 - 128
- Right Angle Dip Sockets ..... Page 129
- DIP Insulator Footprints ..... Pages 130 - 132
- Right Angle Vertical Display Sockets ..... Page 133
- Relay Sockets and Zig-Zag Sockets ..... Pages 134 - 135
- TO Sockets ..... Page 136
- Pin Grid Array (PGA) Sockets ..... Pages 137 - 140
- Ball Grid Array (BGA) Sockets ..... Pages 141-142
- PLCC Sockets ..... Pages 143 - 145

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

TABLE OF CONTENTS







IO SOCKETS..... PAGES 146-152

- Introduction ..... Page 146
- USB Sockets 3.0 ..... Pages 147 and 149
- USB Sockets 2.0 ..... Pages 148 and 150
- Test Point Sockets ..... Page 151
- Jumpers and Microphone Sockets ..... Page 152

PIN RECEPTACLES..... PAGES 153-201

- Introduction ..... Pages 153 - 154
- Custom Machining Capability Overview ..... Page 155
- Receptacles for .008" - .025" diameter pins ..... Pages 156 - 171
- Receptacles for .026" - .040" diameter pins ..... Pages 172 - 180
- Compliant Tail Pins and Receptacles Overview ..... Page 178
- Receptacles for .041" - .064" diameter pins ..... Pages 181 - 188
- Loose Pins and Receptacles on T&R Overview ..... Page 186
- Receptacles for .065" - .102" diameter pins ..... Pages 189 - 194
- Organic Fibre Plug® Receptacles Overview ..... Page 195
- Receptacles with Organic Fibre Plugs® ..... Pages 196 - 197
- Wrapost Receptacles ..... Pages 198 - 201

MALE PCB PINS..... PAGES 202-246

- Introduction ..... Pages 202-203
- Printed Circuit Pins (Nail Head Type) ..... Pages 204 - 207
- Printed Circuit Pins (Header, Swage, Press-Fit) ..... Pages 208 - 224
- Wrapost Terminals ..... Pages 225 - 228
- Solder Terminal Turrets ..... Pages 229 - 237
- Solder Terminals Slotted ..... Pages 238 - 239 and 241-243
- Wire Termination Overview ..... Page 240
- Solder Terminals Various Types ..... Pages 244 - 246

CUSTOM PIN / RECEPTACLE WORKSHEET ..... PAGES 247

GENERAL CONTACT INFORMATION ..... PAGES 248- 249

CONTACT INSERTION/EXTRACTION FORCE GRAPHS ..... PAGES 250 - 262

DETAILED PROPERTIES OF MILL-MAX RAW MATERIALS ..... PAGE 263

GENERAL TECHNICAL SPECIFICATIONS ..... PAGES 264 - 265

GLOSSARY OF TERMS AND DEFINITIONS ..... PAGES 266 - 267

MILL-MAX SOCKETS AND PINS INDEX ..... PAGES 268 - 274

SPECIAL FEATURE QUICK REFERENCE GUIDE ..... PAGES 275-276

Scan the code to download a PDF version of this Catalog or visit www.mill-max.com/catalog

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

WWW.MILL-MAX.COM

SPRING-LOADED CONNECTORS



WWW.MILL-MAX.COM

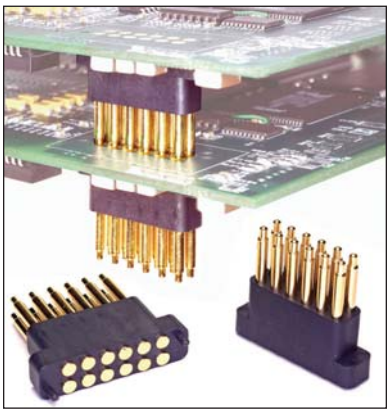
MILL-MAX SPRING-LOADED CONNECTORS ARE IDEAL FOR A WIDE RANGE OF APPLICATIONS, from portable data acquisition units and mobile communication to medical and military equipment applications. Their unique design can be the perfect solution for many situations where establishing an electrical path between mating points is a challenge, including problematic vibratory environments.

When strategically placed within an assembly and utilized correctly (shielded from over compression and direct side load forces,) spring-loaded connectors provide a reliable connection exceeding a million cycles.









SOME TYPICAL APPLICATIONS INCLUDE:

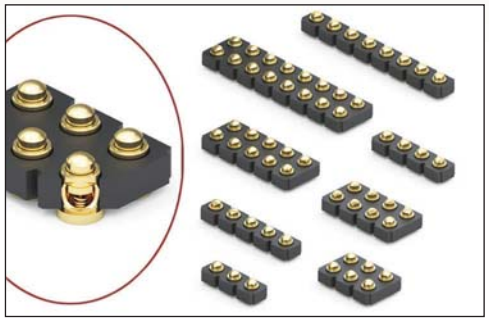
- The internal battery connection in portable instruments, or as the external battery connection for charging these instruments (docking stations).
- As a method for stacking printed circuit boards in an assembly. Utilizing spring pin connectors is a convenient approach to creating mezzanine-tiered board modules that can be assembled and disassembled quickly.
- Blind-mating applications: The spring pin piston need only make contact with its mating surface. This is typically a land or pad that is larger than the plunger diameter. In situations where the assembly process doesn't allow for visibility, spring pins are the optimum choice.

MILL-MAX SPRING-LOADED CONNECTORS CAN MATE TO THE FOLLOWING SURFACES:

- A conductive input/output pad found on the instrument pack itself.
- A gold-plated land on a circuit board. A hard gold over nickel-plated surface is recommended for the mating surface. This is the same as would be used for the printed circuit fingers associated with card edge connectors.
- Individual Mill-Max gold-plated nail head pins which can be soldered to the mating circuit board to serve as targets.
- Mill-Max Target Connectors which provide a large, flat gold-plated circuit path to the board.

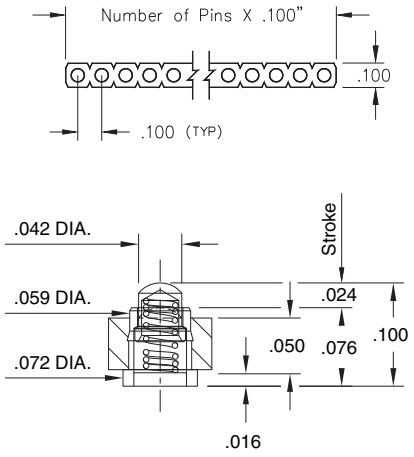
SPRING-LOADED CONNECTORS

SERIES 815 & 817 • .100" GRID SURFACE MOUNT, ULTRA LOW PROFILE • SINGLE AND DOUBLE ROW STRIPS

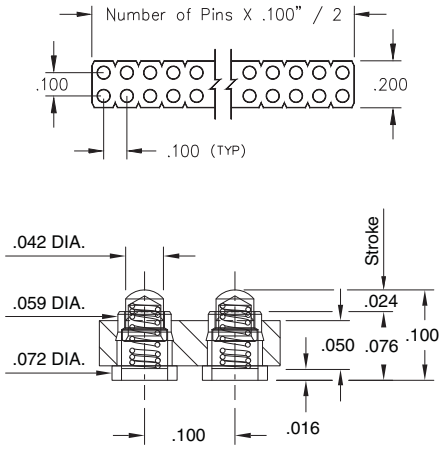


- Modular contacts for use on .100" grid, available in a height of .100", supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a .012" mid. stroke and a .024" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- 815 & 817 series contact strips are designed for manual placement onto a .082" Ø solder pad prior to reflow soldering

SINGLE ROW Series 815



DOUBLE ROW Series 817



ORDERING INFORMATION

Single Row Series 815

815-22-0XX-30-001101

Specify number of contacts 01-32

Double Row Series 817

817-22-0XX-30-001101

Specify number of contacts 04-72

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (.012"): 60 grams
Durability: 1,000,000 cycles
Coplanarity: .005" (Single Row up to 10 pins; Double Row up to 20 pins), For higher pin counts, contact Technical Support

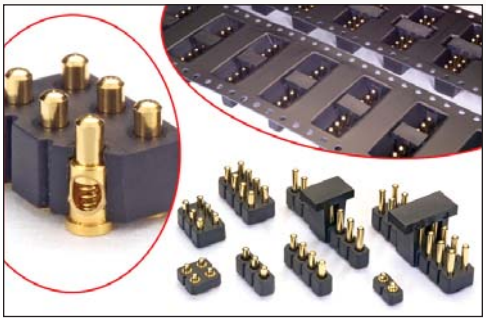
Electrical:

Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

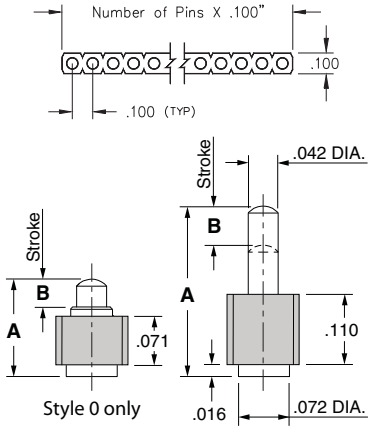
MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 811 & 813 • .100" GRID SURFACE MOUNT, LOW PROFILE • SINGLE AND DOUBLE ROW STRIPS

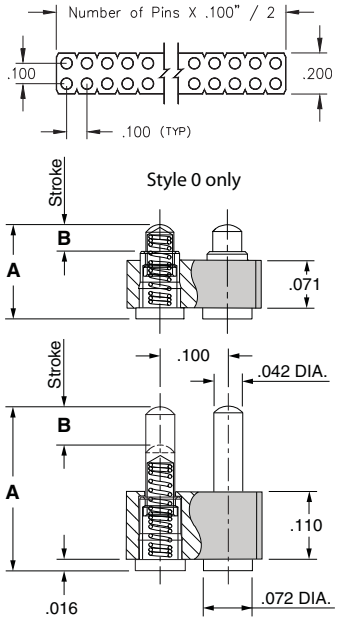


- Modular contacts for use on .100" grid, available in five heights from .137" to .236", supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a long stroke relative to the low profile of the assembly
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 811 & 813 series, contact styles 1 through 4, are available on 32mm wide carrier tape and fitted with vacuum pick-up clips for automated pick and place assembly. Tape and Reel packaging per EIA-481. See page 12 for strip lengths available and ordering information

SINGLE ROW Series 811



DOUBLE ROW Series 813



ORDERING INFORMATION

Single Row Series 811

811-22-0XX-30-00X101

Specify number of contacts 01-64 — **Specify contact style** 0-4

Double Row Series 813

813-22-0XX-30-00X101

Specify number of contacts 04-72 — **Specify contact style** 0-4

For 811 and 813 Tape & Reel packaging, see page 12

CONTACT STYLE	INITIAL HEIGHT A	MAX. STROKE B
0	.137	.039
1	.177	.045
2	.197	.055
3	.217	.055
4	.236	.055

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams
Spring force @ mid stroke (B/2): 60 grams
Durability: 1,000,000 cycles
Coplanarity: .005" (Single Row up to 10 pins; Double Row up to 20 pins), For higher pin counts, contact Technical Support

Electrical:

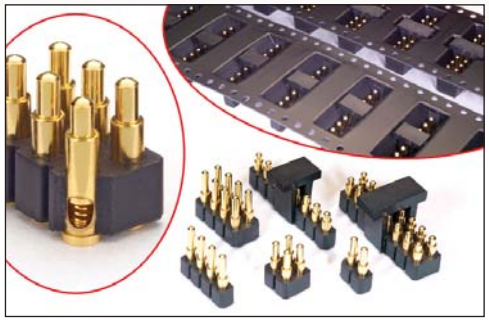
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

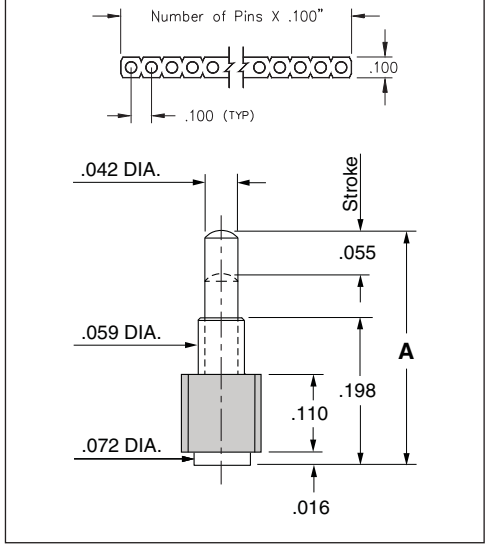
SPRING-LOADED CONNECTORS

SERIES 812 & 814 • .100" GRID SURFACE MOUNT, MID PROFILE • SINGLE AND DOUBLE ROW STRIPS

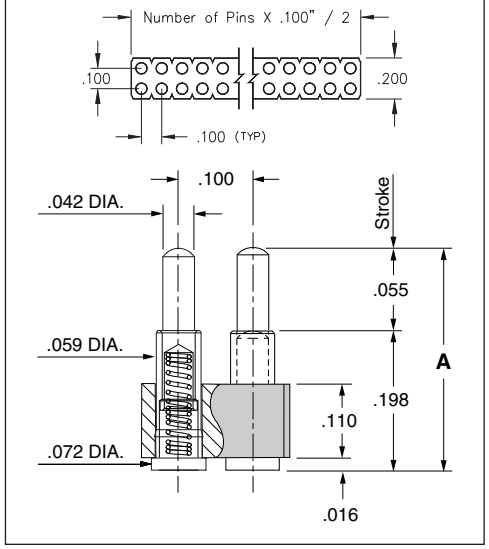


- Modular contacts for use on .100" grid, available in ten heights from .255" to .430", supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Extended body provides greater bearing surface for increased strength & plunger protection
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 812 & 814 series, contact styles 0 through 9, are available on 32mm or 44mm wide carrier tape and fitted with vacuum pick-up clips for automated pick and place assembly. Tape and Reel packaging per EIA-481. See page 12 for strip lengths available and ordering information

SINGLE ROW Series 812



DOUBLE ROW Series 814



ORDERING INFORMATION

Single Row Series 812

812-22-0XX-30-00X101

Specify number of contacts 02-64 — **Specify contact style** 0-9

Double Row Series 814

814-22-0XX-30-00X101

Specify number of contacts 04-72 — **Specify contact style** 0-9

For 812 and 814 Tape & Reel packaging, see page 12

CONTACT STYLE	INITIAL HEIGHT A	CONTACT STYLE	INITIAL HEIGHT A
0	.255	5	.350
1	.275	6	.370
2	.295	7	.390
3	.315	8	.410
4	.335	9	.430

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams
Spring force @ mid stroke (.0275"): 60 grams
Durability: 1,000,000 cycles
Coplanarity: .005" (Single Row up to 10 pins; Double Row up to 20 pins), For higher pin counts, contact Technical Support

Electrical:

Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

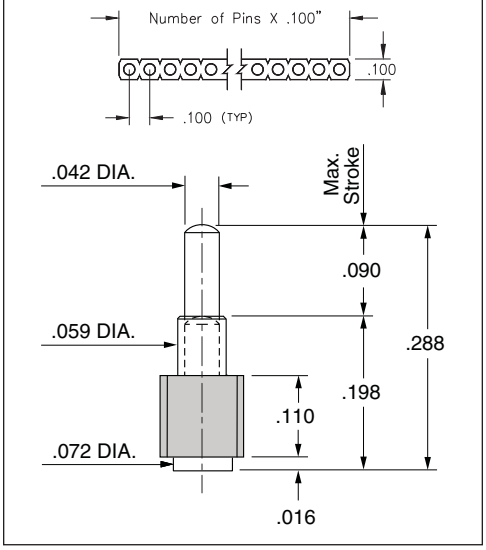
SPRING-LOADED CONNECTORS

SERIES 819 & 820 • .100" GRID SURFACE MOUNT, LONG STROKE • SINGLE AND DOUBLE ROW STRIPS

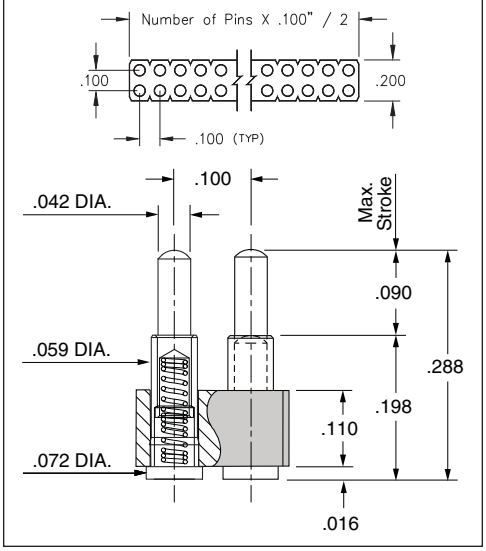


- Modular contacts for use on .100" grid, available in a height of .288", supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a .045" mid. stroke and a .090" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 819 & 820 series contact strips are designed for placement onto a Ø .082" solder pad prior to reflow soldering
- Tape and Reel packaging available, contact Technical Support

SINGLE ROW Series 819



DOUBLE ROW Series 820



ORDERING INFORMATION

Single Row Series 819

819-22-0XX-30-001101

Specify number of contacts 01-64

Double Row Series 820

820-22-0XX-30-001101

Specify number of contacts 04-72

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (.045"): 60 grams
Durability: 1,000,000 cycles

Electrical:

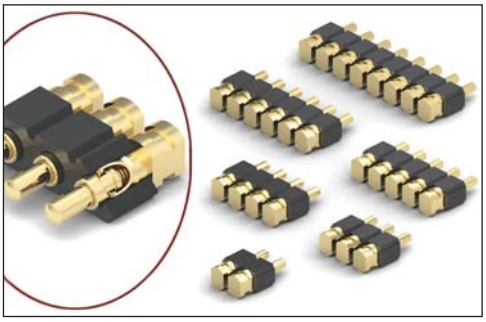
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

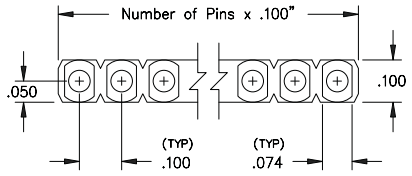
SPRING-LOADED CONNECTORS

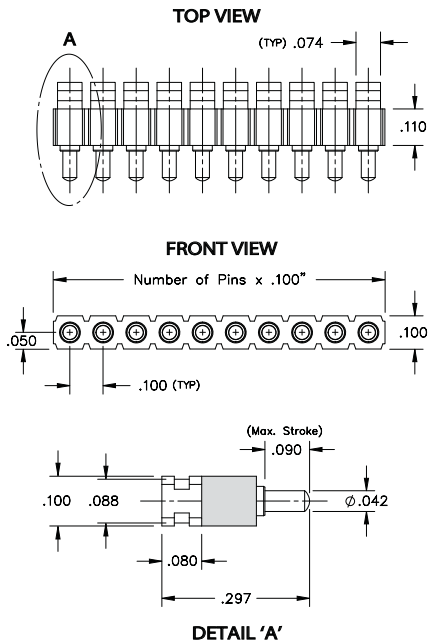
SERIES 810 • .100" GRID HORIZONTAL SURFACE MOUNT • SINGLE ROW STRIPS



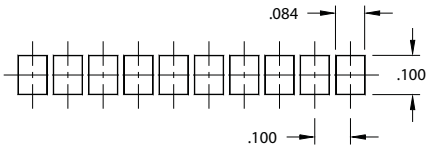
- Modular contacts for use on .100" grid, supplied in single row contact strips. Piston action is parallel to the board surface
- Ideal for daisy chaining of P.C.B.'s when mated with right angle target connectors (series 399...10-008) or for mating boards in a perpendicular orientation
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a .045" mid. stroke & .090" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- 810 series contact strips are designed for manual placement onto solder pads

SINGLE ROW Series 810





Suggested P.C.B. FOOTPRINT



Coplanarity .005". For Pin Counts >10 positions consult Technical Support

ORDERING INFORMATION

Single Row Series 810

810-22-0XX-40-001101

Specify number of contacts 01-10

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (.045"): 60 grams
Durability: 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

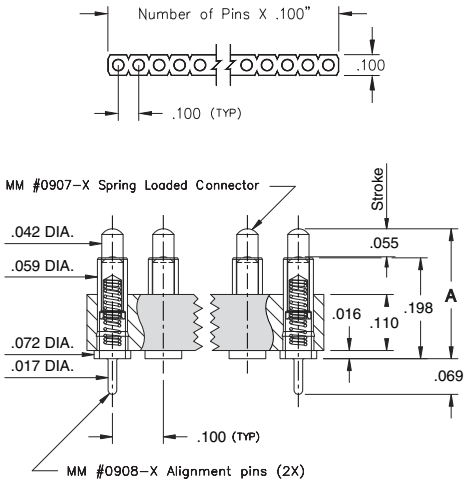
SPRING-LOADED CONNECTORS

SERIES 812 & 814 • .100" GRID SURFACE MOUNT WITH ALIGNMENT PINS • SINGLE AND DOUBLE ROW STRIPS

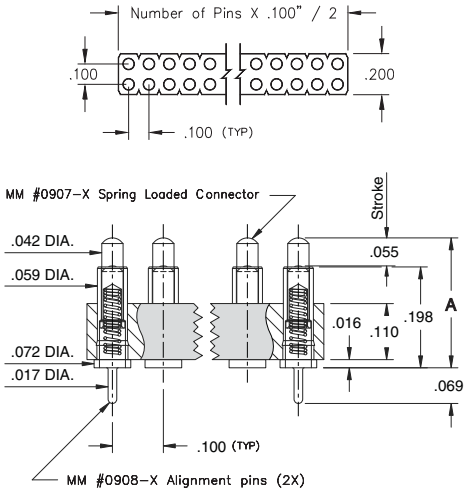


- Modular contacts for use on .100" grid, available in ten heights from .255" to .430", supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a .0275" mid stroke & .055" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 812 & 814 series contact strips are designed for manual placement, .023 ±.003" plated through-holes in the circuit board are required for the alignment pins prior to intrusive reflow soldering

SINGLE ROW Series 812



DOUBLE ROW Series 814



ORDERING INFORMATION

Single Row Series 812...01X101

812-22-0XX-30-01X101

Specify number of contacts 03-64 — **Specify contact style** 0-9

Double Row Series 814...01X101

814-22-0XX-30-01X101

Specify number of contacts 06-72 — **Specify contact style** 0-9

CONTACT STYLE	INITIAL HEIGHT A	CONTACT STYLE	INITIAL HEIGHT A
0	.255	5	.350
1	.275	6	.370
2	.295	7	.390
3	.315	8	.410
4	.335	9	.430

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams
Spring force @ mid stroke (.0275"): 60 grams
Durability: 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

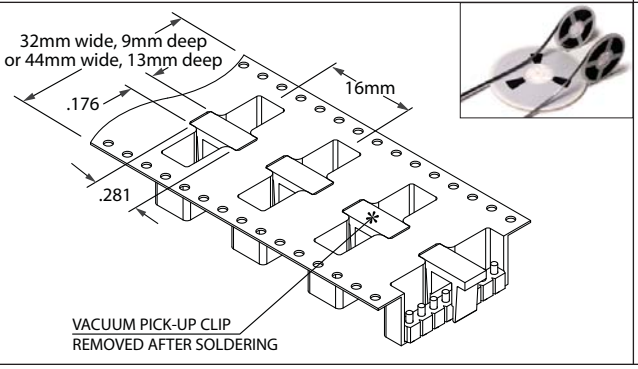
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

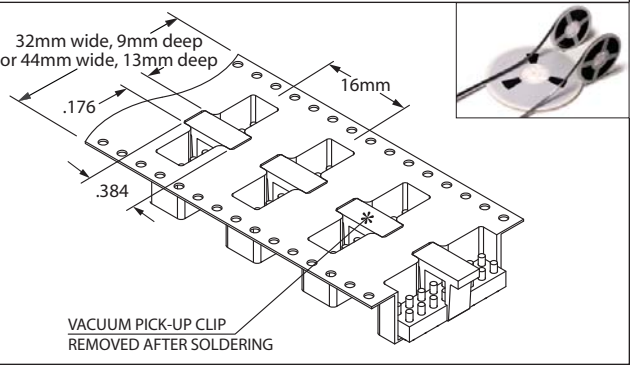
SPRING-LOADED CONNECTORS

SERIES 811, 812, 813, 814 • .100" GRID SURFACE MOUNT • CARRIER TAPE AND PACKAGING

Ordering Information for Series 811/812/813/814 in Carrier Tape

Single Row Series 811	Double Row Series 813
811-22-0XX-30-00X191 **Specify contact style** 0-4 **Specify number of contacts** 02-08 (32mm wide tape, 400 parts per 13" reel)	813-22-0XX-30-00X191 **Specify contact style** 0-4 **Specify number of contacts** 04-16 (32mm wide tape, 400 parts per 13" reel)
Single Row Series 811	**Double Row Series 813**
811-22-0XX-30-00X191 **Specify contact style** 1-4 **Specify number of contacts** 09-12 (44mm wide tape, 200 parts per 13" reel)	813-22-0XX-30-00X191 **Specify contact style** 1-4 **Specify number of contacts** 18-24 (44mm wide tape, 200 parts per 13" reel)
Single Row Series 812	**Double Row Series 814**
812-22-0XX-30-00X191 **Specify contact style** 0-2 **Specify number of contacts** 02-08 (32mm wide tape, 400 parts per 13" reel)	814-22-0XX-30-00X191 **Specify contact style** 0-2 **Specify number of contacts** 04-16 (32mm wide tape, 400 parts per 13" reel)
Single Row Series 812	**Double Row Series 814**
812-22-0XX-30-00X191 **Specify contact style** 0-2 **Specify number of contacts** 09-12 (44mm wide tape, 200 parts per 13" reel)	814-22-0XX-30-00X191 **Specify contact style** 0-2 **Specify number of contacts** 18-24 (44mm wide tape, 200 parts per 13" reel)
Single Row Series 812	**Double Row Series 814**
812-22-0XX-30-00X191 **Specify contact style** 3-9 **Specify number of contacts** 02-12 (44mm wide tape, 200 parts per 13" reel)	814-22-0XX-30-00X191 **Specify contact style** 3-9 **Specify number of contacts** 04-24 (44mm wide tape, 200 parts per 13" reel)

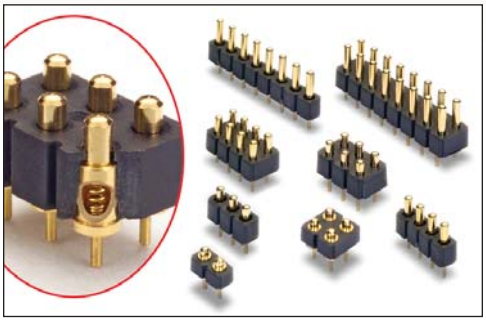




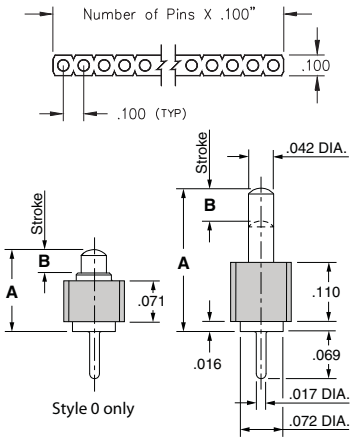
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

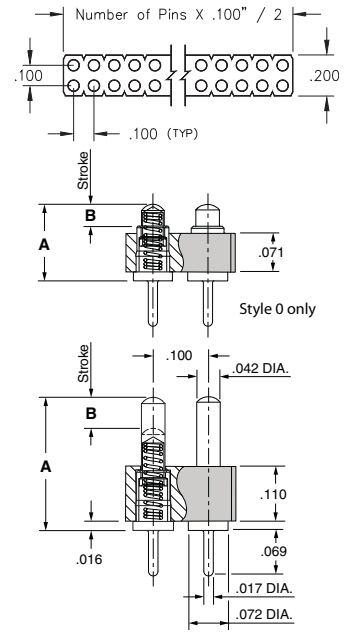
SERIES 821 & 823 • .100" GRID THROUGH-HOLE MOUNT • SINGLE AND DOUBLE ROW STRIPS



SINGLE ROW Series 821



DOUBLE ROW Series 823



- Modular contacts for use on .100" grid, available in five heights from .137" to .236", supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a long stroke relative to the low profile of the assembly
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 821 & 823 series contact strips are designed for manual placement into Ø .022±.003" plated through-holes in the circuit board prior to hand, wave or reflow soldering

ORDERING INFORMATION

Single Row Series 821

821-22-0XX-10-00X101

Specify number of contacts 02-64 — **Specify contact style** 0-4

Double Row Series 823

823-22-0XX-10-00X101

Specify number of contacts 04-72 — **Specify contact style** 0-4

CONTACT STYLE	INITIAL HEIGHT A	MAX. STROKE B
0	.137	.039
1	.177	.045
2	.197	.055
3	.217	.055
4	.236	.055

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams
Spring force @ mid stroke (B/2): 60 grams
Durability: 1,000,000 cycles

Electrical:

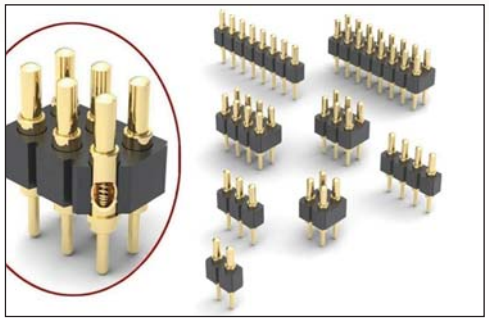
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

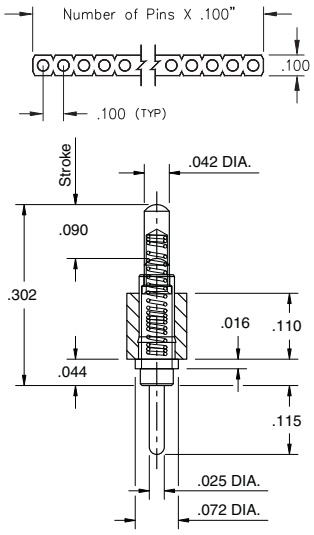
SPRING-LOADED CONNECTORS

SERIES 825 & 827 • .100" GRID THROUGH-HOLE MOUNT, LONG STROKE • SINGLE AND DOUBLE ROW STRIPS

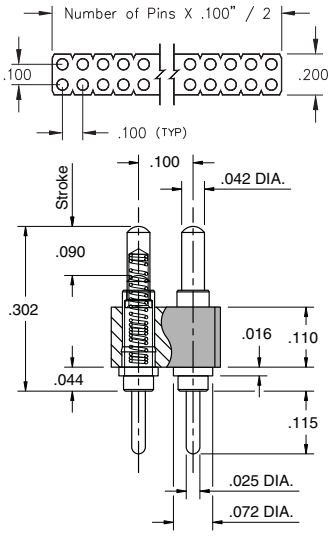


- Modular contacts for use on .100" grid, available in a height of .302", supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a .045" mid. stroke and a .090" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 825 & 827 series contact strips are designed for manual placement into Ø .030±.003" plated through-holes in the circuit board prior to hand, wave or reflow soldering

SINGLE ROW Series 825



DOUBLE ROW Series 827



ORDERING INFORMATION

Single Row Series 825

825-22-0XX-10-001101

Specify number of contacts 02-64

Double Row Series 827

827-22-0XX-10-001101

Specify number of contacts 04-72

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (.045"): 60 grams
Durability: 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

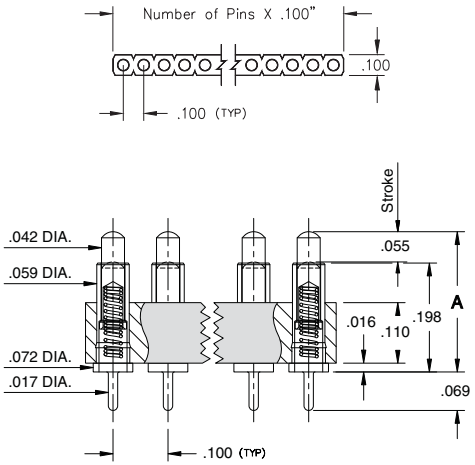
SPRING-LOADED CONNECTORS

SERIES 816 & 818 • .100" GRID THROUGH-HOLE MOUNT, MID PROFILE • SINGLE AND DOUBLE ROW STRIPS

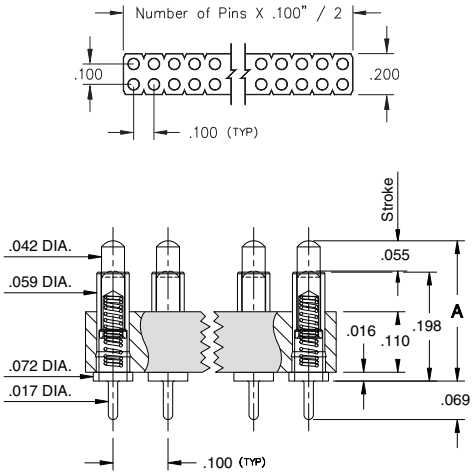


- Modular contacts for use on .100" grid, available in ten heights from .255" to .430", supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a .0275" mid stroke & .055" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 816 & 818 series contact strips are designed for manual placement into Ø .023±.003" plated through-holes in the circuit board prior to intrusive reflow soldering

SINGLE ROW Series 816...00X101



DOUBLE ROW Series 818...00X101



ORDERING INFORMATION

Single Row Series 816...00X101

816-22-0XX-10-00X101

Specify number of contacts 02-64 — **Specify contact style** 0-9

Double Row Series 818...00X101

818-22-0XX-10-00X101

Specify number of contacts 04-72 — **Specify contact style** 0-9

CONTACT STYLE	INITIAL HEIGHT A	CONTACT STYLE	INITIAL HEIGHT A
0	.255	5	.350
1	.275	6	.370
2	.295	7	.390
3	.315	8	.410
4	.335	9	.430

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams
Spring force @ mid stroke (.0275"): 60 grams
Durability: 1,000,000 cycles

Electrical:

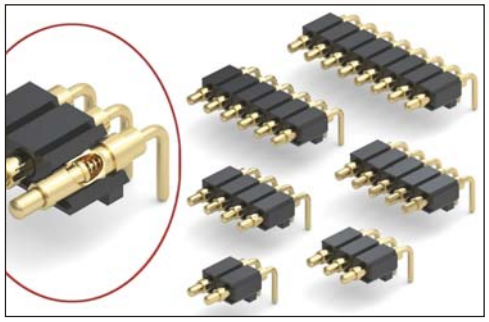
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

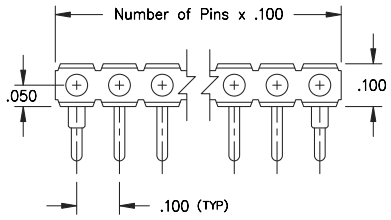
SPRING-LOADED CONNECTORS

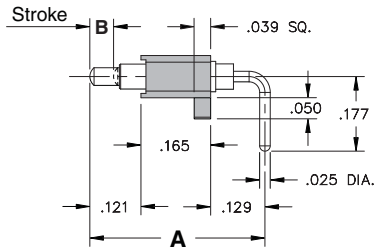
SERIES 829 • .100" GRID RIGHT ANGLE MOUNT • SINGLE ROW STRIPS



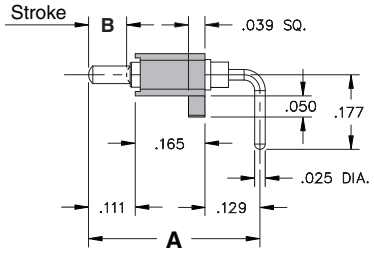
- Modular contacts for use on .100" grid. Supplied in single row strips with mounting pegs for support
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- 829 series contact strips are designed for manual placement into Ø .032±.003" plated through-holes in the circuit board prior to wave or reflow soldering

SINGLE ROW Series 829



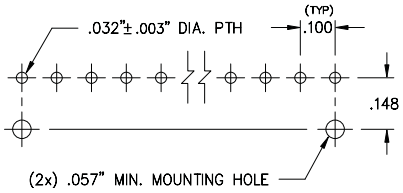


Contact style 1 only



Contact style 2 only

Suggested P.C.B Footprint



ORDERING INFORMATION

Single Row Series 829

829-22-0XX-20-00X101

Specify number of contacts 01-20 — **Specify contact style** 1 or 2

CONTACT STYLE	INITIAL LENGTH A	MAX. STROKE B
1	.415	.055
2	.406	.090

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial length (A): 25 grams
Spring force @ mid stroke (B/2): 60 grams
Durability: 1,000,000 cycles

Electrical:

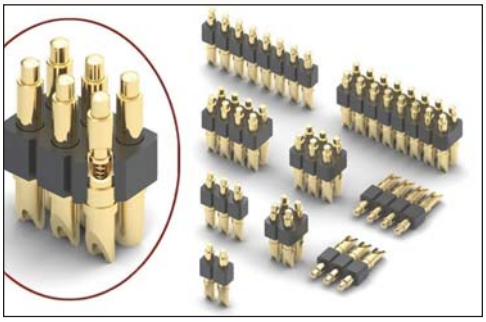
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

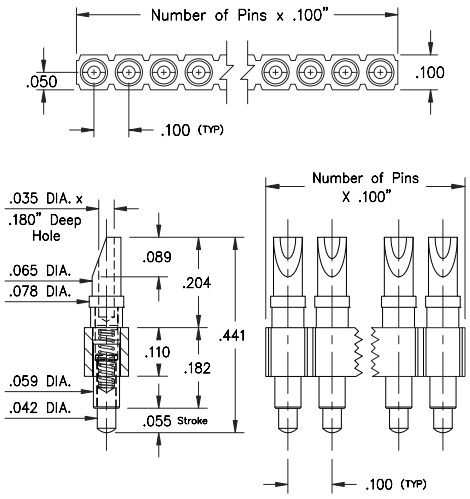
SPRING-LOADED CONNECTORS

SERIES 824 & 826 • .100" GRID SOLDERCUP HEADER • SINGLE AND DOUBLE ROW STRIPS

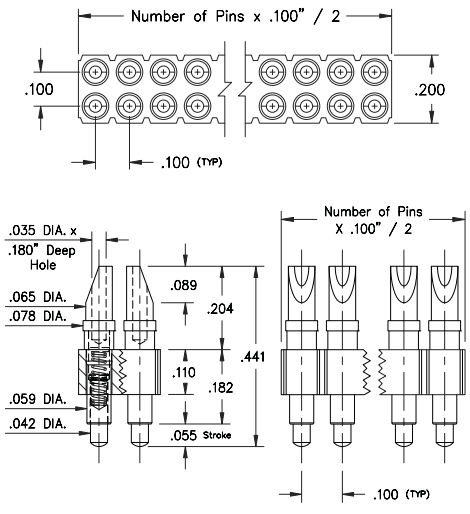


- Modular contacts for use on .100" grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a .0275" mid. stroke and a .055" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic
- Both 824 & 826 series strips have spring pins with wire termination soldercups. The soldercups are aligned to provide easy access for soldering up to size 22 AWG wires

SINGLE ROW Series 824



DOUBLE ROW Series 826



ORDERING INFORMATION

Single Row Series 824

824-22-0XX-00-001000

Specify number of contacts 01-64

Double Row Series 826

826-22-0XX-00-001000

Specify number of contacts 04-72

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (.0275"): 60 grams
Durability: 1,000,000 cycles

Electrical:

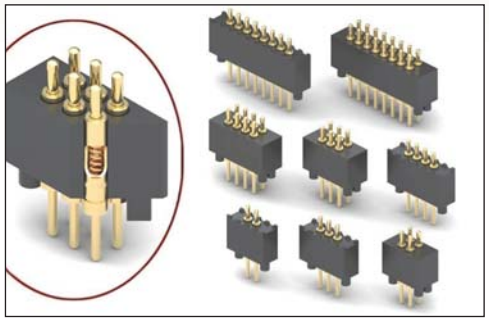
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

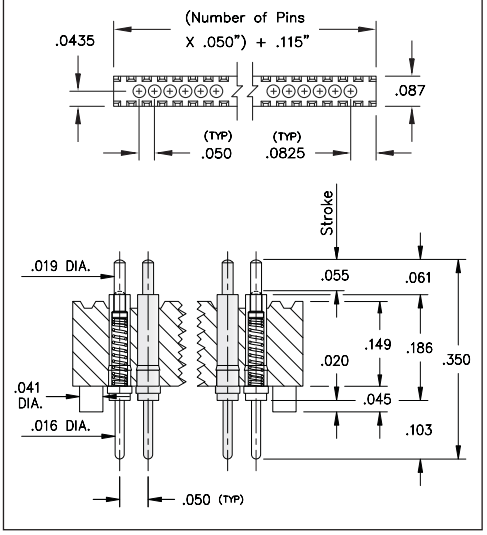
SPRING-LOADED CONNECTORS

SERIES 854 & 855 • .050" GRID THROUGH-HOLE MOUNT • SINGLE AND DOUBLE ROW STRIPS

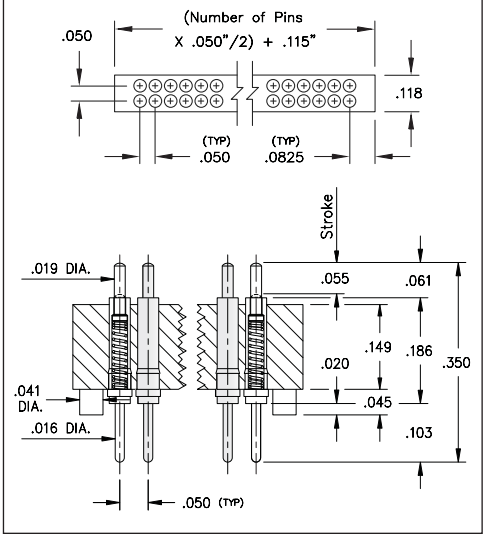


- Modular contacts for use on .050" grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a .0275" mid. stroke and a .055" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- Both 854 & 855 series contact strips are designed for manual placement into Ø .023±.003" plated through-holes in the circuit board prior to hand, wave or reflow soldering

SINGLE ROW Series 854



DOUBLE ROW Series 855



ORDERING INFORMATION

Single Row Series 854

854-22-0XX-10-001101

Specify number of contacts 02-20

Double Row Series 855

855-22-0XX-10-001101

Specify number of contacts 04-40

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (.0275"): 60 grams
Durability: 1,000,000 cycles

Electrical:

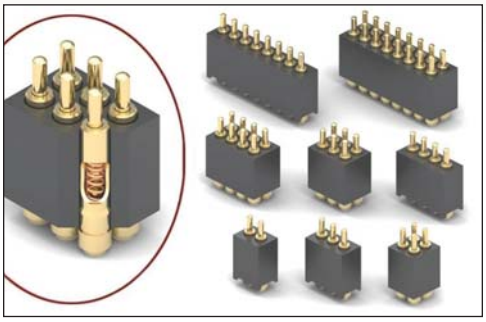
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

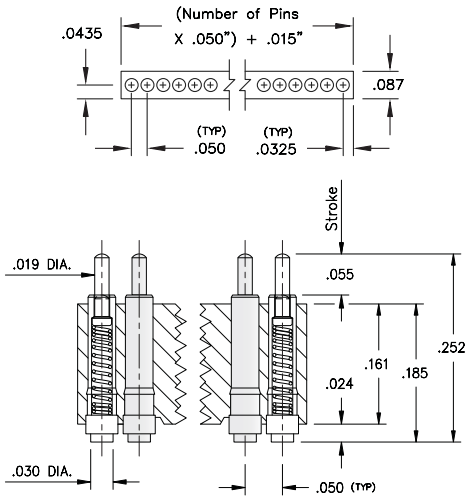
SPRING-LOADED CONNECTORS

SERIES 854 & 855 • .050" GRID SURFACE MOUNT, HIGH DENSITY • SINGLE AND DOUBLE ROW STRIPS

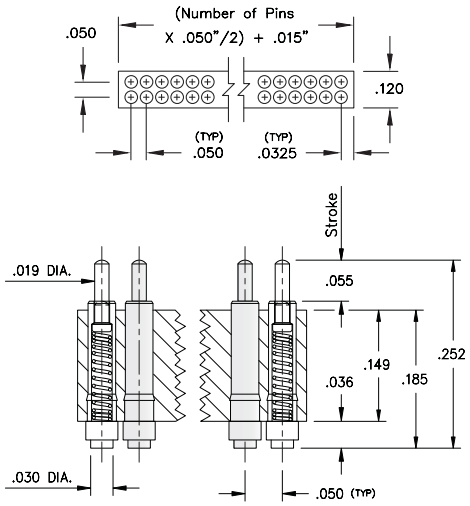


- Modular contacts for use on .050" grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a .0275" mid. stroke and a .055" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- 854 & 855 series contact strips are designed for manual placement onto .040" Ø solder pads

SINGLE ROW Series 854



DOUBLE ROW Series 855



ORDERING INFORMATION

Single Row Series 854

854-22-0XX-30-001101

Specify number of contacts 02-20

Double Row Series 855

855-22-0XX-30-001101

Specify number of contacts 04-40

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20µ" gold over 100µ" nickel
Spring: Beryllium copper-plated 10µ" gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (.0275"): 60 grams
Durability: 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

SERIES 319, 330, 399 • .100" GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS

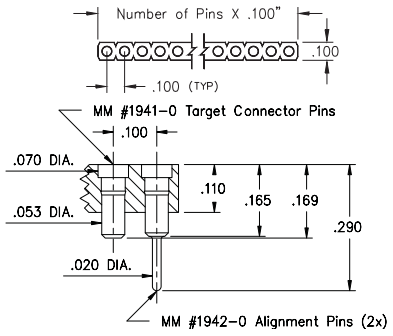


FIG. 1

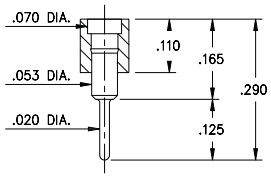


FIG. 2

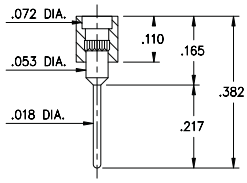


FIG. 3

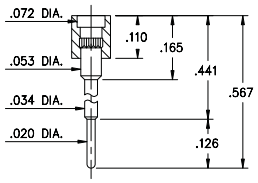


FIG. 4

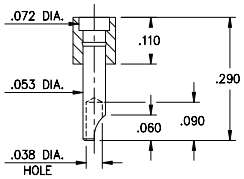


FIG. 5

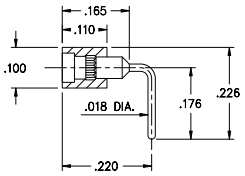
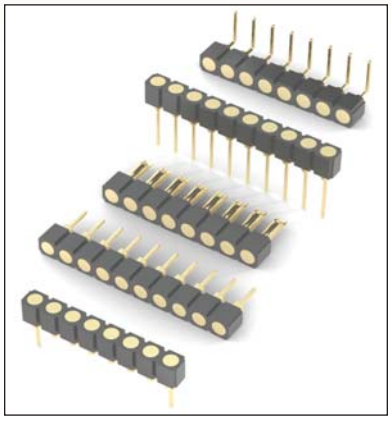


FIG. 6

- Series 319, 330 and 399 Spring Target Connectors, supplied in single row strips
- Spring Target Connectors present a large flat surface for making contact with our standard .042" dia. spring pin plungers. The target connectors provide an excellent gold-plated conductive path back to the board mounted spring pin connector
- Target connectors use MM #1938, #1940, #1941, #1942 and #3024 pins. See page 218 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 319...041**	**Surface Mount w/ Alignments Pins**
	319-10-1__-30-041000	
	Specify number of pins	03-64
FIG. 2	**Series 319...001**	**Standard Solder Tails**
	319-10-1__-00-001000	
	Specify number of pins	01-64
FIG. 3	**Series 319...002**	**Long Solder Tails**
	319-10-1__-00-002000	
	Specify number of pins	01-64
FIG. 4	**Series 319...005**	**Elevated with Solder Tails**
	319-10-1__-00-005000	
	Specify number of pins	01-64
FIG. 5	**Series 330...240**	**Solder Cups**
	330-10-1__-00-240000	
	Specify number of pins	01-64
FIG. 6	**Series 399...008**	**Right Angle Solder Tails**
	399-10-1__-10-008000	
	Specify number of pins	01-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

SERIES 419, 430, 499 • .100" GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • DOUBLE ROW STRIPS

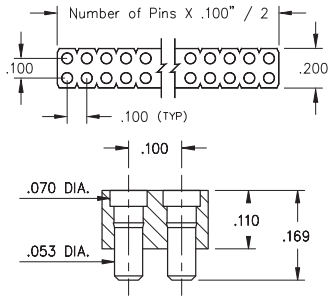


Fig. 1 and Fig. 2 Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 1

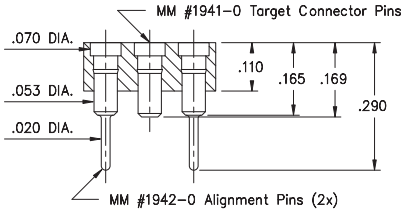


FIG. 2

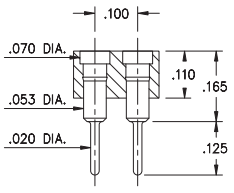


FIG. 3

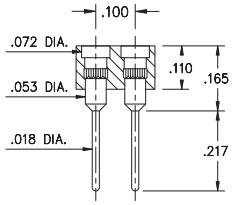


FIG. 4

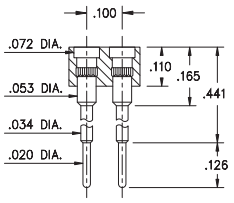


FIG. 5

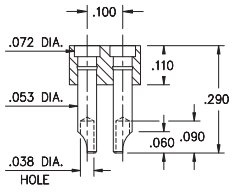


FIG. 6

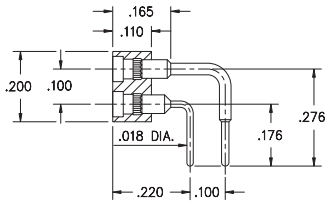
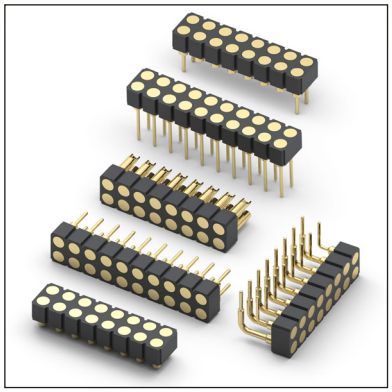


FIG. 7

- Series 419, 430 and 499 Spring Target Connectors, supplied in double row strips
- Spring Target Connectors present a large flat surface for making contact with our standard .042" dia. spring pin plungers. The target connectors provide an excellent gold-plated conductive path back to the board mounted spring pin connector
- Target connectors use MM #1938, #1940, #1941, #1942 and #3024 pins. See page 218 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 419...041**	**Surface Mount**
	419-10-2__-30-041000	
	Specify number of pins ← 04-64	
FIG. 2	**Series 419...042**	**Surface Mount w/ Alignments Pins**
	419-10-2__-30-042000	
	Specify number of pins ← 06-64	
FIG. 3	**Series 419...001**	**Standard Solder Tails**
	419-10-2__-00-001000	
	Specify number of pins ← 04-64	
FIG. 4	**Series 419...002**	**Long Solder Tails**
	419-10-2__-00-002000	
	Specify number of pins ← 04-64	
FIG. 5	**Series 419...005**	**Elevated with Solder Tails**
	419-10-2__-00-005000	
	Specify number of pins ← 04-64	
FIG. 6	**Series 430...240**	**Solder Cups**
	430-10-2__-00-240000	
	Specify number of pins ← 04-64	
FIG. 7	**Series 499...008**	**Right Angle Solder Tails**
	499-10-2__-10-008000	
	Specify number of pins ← 04-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

SERIES 856, 857 • .050" GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE AND DOUBLE ROW STRIPS

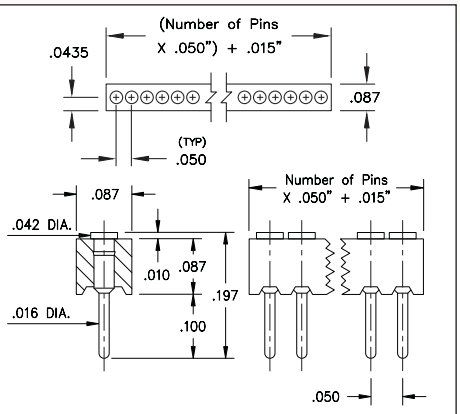
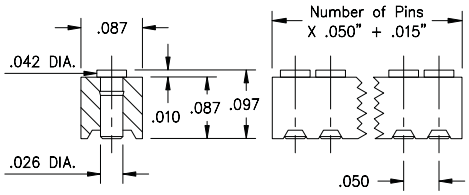


FIG. 1



Coplanarity .005". For Pin counts >20 positions, consult Technical Support.

FIG. 2

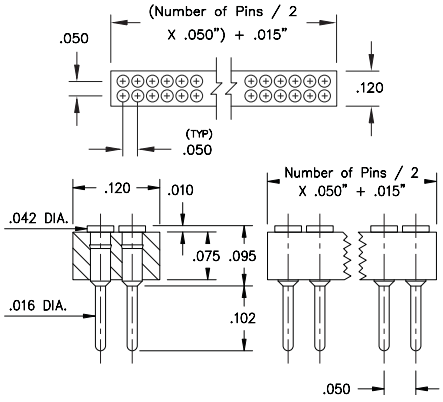
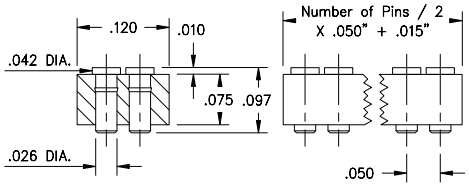


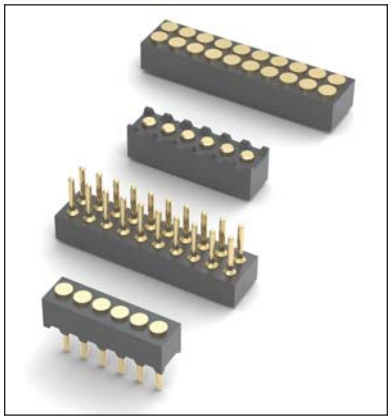
FIG. 3



Coplanarity .005". For Pin counts >40 positions, consult Technical Support.

FIG. 4

- Series 856 and 857 Spring Target Connectors, supplied in single and double row strips
- Spring Target Connectors present a large flat surface for making contact with our standard .019" dia. spring pin plungers. The target connectors provide an excellent gold-plated conductive path back to the board-mounted spring pin connector
- Target connectors use MM #1933 and #1935 pins. See page 213 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 856...051**	**Standard Solder Tails**
	856-10-0__-10-051000	
	Specify number of pins ←	01-20
FIG. 2	**Series 856...051**	**Surface Mount**
	856-10-0__-30-051000	
	Specify number of pins ←	02-20
FIG. 3	**Series 857...051**	**Standard Solder Tails**
	857-10-0__-10-051000	
	Specify number of pins ←	04-40
FIG. 4	**Series 857...051**	**Surface Mount**
	857-10-0__-30-051000	
	Specify number of pins ←	04-40

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

SPRING-LOADED PINS

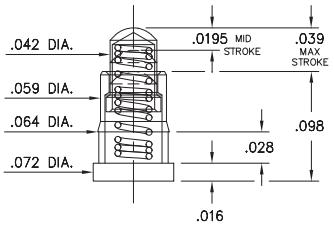
DISCRETE SPRING-LOADED CONTACTS • SURFACE MOUNT

0900-0

0900-0-15-20-76-14-11-0

"Legacy P/N 0900-0-00-00-00-00-11-0"

Short stroke, Surface mount

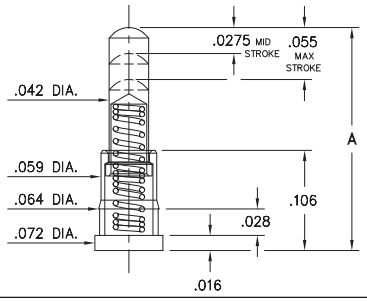


0900-1⇨4,8

0900-X-15-20-75-14-11-0

"Legacy P/N 0900-X-00-00-00-00-11-0"

Standard stroke, Surface mount



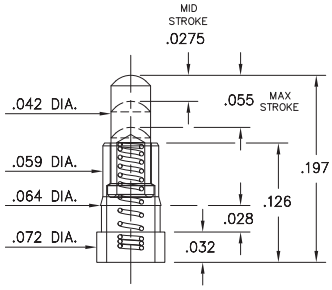
Basic Part Number	Length A
0900-1	.177
0900-2	.197
0900-3	.217
0900-4	.236
∗0900-8	.155

∗0900-8 has a .0195 Mid. Stroke & .039 Max. Stoke
Order as:
0900-8-15-20-76-14-11-0

0934

0934-0-15-20-74-14-26-0

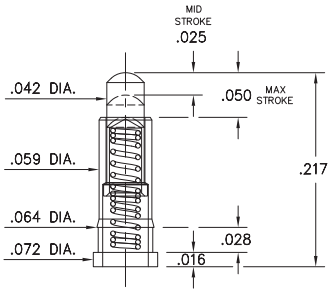
Standard stroke, Surface mount



0936

0936-0-15-20-75-14-11-0

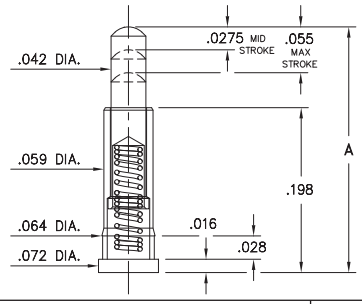
Standard stroke, Surface mount



0907-0⇨9

0907-X-15-20-75-14-11-0

Standard stroke, Surface mount, Mid profile

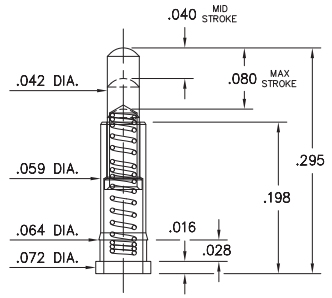


Basic Part Number	Length A
0907-0	.255
0907-1	.275
0907-2	.295
0907-3	.315
0907-4	.335
0907-5	.350
0907-6	.370
0907-7	.390
0907-8	.410
0907-9	.430

0928

0928-0-15-20-77-14-11-0

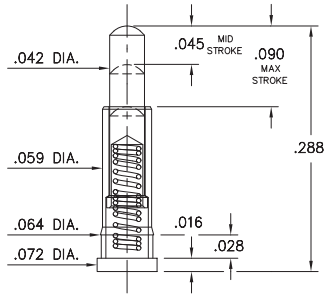
Long stroke, Surface mount



0913

0913-0-15-20-77-14-11-0

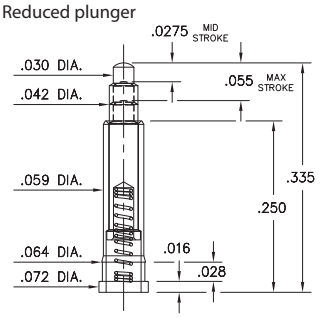
Long stroke, Surface mount, Mid profile



0925

0925-0-15-20-73-14-26-0

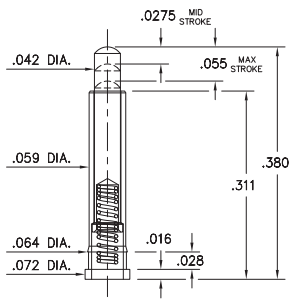
Standard stroke, Surface mount
Reduced plunger



0927

0927-0-15-20-75-14-11-0

Standard stroke, Surface mount, Mid profile

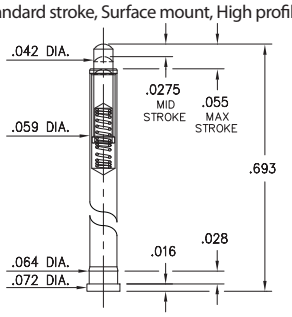


0905

0905-0-15-20-75-14-11-0

"Legacy P/N 0905-0-00-00-00-00-11-0"

Standard stroke, Surface mount, High profile



Material Specifications:

Sleeve & Plunger Material: Copper Alloy
Spring Material: Beryllium Copper
Sleeve & Plunger Finish: 20 µ"Gold over Nickel
Spring Finish: 10 µ"Gold over Nickel
Dimensions: Inches
Tolerances On: Lengths: ± .006
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

Mechanical & Electrical Specifications:

Durability: 1,000,000 cycles
Current Rating: 2A continuous, 3A peak
Contact Resistance: 20 mΩ max.

Environmental Specifications:

Operating temperature range: -55/+125° C

73, 74, 75, 76, 77 Springs are not interchangeable

Order Code: 09XX - X - 15 - 20 - 7X - 14 - XX - 0

Spring Number

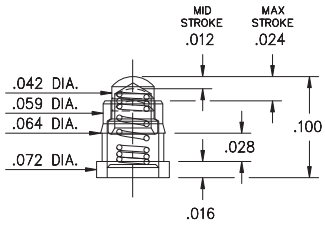
Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
73	.0275	.055	60 g	25 g
74	.0275	.055	50 g	15 g
75	.0275	.055	60 g	25 g
76	.0195	.039	60 g	25 g
77	.045	.090	60 g	25 g

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

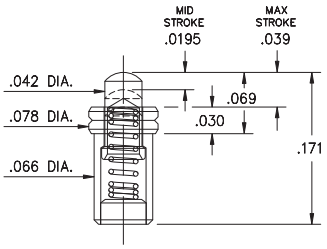
SPRING-LOADED PINS

DISCRETE SPRING-LOADED CONTACTS

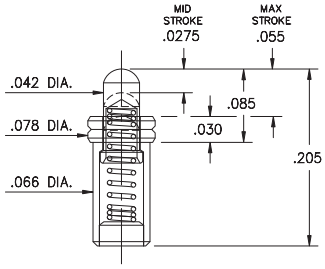
0965
0965-0-15-20-80-14-11-0
Ultra low profile, Surface mount
* Stainless steel spring



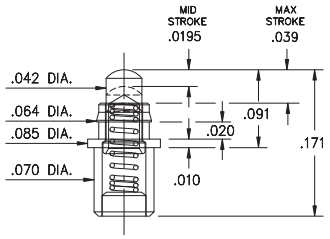
0921-0
0921-0-15-20-76-14-11-0
Ultra low profile, Short stroke
Solder mount in .070 min. mounting hole



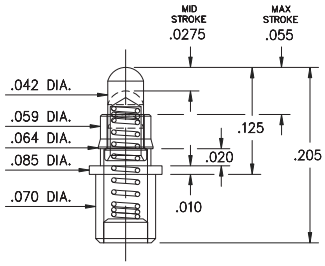
0921-1
0921-1-15-20-75-14-11-0
Low profile, Standard stroke
Solder mount in .070 min. mounting hole



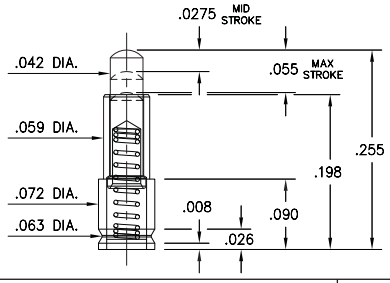
0926-0
0926-0-15-20-76-14-11-0
Low Profile, Short Stroke
Solder mount in .074 min. mounting hole



0926-1
0926-1-15-20-75-14-11-0
Low profile, Standard stroke
Solder mount in .074 min. mounting hole

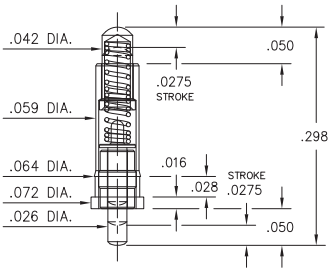


0977
0977-0-15-20-75-14-11-0
Standard stroke, Surface mount
Also available on 24mm wide carrier tape: 1,100 parts per 13″ reel. Order as: 0977-0-57-20-75-14-11-0

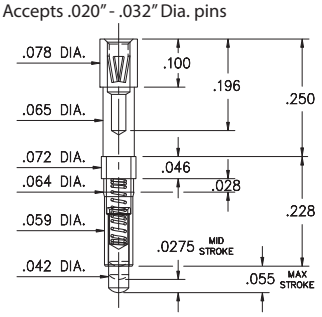




0980
0980-0-15-20-75-14-11-0
Double action, .055 Combined stroke
Mount between parallel circuit boards



0959
0959-0-54-20-75-14-11-0
Receptacle spring pin, Standard stroke
Accepts .020″ - .032″ Dia. pins



Material Specifications:

Sleeve & Plunger Material: Copper Alloy
Spring Material: BeCu or Stainless Steel 302 *
Sleeve & Plunger Finish: 20 µ″ Gold over Nickel
Spring Finish: 10 µ″ Gold over Nickel
Dimensions: Inches
Tolerances On: Lengths: ± .006
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

Mechanical & Electrical Specifications:

Durability: 1,000,000 cycles
Current Rating: 2A continuous, 3A peak
Contact Resistance: 20 mΩ max.

Environmental Specifications:

Operating temperature range: -55/+125° C

75, 76, 80, 85 Springs are not interchangeable

Order Code: 09XX - X - 15 - 20 - XX - 14 - 11 - 0
Spring Number

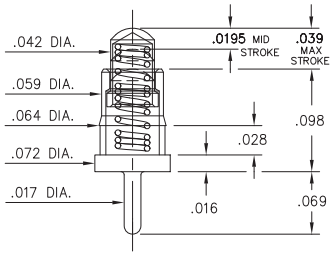
Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
75	.0275	.055	60 g	25 g
76	.0195	.039	60 g	25 g
80	.012	.024	70 g	25 g
85	.040	.080	60 g	25 g

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

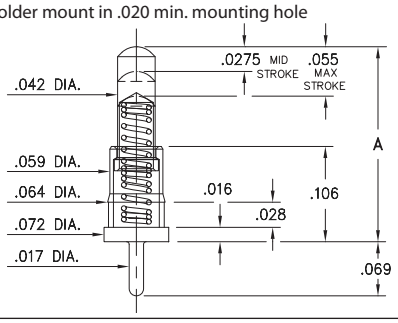
SPRING-LOADED PINS

DISCRETE SPRING-LOADED CONTACTS • THROUGH-HOLE MOUNT

0906-0
0906-0-15-20-76-14-11-0
Short stroke
Solder mount in .020 min. mounting hole



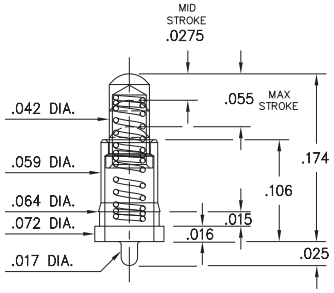
0906-1⇨4,8
0906-X-15-20-7X-14-11-0
Standard stroke
Solder mount in .020 min. mounting hole



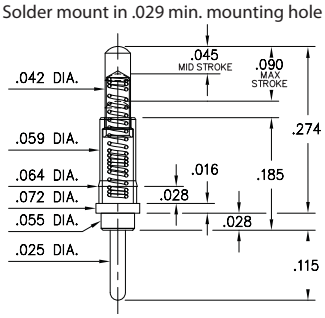
Basic Part Number	Length A
0906-1	.177
0906-2	.197
0906-3	.217
0906-4	.236
∗0906-8	.155

∗0906-8 has a .0195 Mid. Stroke & .039 Max. Stoke

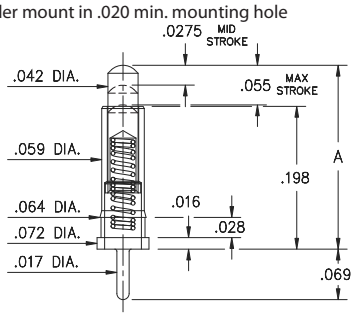
0930
0930-0-15-20-75-14-11-0
Standard stroke
Solder mount in .020 min. mounting hole



0914
0914-0-15-20-77-14-11-0
Long stroke
Solder mount in .029 min. mounting hole

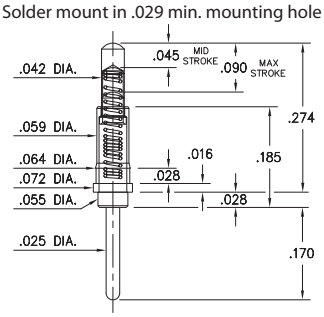


0908-0⇨9
0908-X-15-20-75-14-11-0
Standard stroke
Solder mount in .020 min. mounting hole

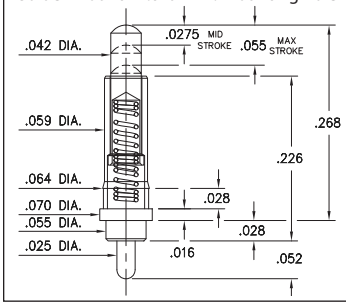


Basic Part Number	Length A
0908-0	.255
0908-1	.275
0908-2	.295
0908-3	.315
0908-4	.335
0908-5	.350
0908-6	.370
0908-7	.390
0908-8	.410
0908-9	.430

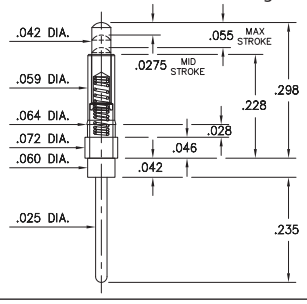
0932
0932-0-15-20-77-14-11-0
Long stroke
Solder mount in .029 min. mounting hole



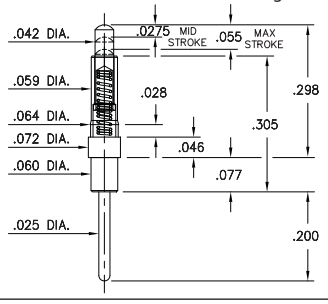
0901
0901-0-15-20-75-14-11-0
"Legacy P/N 0901-0-00-00-00-00-11-0"
Solder mount in .029 min. mounting hole



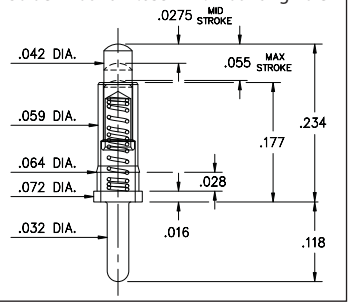
0929
0929-0-15-20-75-14-11-0
Standard stroke
Solder mount in .029 min. mounting hole



0922
0922-0-15-20-75-14-11-0
Standard stroke
Solder mount in .029 min. mounting hole



0956
0956-0-15-20-75-14-11-0
Standard stroke
Solder mount in .035 min. mounting hole



Material Specifications:

Sleeve & Plunger Material: Copper Alloy
Spring Material: Beryllium Copper
Sleeve & Plunger Finish: 20 µ" Gold over Nickel
Spring Finish: 10 µ" Gold over Nickel
Dimensions: Inches
Tolerances On: Lengths: ± .006
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

Mechanical & Electrical Specifications:

Durability: 1,000,000 cycles
Current Rating: 2A continuous, 3A peak
Contact Resistance: 20 mΩ max.

Environmental Specifications:

Operating temperature range: -55/+125° C

75, 76, 77 Springs are not interchangeable

Order Code: 09XX - X - 15 - 20 - 7X - 14 - 11 - 0
Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
75	.0275	.055	60 g	25 g
76	.0195	.039	60 g	25 g
77	.045	.090	60 g	25 g

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

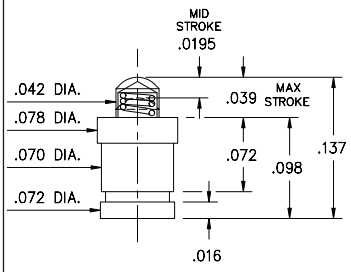
SPRING-LOADED PINS

DISCRETE SPRING-LOADED CONTACTS • SURFACE MOUNT

0910-0

0910-0-57-20-76-14-11-0

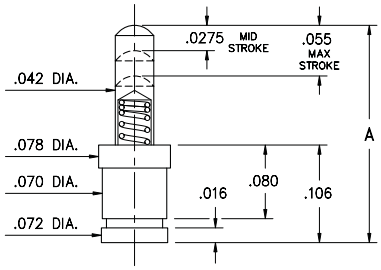
Short stroke, Surface mount
Packaged on 16mm wide carrier tape:
2,000 parts per 13" reel.



0910-1⇨4

0910-X-57-20-75-14-11-0

Standard stroke, Surface mount
Packaged on carrier tape.
See chart for tape width and qty. per reel





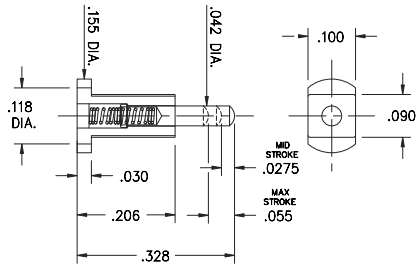
Basic Part Number	Length A
0910-1	.177
0910-2	.197
0910-3	.217
0910-4	.236

Basic Part Number	Tape Width	Quantity per Reel
0910-1	16mm	1,500
0910-2	24mm	1,100
0910-3	24mm	1,100
0910-4	24mm	1,100

0967

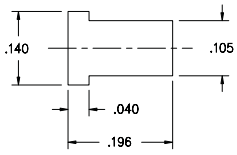
0967-0-15-20-75-14-11-0

Standard stroke, Horizontal surface mount
Also available on 16mm wide carrier tape: 2,200 parts per 13" reel. Order as: 0967-0-58-20-75-14-11-0





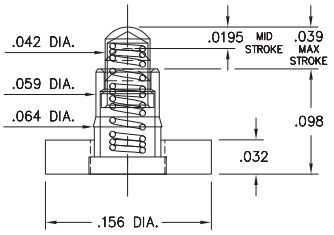
P.C.B. Layout



0990-0

0990-0-50-20-76-14-11-0

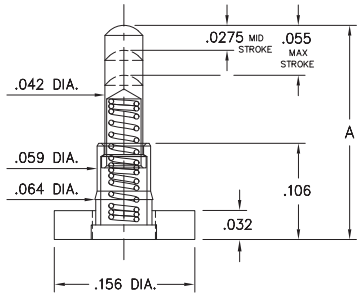
Short stroke, Surface mount, Large base



0990-1⇨4

0990-X-50-20-75-14-11-0

Standard stroke, Surface mount, Large base

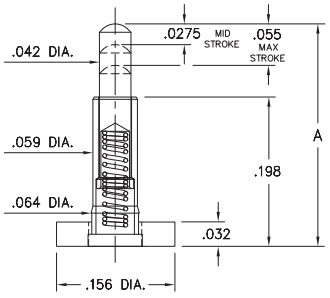


Basic Part Number	Length A
0990-1	.177
0990-2	.197
0990-3	.217
0990-4	.236

0997-0⇨9

0997-X-50-20-75-14-11-0

Standard stroke, Surface mount, Large base, Mid profile



Basic Part Number	Length A
0997-0	.255
0997-1	.275
0997-2	.295
0997-3	.315
0997-4	.335
0997-5	.350
0997-6	.370
0997-7	.390
0997-8	.410
0997-9	.430

Material Specifications:

Sleeve & Plunger Material: Copper Alloy
Spring Material: Beryllium Copper
Sleeve & Plunger Finish: 20 µ" Gold over Nickel
Spring Finish: 10 µ" Gold over Nickel
Dimensions: Inches
Tolerances On: Lengths: ± .006
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

Mechanical & Electrical Specifications:

Durability: 1,000,000 cycles
Current Rating: 2A continuous, 3A peak
Contact Resistance: 20 mΩ max.

Environmental Specifications:

Operating temperature range: -55/+125° C

75, 76 Springs are not interchangeable

Order Code: 09XX - X - XX - 20 - 7X - 14 - 11 - 0
Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
75	.0275	.055	60 g	25 g
76	.0195	.039	60 g	25 g

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

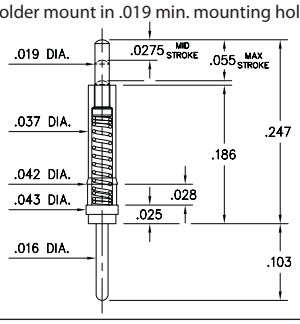
SPRING-LOADED PINS

DISCRETE SPRING-LOADED CONTACTS

0985

0985-0-15-20-71-14-11-0

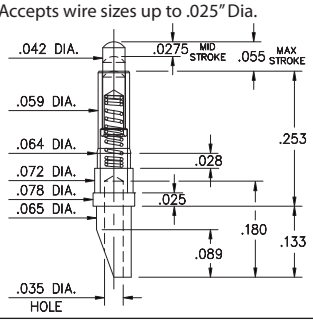
Standard stroke
Solder mount in .019 min. mounting hole



0933

0933-0-15-20-75-14-11-0

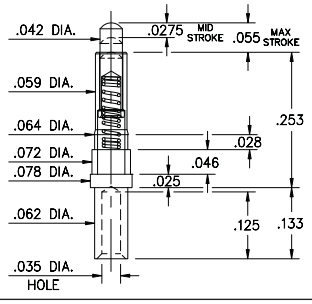
Standard stroke, Soldercup
Accepts wire sizes up to .025" Dia.



0962

0962-0-15-20-75-14-11-0

Standard stroke, Wire termination for
wire sizes 24 AWG Max. / 28 AWG Min.



Material Specifications:

Sleeve & Plunger Material: Copper Alloy
Spring Material: Beryllium Copper
Sleeve & Plunger Finish: 20 µ" Gold over Nickel
Spring Finish: 10 µ" Gold over Nickel
Dimensions: Inches
Tolerances On: Lengths: ± .006
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

Mechanical & Electrical Specifications:

Durability: 1,000,000 cycles
Current Rating: 2A continuous, 3A peak
Contact Resistance: 20 mΩ max.

Environmental Specifications:

Operating temperature range: -55/+125° C

71, 75 Springs are not interchangeable

Order Code: 09XX - X - 15 - 20 - 7X - 14 - 11 - 0

Spring Number

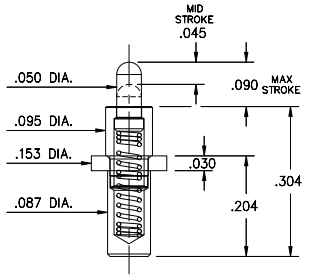
Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
71	.0275	.055	50 g	15 g
75	.0275	.055	60 g	25 g

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

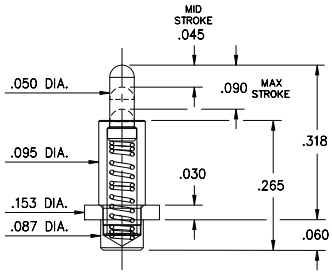
SPRING-LOADED PINS

DISCRETE SPRING-LOADED CONTACTS • POWER SPRING PINS

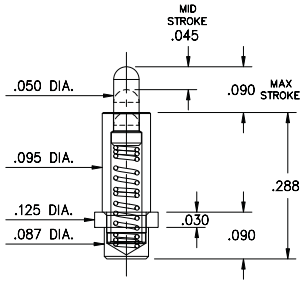
0850
0850-0-15-20-83-14-11-0
Power spring pin
Solder Mount in .090 min. mounting hole



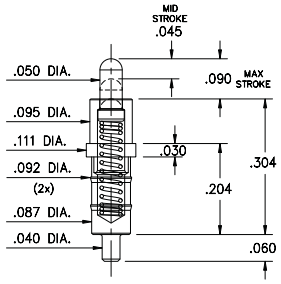
0851
0851-0-15-20-82-14-11-0
Power spring pin
Solder Mount in .090 min. mounting hole



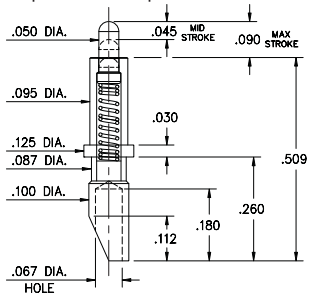
0853
0853-0-15-20-82-14-11-0
Power spring pin
Solder Mount in .090 min. mounting hole



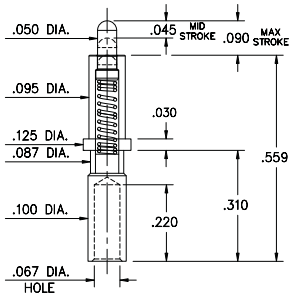
0852
0852-0-15-20-83-14-11-0
Power spring pin
Solder Mount in .043 min. mounting hole



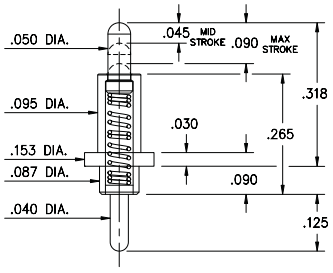
0854
0854-0-15-20-82-14-11-0
Power spring pin, Soldercup
Accepts wire sizes up to .057" Dia.



0855
0855-0-15-20-82-14-11-0
Power spring pin, Wire termination for wire sizes 16 AWG Max. / 20 AWG Min.



0856
0856-0-15-20-82-14-11-0
Power spring pin
Solder Mount in .043 min. mounting hole



Material Specifications:

Sleeve & Plunger Material: Copper Alloy
Spring Material: Stainless Steel 302
Sleeve & Plunger Finish: 20 µ" Gold over Nickel
Spring Finish: 10 µ" Gold over Nickel
Dimensions: Inches
Tolerances On: Lengths: ± .006
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

Mechanical & Electrical Specifications:

Durability: 1,000,000 cycles
Rated Current (Free air):
Continuous 9 amps @ 10° C temperature rise
Contact Resistance: 20 mΩ max.

Environmental Specifications:

Operating temperature range: -55/+125° C

82, 83 Springs are not interchangeable

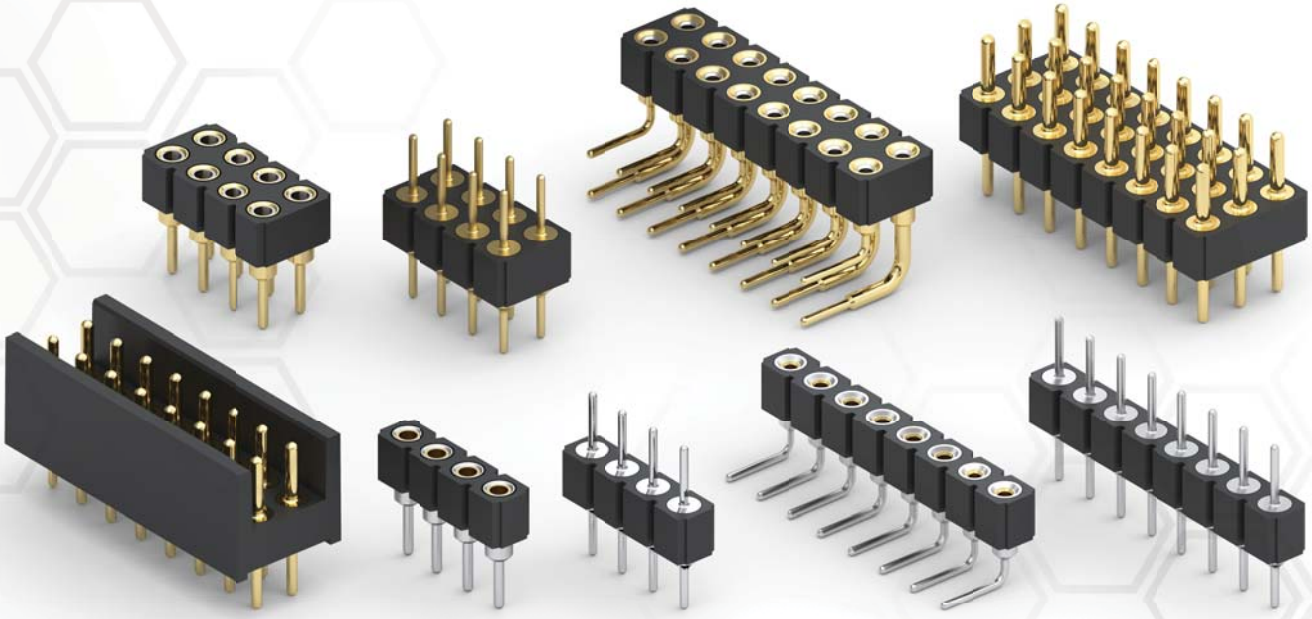
Order Code: 08XX - X - 15 - 20 - 8X - 14 - 11 - 0
Spring Number

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
82	.045	.090	120 g	25 g
83	.045	.090	120 g	25 g

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

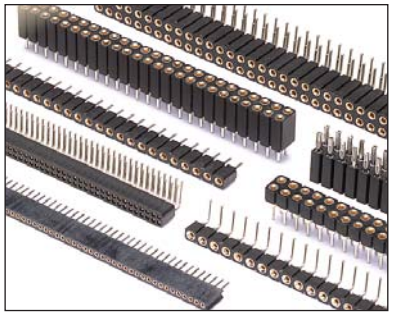
WWW.MILL-MAX.COM

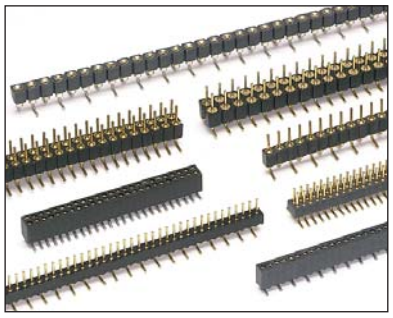
BOARD-TO-BOARD INTERCONNECTS



WWW.MILL-MAX.COM

MILL-MAX HEADER AND SOCKET INTERCONNECTS OFFER AN IDEAL SOLUTION TO THE BOARD-TO-BOARD INTERCONNECT CHALLENGES THAT DESIGN ENGINEERS FACE EVERY DAY. We offer a variety of options to accommodate everything from space-saving, fine-pitch requirements, to larger, more robust applications in which products are subjected to harsh environments including significant shock and vibration. By mating different combinations of headers and sockets, a wide range of board-to-board spacing can be achieved.







MILL-MAX CONNECTORS ARE AVAILABLE IN THE FOLLOWING CONFIGURATIONS:

- Pluggable using a mating socket and header
- Permanent by soldering a through-hole header to both boards
- Fine pitch from 2mm down to 1mm pin-to-pin spacing
- Surface mount headers and sockets
- Right angle
- Multiple board stacking using Organic Fiber Plug® pass-through sockets
- Horizontal "Z-Bend" SMT
- Wire Termination: Soldercup, Turret, Slotted
- Solderless Press-fit

CUSTOM INSULATORS

NEED A SOCKET OR HEADER IN A UNIQUE CONFIGURATION?

Mill-Max can manufacture custom insulators to your exacting specifications, saving you money for high volume runs.

When your product's in high demand, the most cost-effective way to produce a custom connector insulator is to mold it. Mill-Max can mold* insulators out of PCT, Nylon, PPS or LCP, depending on the environmental, mechanical, electrical and thermal requirements of your application.

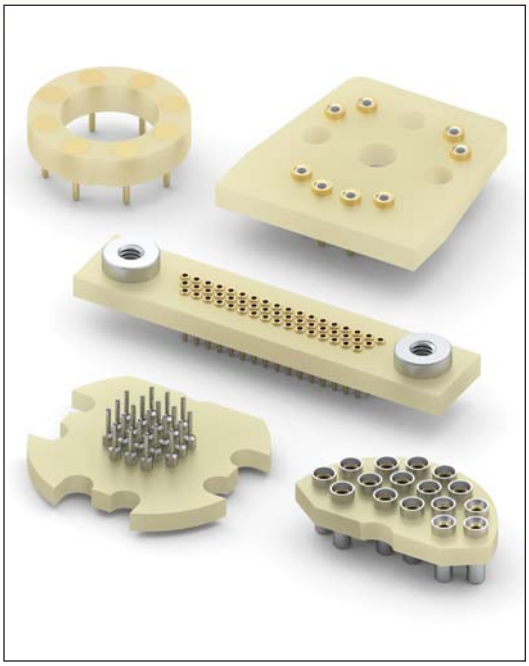
If you have a high-volume connector application, Mill-Max can provide a superior molded insulator solution that will keep your costs in check.

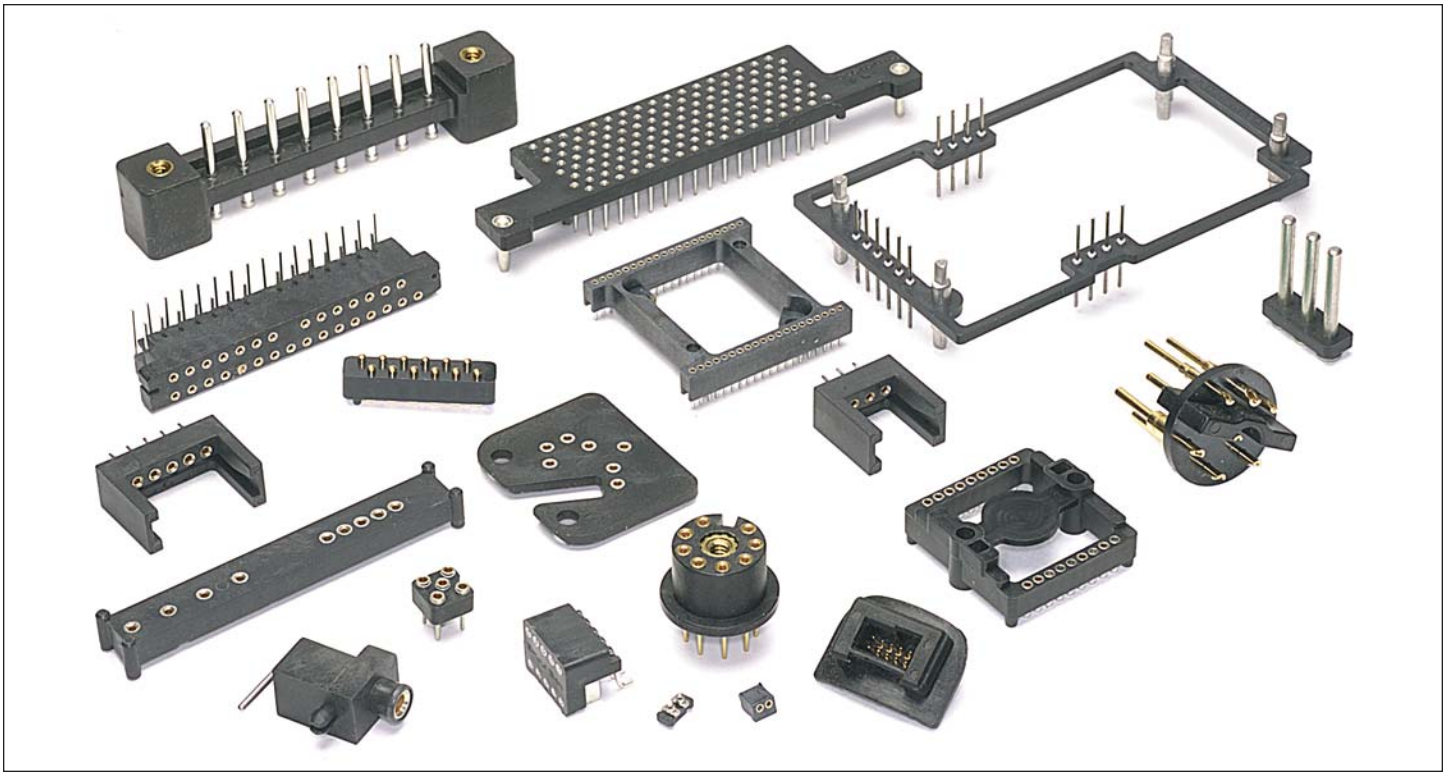
In addition, Mill-Max's utilization of FR-4 epoxy material, in combination with standard pins/receptacles, makes this kind of customization a quick and efficient process for both prototype and volume production.

FR-4 insulators offered in standard thicknesses of .020", .031", .047", .062", .093" and .125" are best suited for single plane designs. Mill-Max can turn around a socket, header or spring pin connector typically in 2-4 weeks or less! (Provided that a standard receptacle or pin with a press-fit feature is used.)

Please contact us with your custom application by completing our Custom Product Worksheet on page 247.

* A one-time partial tooling charge is assessed in order to cover the costs associated with building a custom mold tool.





Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 891 & 893 • 1mm GRID SURFACE MOUNT • MALE AND FEMALE CONNECTORS

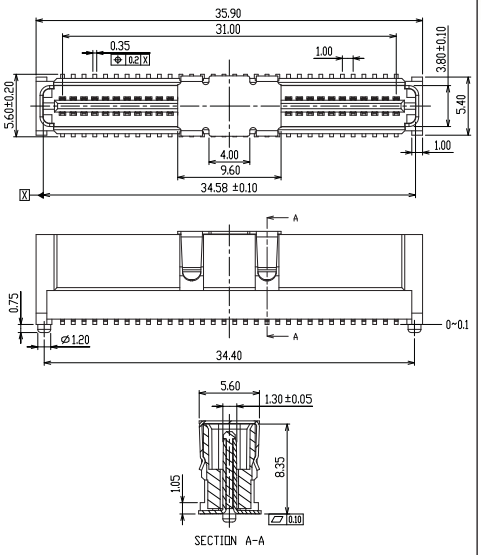


FIG. 1

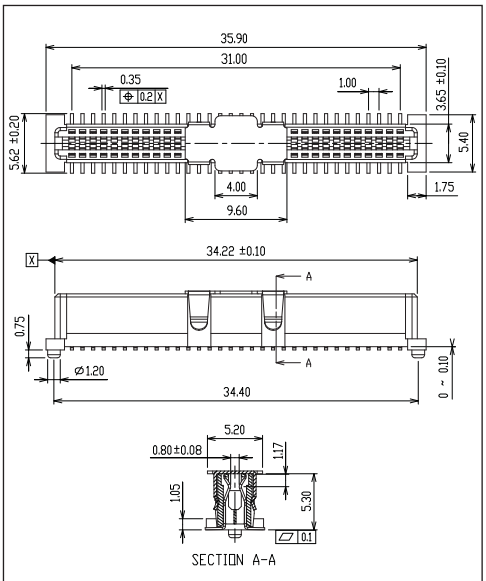
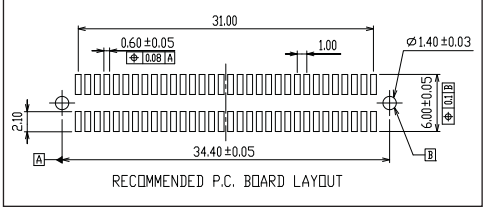
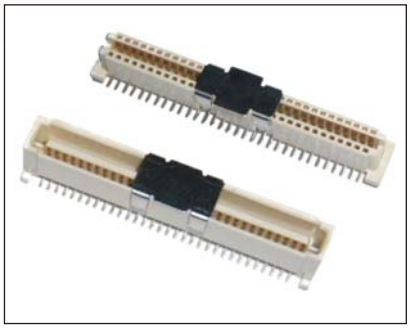


FIG. 2



- 64 Position Mezzanine Connectors for board stacking
- 1 mm Centerline high density packaging
- Mated connector board stacking height of 10 mm
- Conforms to EIA-700 AAAB for IEEE 1386 applictions
- Tape & Reel packaged per EIA-783 (56 mm wide; 16 mm pitch)
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 891...120**	**1mm Surface Mount Male Connector**
	891-10-064-30-120000 **Tape and Reel Packaging:** 400 Parts per 13" reel	
FIG. 2	**Series 893...420**	**1mm Surface Mount Female Connector**
	893-43-064-30-420000 **Tape and Reel Packaging:** 600 Parts per 13" reel	

Technical Specifications

RoHS-2 2011/65/EU

Materials:
Terminals and Contacts: Phosphor Bronze
Plating: Contact area - 30 µ" Gold over Nickel
Solder Terminals - 75 µ" Tin over Nickel
Vacuum Cap: Stainless Steel
Insulator Material: High temperature glass filled LCP, rated UL 94V-0

Ratings:
Current: (30° C Temperature Rise): 0.5 A max., all circuits wired in series (1.0A max., five adjacent circuits wired in series)
Voltage: 250V AC (RMS) (contact to contact)
Operating Temperature Range: -55° C - +85° C

Electrical:
Contact resistance: 30mΩ max.
Insulation resistance: 1,000 MΩ min.
Dielectric Withstanding Voltage: 250V AC for one minute @ sea level

Mechanical:
Vibration: No discontinuity > 1 ms per MIL-STD 202, Method 201
Physical Shock: No discontinuity > 1 µs per EIA 364-27 Test Condition H
Durability: 100 cycles min. per EIA 364-09
Mating Force: 60 g/terminal max. per EIA 364-13
Separation Force: 23 g/terminal min. per EIA 364-13
Contact Retention Force: .4Kg min. per EIA 364-35

Environmental:
Thermal Shock: Per EIA 364-32, Test Condition I
Humidity: Test conditions - Ambient temp. 40±2°C; Relative humidity: 90 - 95%; Duration: 96 Hrs.
Post Humidity Inspection - 1. No damage
2. Contact resistance change < 15 mΩ
3. Insulation Resistance: 100 MΩ min.
Solderability: Per EIA 364-52 Category 2

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 860 & 861 • 1mm GRID HEADERS AND SOCKETS • SINGLE ROW STRIPS

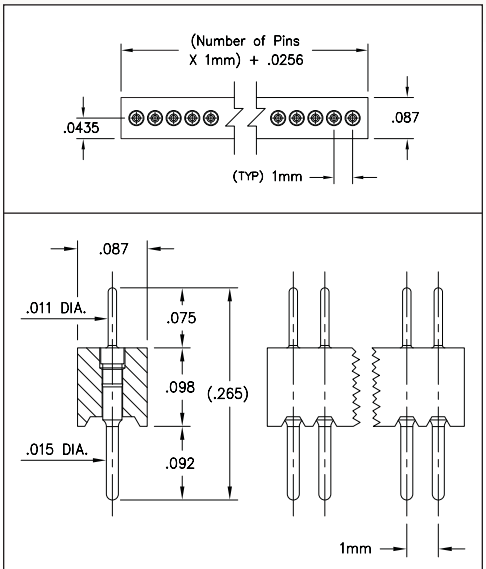


FIG. 1

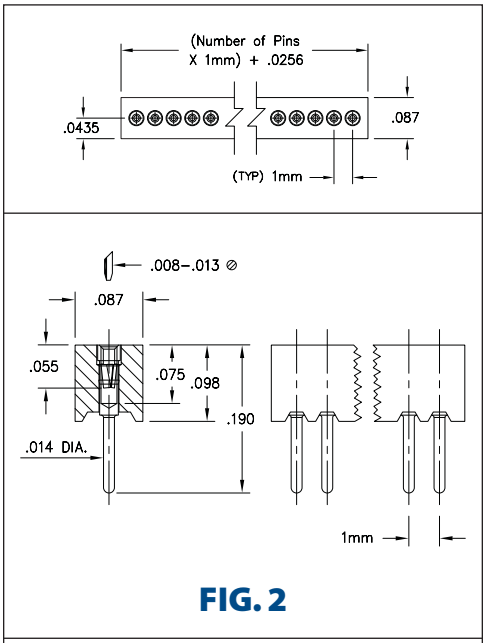
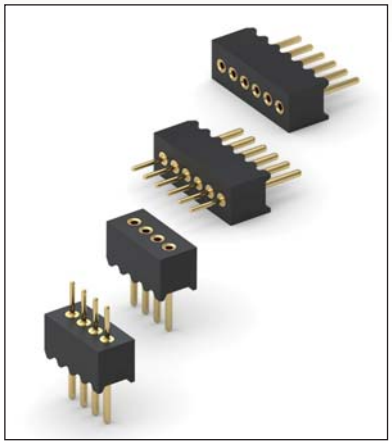


FIG. 2

- Series 860 headers and Series 861 sockets are single row, 1mm pitch interconnects rated at 2 amps
- Series 860 headers have .015" diameter solder tails and .011" diameter pluggable pins (MM #3039) See page 208 for details
- Series 861 sockets have .014" diameter solder tails (MM #0439). See page 156 for details
- Both 860 headers and 861 sockets are available in 2-50 position strips
- The header and socket provide a mated height of .196" for board stacking applications
- Insulators are high temperature thermoplastic, suitable for most soldering processes, and feature standoffs to promote solder flow



ORDERING INFORMATION

FIG. 1 — **Series 860...002** — **Single Row 1mm Header**

860-10-0__-10-002000

Specify number of pins → 02-50

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

FIG. 2 — **Series 861...002** — **Single Row 1mm Socket**

861-13-0__-10-002000

Specify number of pins → 02-50

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	13 ◆						
Sleeve (Pin)	10 µ" Au						
Contact (Clip)	30 µ" Au						

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

SERIES 850, 851, 852, 853 • .050" GRID HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS

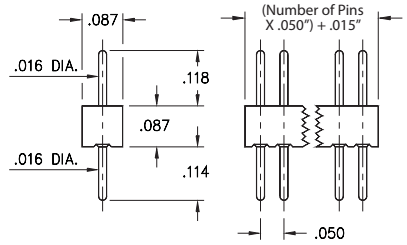


FIG. 1

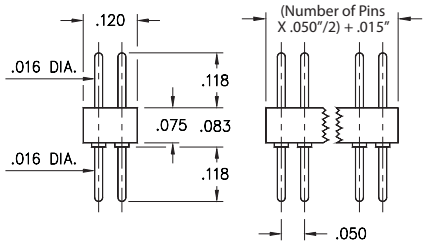


FIG. 2

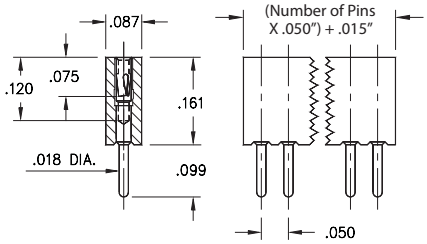


FIG. 3

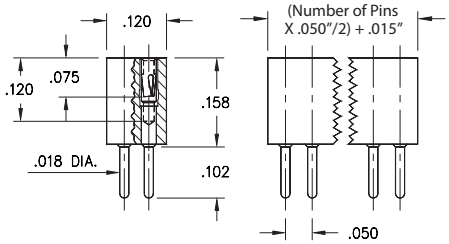


FIG. 4

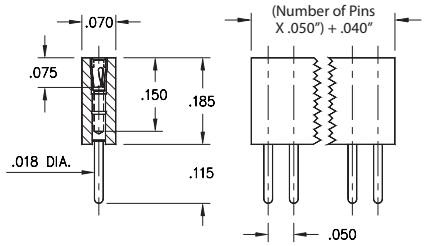
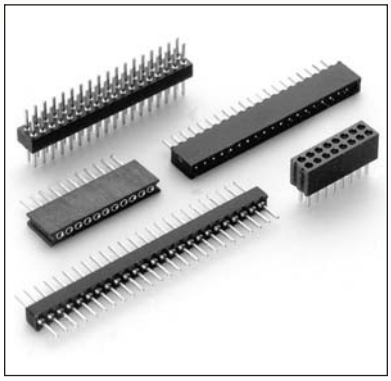


FIG. 5

- Series 850, 851, 852, 853 single and double row interconnects have .050" pin spacing and permit board stacking as low as .248"
- Pin headers have .016" dia. pins (MM #4006-0) See page 208 for details
- MM #0467 and MM #4890 receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. (#11 contact accepts pin diameters from .015"-.020"). See pages 158 and 160 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 850...001 Single Row .087" Profile Pin Header**

850-XX-0_ _-10-001000

Specify number of pins: 01-50

FIG. 2 — **Series 852...001 Double Row .083" Profile Pin Header**

852-XX-_ _ _-10-001000

Specify number of pins: 002-100

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3 — **Series 851...001 Single Row .161" Profile Socket**

851-XX-0_ _-10-001000

Specify number of pins: 01-50

FIG. 4 — **Series 853...001 Double Row .161" Profile Socket**

853-XX-_ _ _-10-001000

Specify number of pins: 002-100

FIG. 5 — **Series 851...002 Single Row .185" Profile Socket**

851-XX-0_ _-10-002000

Specify number of pins: 01-77

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93	99	41 ◆	43 ◆	
Sleeve (Pin)		200 µ"Sn/Pb	200 µ"Sn/Pb	200 µ"Sn/Pb	200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au	100 µ"Sn/Pb	10 µ" Au	30 µ" Au	

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 851 & 853 • .050" GRID LONG TAIL SOCKETS • SINGLE AND DOUBLE ROW STRIPS

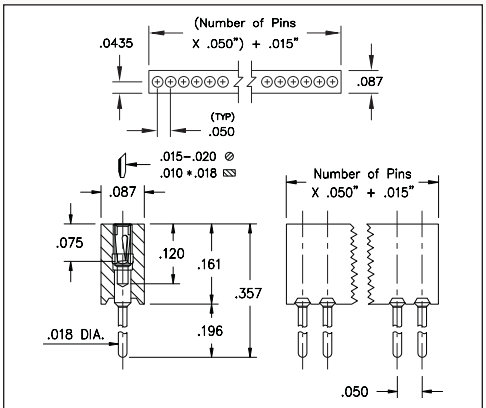


FIG. 1

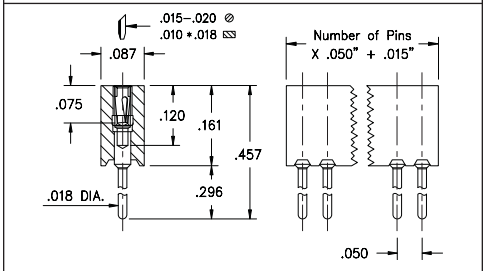


FIG. 2

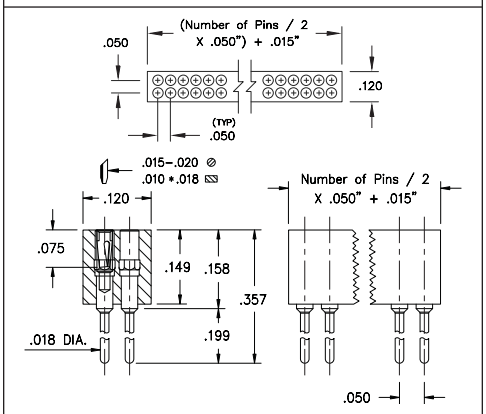


FIG. 3

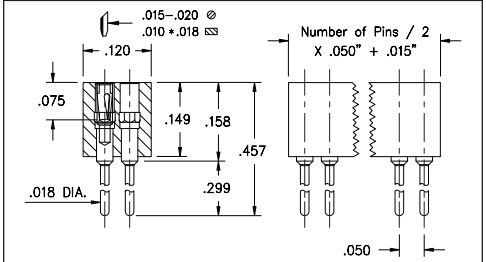
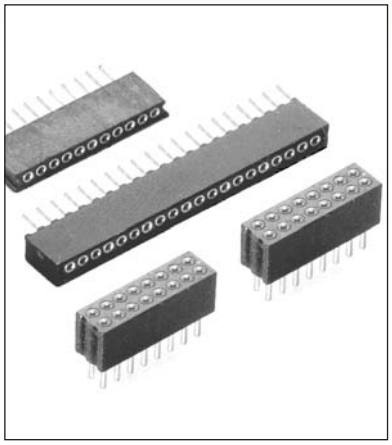


FIG. 4

- Series 851...011 and 853...011 use MM #4890-1 pins. See page 160 for details
- Series 851...021 and 853...021 use MM #4890-2 pins. See page 160 for details
- Receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. (#11 contact accepts pin diameters from .015"-.020"). See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 851...011**	**Single Row Socket**
	851-XX-0_ _-10-011000 **Specify number of pins** ← 01-50	
FIG. 2	**Series 851...021**	**Single Row Socket**
	851-XX-0_ _-10-021000 **Specify number of pins** ← 01-50	
FIG. 3	**Series 853...011**	**Double Row Socket**
	853-XX-_ _ _-10-011000 **Specify number of pins** ← 004-100	
FIG. 4	**Series 853...021**	**Double Row Socket**
	853-XX-_ _ _-10-021000 **Specify number of pins** ← 004-100	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=					41 ◆	43 ◆	
Sleeve (Pin)					200 µ" Sn	200 µ" Sn	
Contact (Clip)					10 µ" Au	30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 850, 851, 852, 853 • 050" GRID RIGHT ANGLE HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS

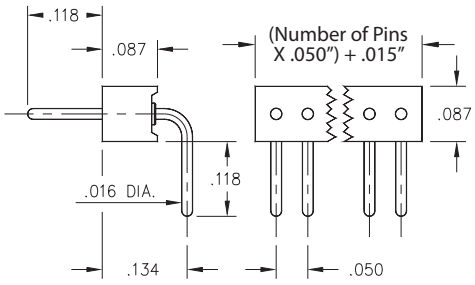


FIG. 1

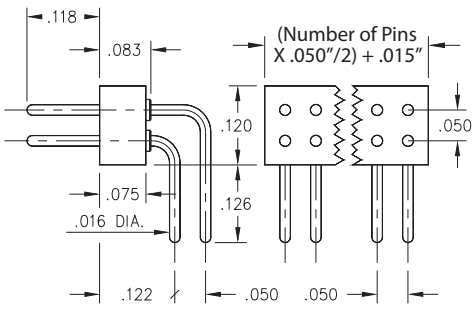


FIG. 2

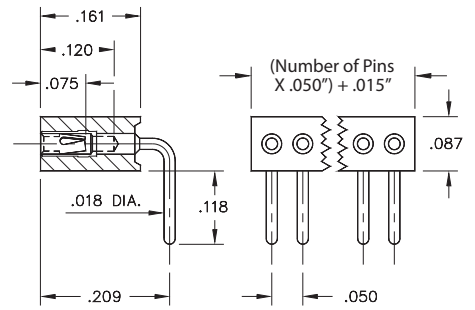


FIG. 3

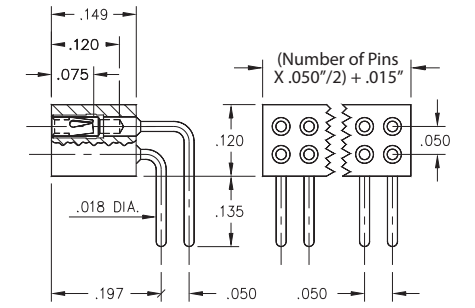
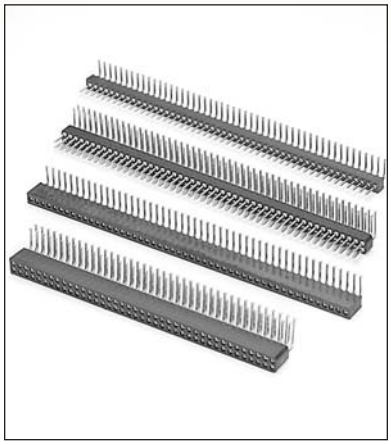


FIG. 4

- Series 850 and 851 interconnects are available in single and double row form
- Series 850 & 852 headers use MM #4006-1 and #4006-2 pins. See page 208 for details
- Series 851 & 853 sockets use MM #4890-1 and #4890-2 receptacles that accept pin diameters from .015"-.021". See page 160 for details
- Receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 850...001** **Single Row Right Angle Pin Header**

850-XX-0__-20-001000

Specify number of pins 01-50

FIG. 2 — **Series 852...001** **Double Row Right Angle Pin Header**

852-XX-___-20-001000

Specify number of pins 002-100

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3 — **Series 851...001** **Single Row Right Angle Socket**

851-XX-0__-20-001000

Specify number of pins 01-50

FIG. 4 — **Series 853...001** **Double Row Right Angle Socket**

853-XX-___-20-001000

Specify number of pins 002-100

RoHS-2 2011/65/EU

XX=Plating Code See Below

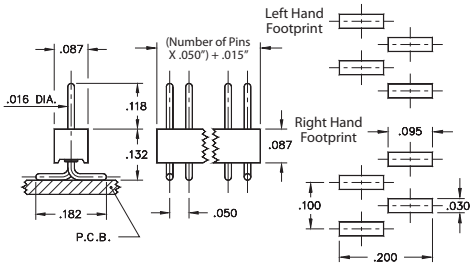
For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=			93	99		43 ◆	
Sleeve (Pin)			200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	
Contact (Clip)			30 µ" Au	100 µ" Sn/Pb		30 µ" Au	

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

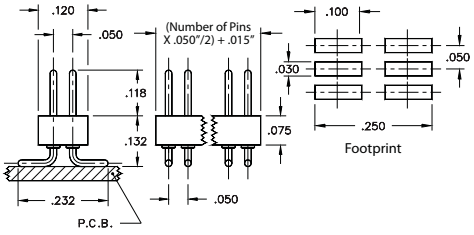
INTERCONNECTS

SERIES 850, 851, 852, 853 • 050" GRID SURFACE MOUNT HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS



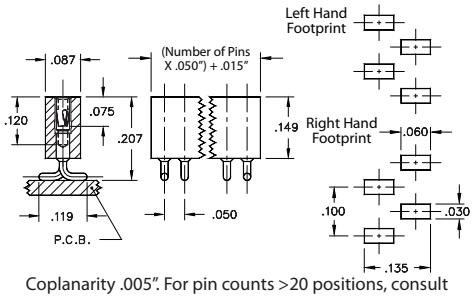
Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 1



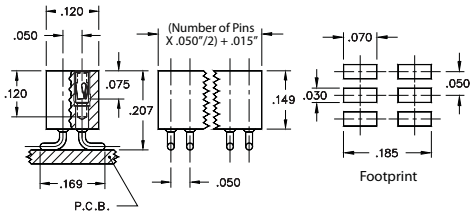
Coplanarity .005". For pin counts >40 positions, consult Technical Support.

FIG. 2



Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 3



Coplanarity .005". For pin counts >40 positions, consult Technical Support.

FIG. 4

- Single row interconnects having an even number of pins are now available with a left or right hand footprints
- Headers (850 and 852) use MM #4006 pins. See page 208 for details
- Sockets (851 and 853) use MM #4890-0 receptacles and accept pin diameters from .015"-.021". See page 160 for details
- Receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1L	**Single Row Header, Left Hand Footprint, Odd or Even # of Pins**
	850-XX-0_ _-30-001000 — Specify number of pins (02-50)
FIG. 1R	**Single Row Header, Right Hand Footprint, Even # of Pins**
	850-XX-0_ _-30-002000 — Specify number of pins (02-50)
FIG. 2	**Double Row Header, Even # of Pins**
	852-XX-_ _ _-30-001000 — Specify number of pins (004-100)

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn

FIG. 3L	**Single Row Socket, Left Hand Footprint, Odd or Even # of Pins**
	851-XX-0_ _-30-001000 ★ — Specify number of pins (02-50)
FIG. 3R	**Single Row Socket, Right Hand Footprint, Even # of Pins**
	851-XX-0_ _-30-002000 — Specify number of pins (02-50)
FIG. 4	**Double Row Socket, Even # of Pins**
	853-XX-_ _ _-30-001000 ★ — Specify number of pins (004-100)

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

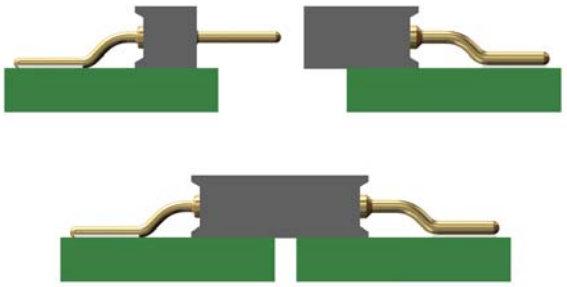
SPECIFY PLATING CODE XX=		91	93	99	41 ◆	43 ◆	44 ◆
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	200 µ" Sn
Contact (Clip)		10 µ" Au	30 µ" Au	100 µ" Sn/Pb	10 µ" Au	30 µ" Au	100 µ" Sn

★ 44 Plating Non-Standard

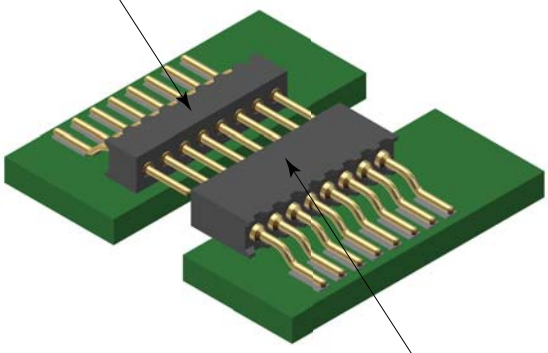
HORIZONTAL SMT PINS & CONNECTORS

VERSATILE CONNECTORS FOR HORIZONTAL & EDGE BOARD MATING APPLICATIONS

Z-Bend Style
SIP Header & Socket
HSMT (.050" Grid)



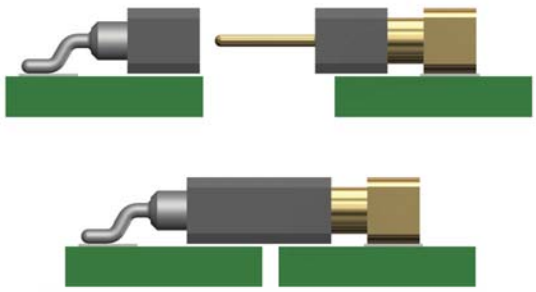
850-10-0XX-40-001000
.050" Grid (See Page 40)



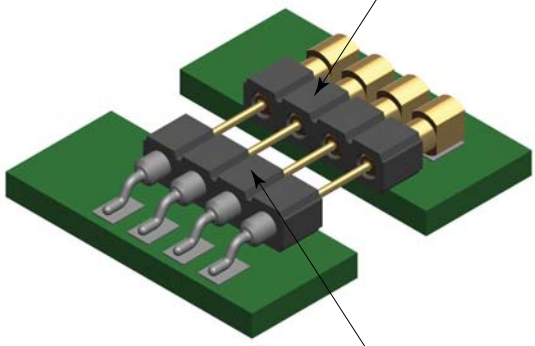
851-13-0XX-40-001000
.050" Grid (See Page 40)

Z-Bend Style
SIP Socket HSMT
(.100" Grid)

Block Style
SIP Header HSMT
(.100" Grid)



351-10-1XX-40-002000
.100" Grid (See Page 50)



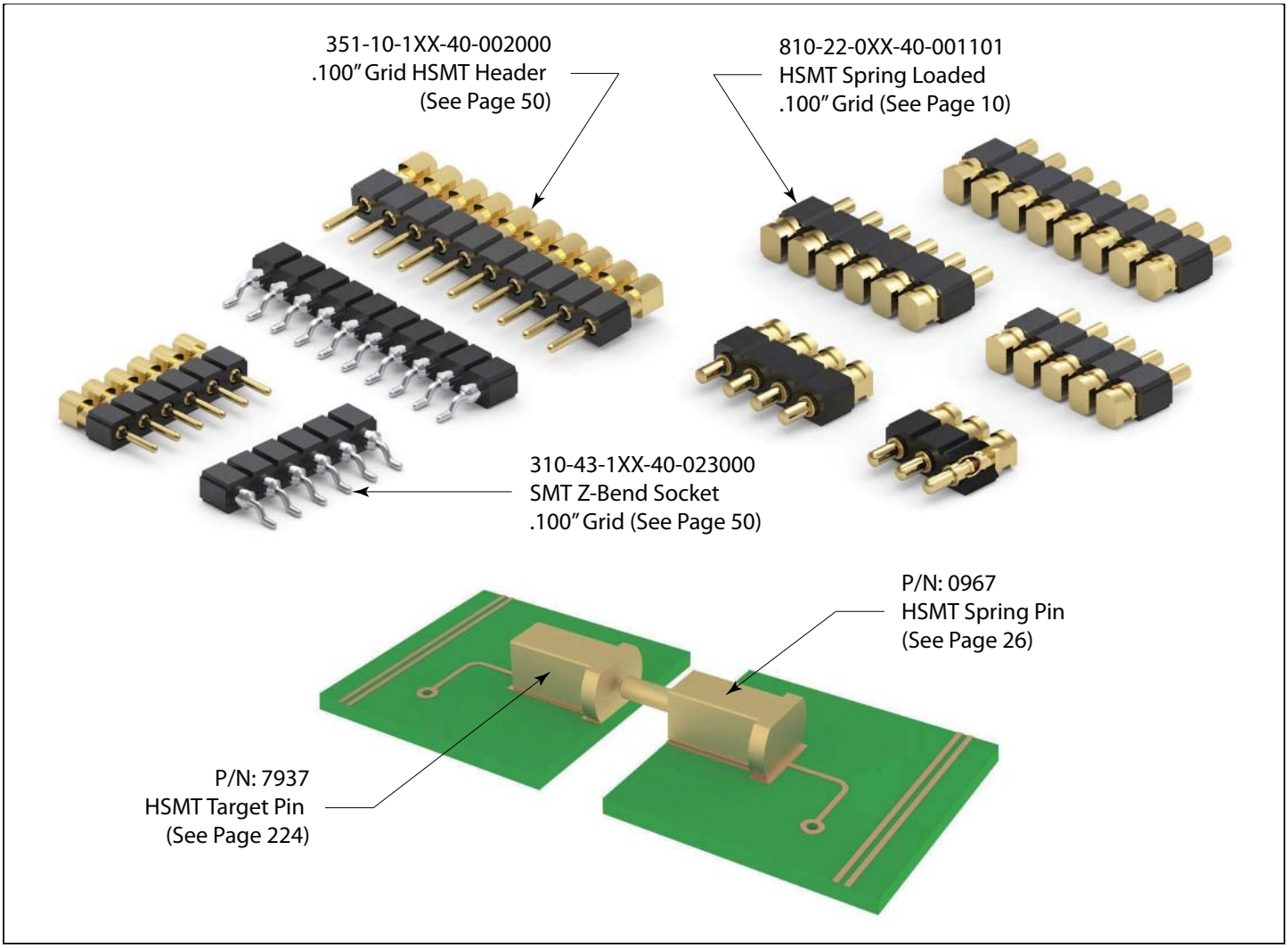
310-43-1XX-40-023000
.100" Grid (See Page 50)

Mill-Max Mfg. offers a complete line of Horizontal Surface Mount products including headers and sockets on .050" (1,27mm) and .100" (2,54mm) grid, discrete spring-loaded and mating target pins and spring-loaded connector strips.

For low profile IO applications surface mount SIP sockets and headers strips are assembled parallel to the board surface. They are ideal for placement near the board edge for easy access test connections & creating pluggable adapter modules which can sit perpendicular to the motherboard (mated to a vertical connector), effectively conserving precious board real estate.

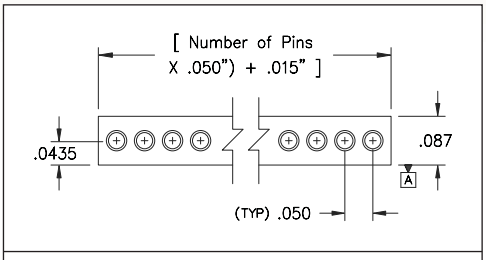
HORIZONTAL SMT PINS & CONNECTORS

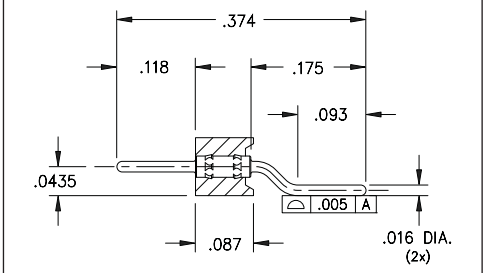
VERSATILE CONNECTORS FOR HORIZONTAL & EDGE BOARD MATING APPLICATIONS



Mill-Max Mfg's #0967 (featured above) is a low profile, horizontal, surface mount spring pin designed for edge board interface applications: board-to-board or device-to-board. The #0967 mounts parallel to the P.C. board so that the plunger travel is horizontal to the board surface. The above board height of .100" (2,54mm) provides a low profile for tight packaging requirements. Typically mounted on the edge of the P.C. board, it can be mated with a board running perpendicular to it, or parallel P.C. boards can be daisy-chained together by using the Mill-Max Mfg. #7937 horizontal SMT target pin and #0967 on opposing boards.

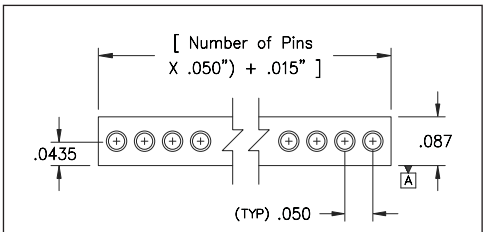
SERIES 850 & 851 • .050" GRID HORIZONTAL SURFACE MOUNT Z-BEND HEADERS & SOCKETS • SINGLE ROW STRIPS

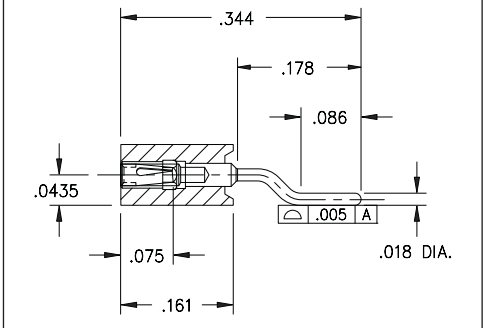




Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 1

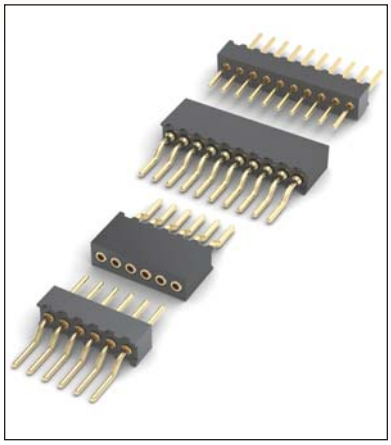




Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 2

- Series 850 horizontal surface mount headers have .016" dia. pluggable pins and Z-bent tails for SMT soldering to the P.C.B. (MM #4006-1). See page 208 for details
- Series 851 horizontal Surface Mount Z-Bend sockets uses MM #4890-1 receptacles that accept pin diameters from .015"-.020". See page 160 for details
- Receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 850...001 Single Row Surface Mount Z-Bend Header**

850-10-0__-40-001000

Specify number of pins 02-20

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

FIG. 2 — **Series 851...001 Single Row Surface Mount Z-Bend Socket**

851-XX-0__-40-001000

Specify number of pins 02-20

RoHS-2 2011/65/EU

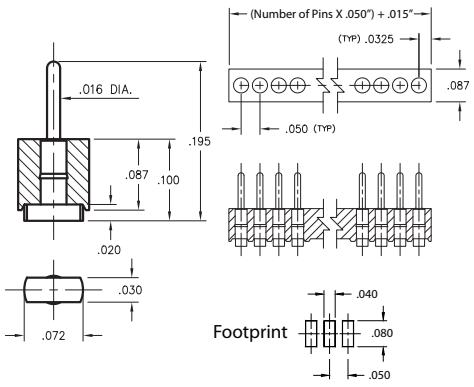
XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	11 ◆	13 ◆					
Sleeve (Pin)	10 µ" Au	10 µ" Au					
Contact (Clip)	10 µ" Au	30 µ" Au					

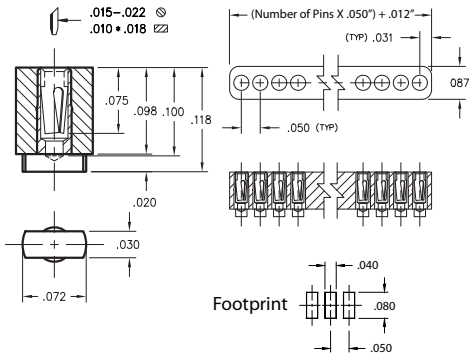
MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 340 & 399 • .050" AND .100" GRID SURFACE MOUNT HEADERS & SOCKETS • SINGLE ROW STRIPS



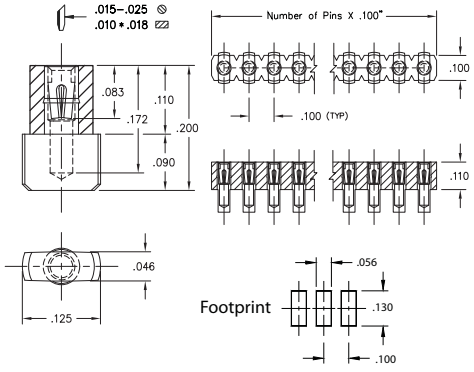
Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 1



Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 2



Coplanarity .005". For pin counts >10 positions, consult Technical Support.

FIG. 3

- Series 340 and 399 interconnects are single row headers & sockets having unique surface mount "block" terminals
- "Block" termination makes the interconnects "self standing". This also minimizes profile and reduces the footprint compared with traditional "gullwing" designs
- Series 399 is a matched pair of .050" pitch sockets and headers with a mated height of only .218"
- Series 340 is a .100" pitch SIP socket using a Hi-Rel, 4-finger BeCu #30 contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering processes



ORDERING INFORMATION

FIG. 1 — **Series 399...310 Single Row .050" Grid Header**

399-10-0__-00-310000

Specify number of pins: 02-50

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

FIG. 2 — **Series 399...300 Single Row .050" Grid Socket**

399-XX-0__-21-300000

Specify number of pins: 02-50

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91			41 ◆		
Sleeve (Pin)		200 µ" Sn/Pb			200 µ" Sn		
Contact (Clip)		10 µ" Au			10 µ" Au		

FIG. 3 — **Series 340...780 Single Row .100" Grid Socket**

340-XX-1__-30-780100

Specify number of pins: 02-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=				99			44 ◆
Sleeve (Pin)				200 µ" Sn/Pb			200 µ" Sn
Contact (Clip)				100 µ" Sn/Pb			100 µ" Sn

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 870 & 871 • .070" GRID (.018" DIA.) PINS, RIGHT ANGLE HEADERS & SOCKETS • SINGLE ROW STRIPS

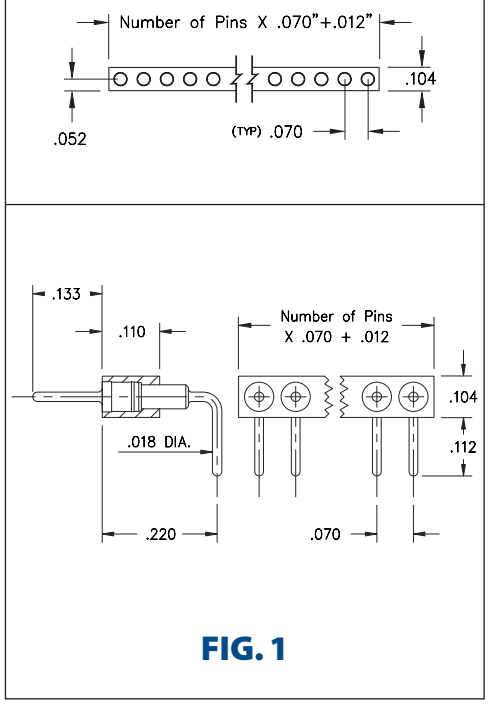


FIG. 1

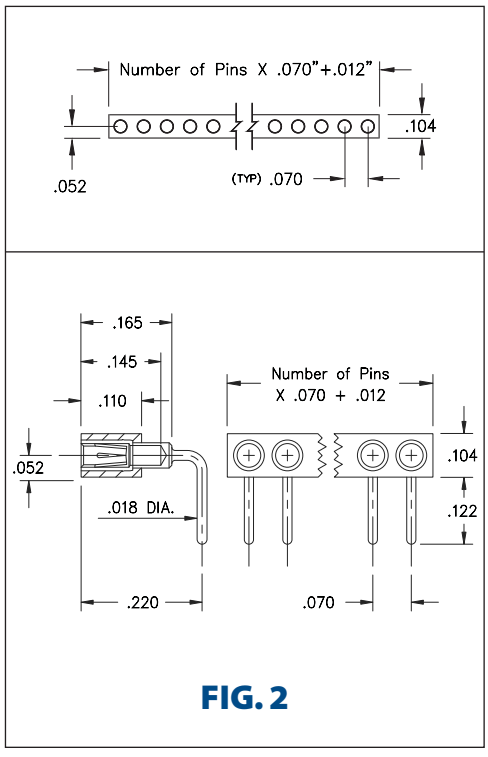
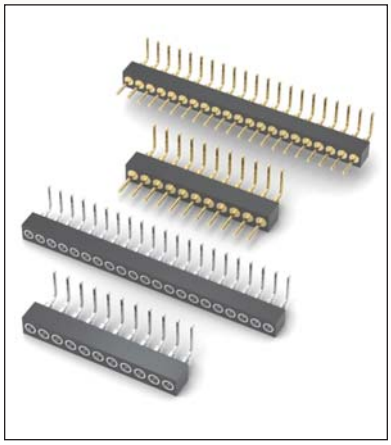


FIG. 2

- Series 870 and 871 Interconnects feature space saving .070" pitch
- Series 870 uses MM #3790-0 pins. See page 209 for details
- Series 871 uses MM #1805 receptacles and accept pin diameters from .015" - .025". See page 169 for details
- Receptacles use Hi-Rel, 4-finger BeCu #30 contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 870...20-001** — **Right Angle Pin Header**

870-10-0__-20-001000

Specify number of pins 02-21

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

FIG. 2 — **Series 871...20-001** — **Right Angle Socket**

871-XX-0__-20-001000

Specify number of pins 02-21

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=					41 ◆	43 ◆	
Sleeve (Pin)					200 µ" Sn	200 µ" Sn	
Contact (Clip)					10 µ" Au	30 µ" Au	

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 830, 831, 832, 833 • 2mm GRID HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS

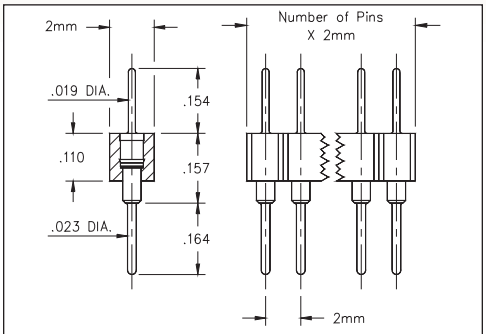


FIG. 1

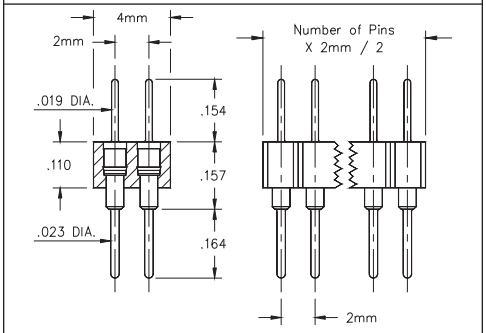


FIG. 2

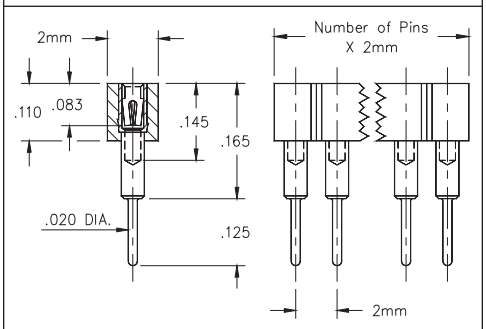


FIG. 3

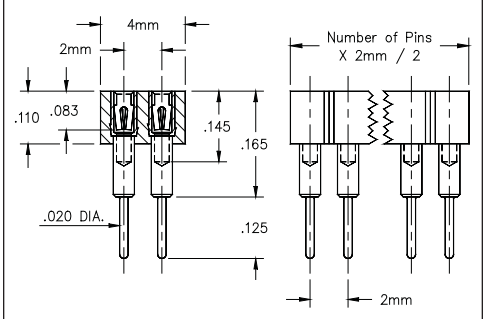


FIG. 4

- Series 830 single & double row interconnects have 2mm pin spacing and permit board stacking as low as .322"
- Pin headers (830 & 832 series) use MM #5012 pins. See page 208 for details
- Sockets (831 & 833 series) use MM #1802 receptacles and accept pin diameters from .015"-.025". See page 169 for details
- Contact is rated at 3 amps
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 830...001 — Single Row Pin Header**

830-XX-0__-10-001000

Specify number of pins (01-50)

FIG. 2 — **Series 832...001 — Double Row Pin Header**

832-XX-___-10-001000

Specify number of pins (002-100)

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3 — **Series 831...001 — Single Row Socket**

831-XX-0__-10-001000

Specify number of pins (01-50)

FIG. 4 — **Series 833...001 — Double Row Socket**

833-XX-___-10-001000

Specify number of pins (002-100)

RoHS-2 2011/65/EU

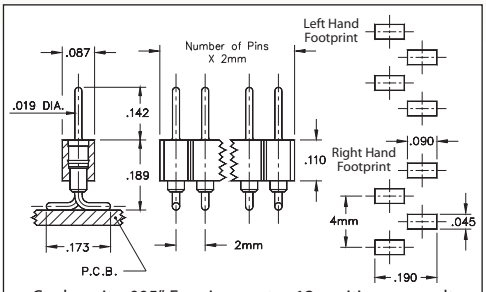
XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

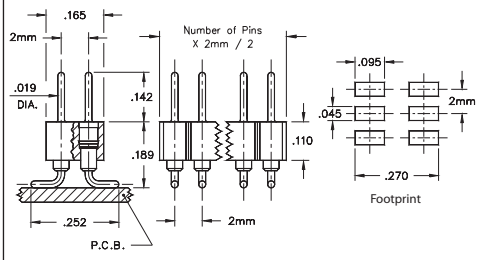
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 830, 831, 832, 833 • 2mm GRID GULL WING SURFACE MOUNT HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS



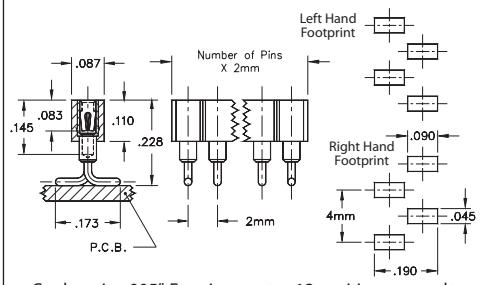
Coplanarity .005". For pin counts >12 positions, consult Technical Support.

FIG. 1



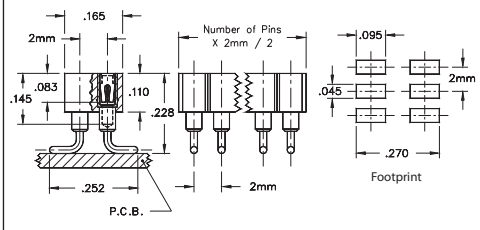
Coplanarity .005". For pin counts >24 positions, consult Technical Support.

FIG. 2



Coplanarity .005". For pin counts >12 positions, consult Technical Support.

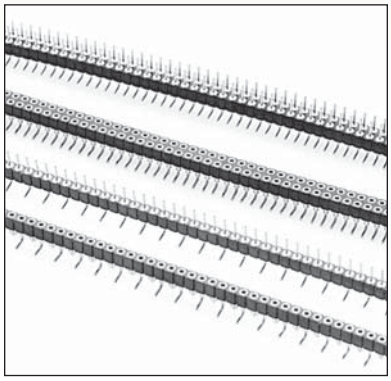
FIG. 3



Coplanarity .005". For pin counts >24 positions, consult Technical Support.

FIG. 4

- Headers (830 & 832) use MM #6218 pins. See page 208 for details
- Sockets (831 & 833) use MM #1802 receptacles and accept pin diameters from .015"-.025". See page 169 for details
- Coplanarity .005" (Single Row max 12 pins; Double Row max 24 pins) For higher pin counts, contact Technical Support
- Contact is rated at 3 amps
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1L — Single Row Header, Left Hand Footprint, Odd or Even # of pins

830-XX-0_ _-30-001000

Specify number of pins → 01-50

FIG. 1R — Single Row Header, Right Hand Footprint, Even # of pins

830-XX-0_ _-30-002000

Specify number of pins → 02-50

FIG. 2 — Double Row Header, Even # of pins

832-XX-_ _ _-30-001000

Specify number of pins → 004-100

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn

FIG. 3L — Single Row Socket, Left Hand Footprint, Odd or Even # of pins

831-XX-0_ _-30-001000

Specify number of pins → 01-50

FIG. 3R — Single Row Socket, Right Hand Footprint, Even # of pins

831-XX-0_ _-30-002000

Specify number of pins → 02-50

FIG. 4 — Double Row Socket, Even # of pins

833-XX-_ _ _-30-001000

Specify number of pins → 004-100

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	91	93	41 ◆	43 ◆
Sleeve (Pin)	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

SERIES 830, 831, 832, 833 • 2mm GRID RIGHT ANGLE HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS

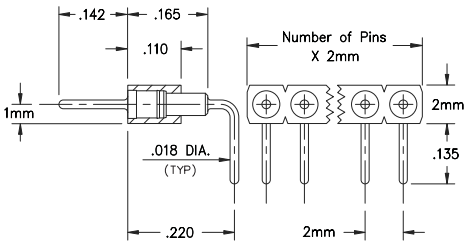


FIG. 1

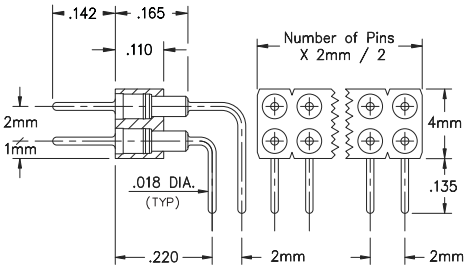


FIG. 2

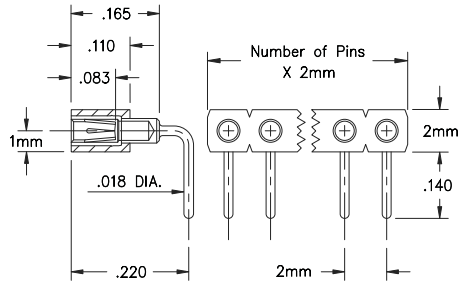


FIG. 3

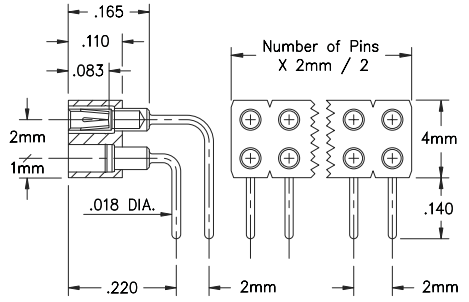
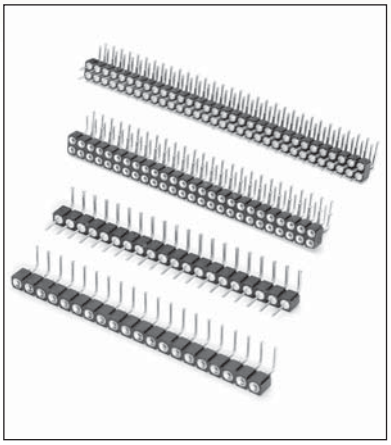


FIG. 4

- Series 830 & 832 use MM #3790 & MM #3796 pins. See page 209 for details
- Series 831 & 833 use MM #1805 and MM #3805 receptacles and accept pin diameters from .015"-.025". See page 169 for details
- Receptacles use Hi-Rel, Low force, 6-finger BeCu #32 contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 830...001**	**Single Row Right Angle Header**
	830-10-0_ _-20-001000	
	Specify number of pins ← 01-50	
FIG. 2	**Series 832...001**	**Double Row Right Angle Header**
	832-10-_ _ _-20-001000	
	Specify number of pins ← 002-100	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

FIG. 3	**Series 831...001**	**Single Row Right Angle Socket**
	831-XX-0_ _-20-001000	
	Specify number of pins ← 01-50	
FIG. 4	**Series 833...001**	**Double Row Right Angle Socket**
	833-43-_ _ _-20-001000	
	Specify number of pins ← 002-100	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=					41 ◆	43 ◆	
Sleeve (Pin)					200 µ" Sn	200 µ" Sn	
Contact (Clip)					10 µ" Au	30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 301, 310, 350, 399 • .100" GRID (.018" DIA.) PINS, STRAIGHT AND RIGHT ANGLE • SINGLE ROW STRIPS

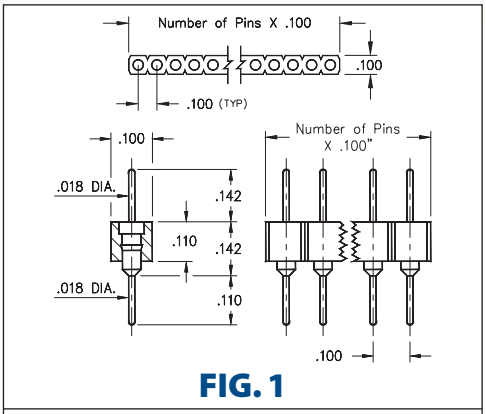


FIG. 1

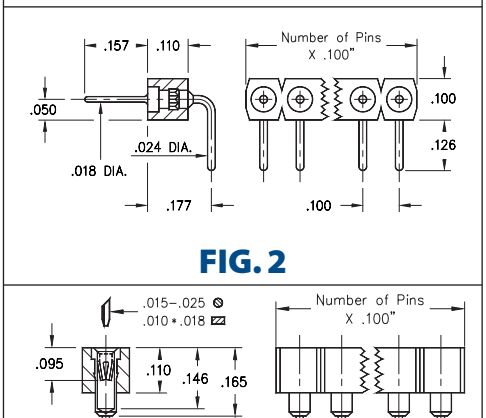


FIG. 2

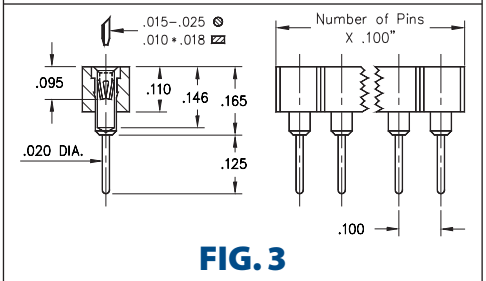


FIG. 3

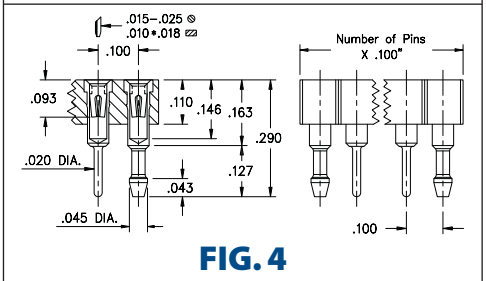


FIG. 4

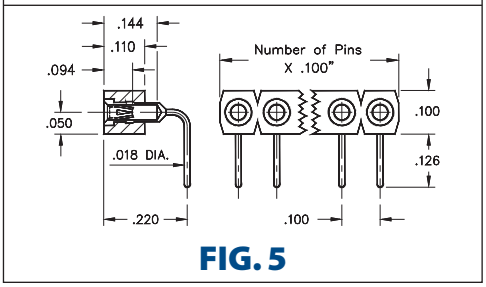
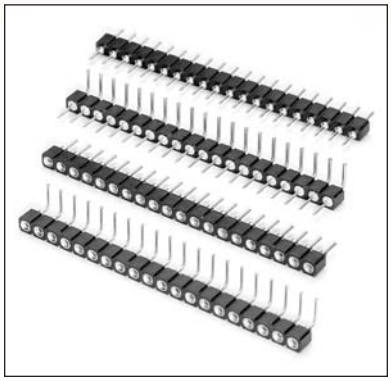


FIG. 5

- Series 3XX are available with straight and right angle solder tails
- Series 350 & 399...009 use MM #3404 and #5011 pins. See pages 212 & 214 for details
- Series 301, 310 & 399...003 use MM #0156, #1001 & #1103 receptacles. See pages 165 and 166 for details
- Receptacles use Hi-Rel, 4-finger #30 BeCu contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 350...006** — **Straight Pin Header**

350-XX-1__-00-006000

Specify number of pins 01-64

FIG. 2 — **Series 399...009** — **Right Angle Pin Header**

399-XX-1__-10-009000

Specify number of pins 02-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3 — **Series 310...001** — **Solder Tail Socket**

310-XX-1__-41-001000

Specify number of pins 01-64

FIG. 4 — **Series 301...056** — **Socket with Retention Pins**

301-43-1__-41-560000

Specify number of pins 03-64

FIG. 5 — **Series 399...003** — **Right Angle Socket**

399-XX-1__-10-003000

Specify number of pins 02-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	11 ◆	13 ◆	91	93	99	41 ◆	43 ◆	44 ◆
Sleeve (Pin)	10 µ" Au	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	100 µ" Sn/Pb	10 µ" Au	30 µ" Au	100 µ" Sn

★ 41, 91 & 99 Platings Non-Standard

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

INTERCONNECTS

SERIES 410, 450, 499 • .100" GRID (.018" DIA.) PINS, STRAIGHT AND RIGHT ANGLE • DOUBLE ROW STRIPS

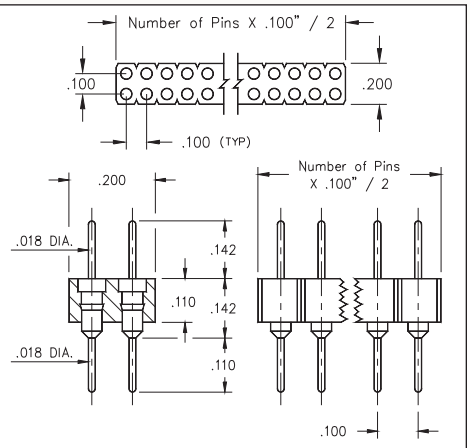


FIG. 1

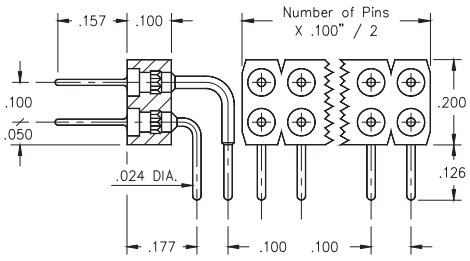


FIG. 2

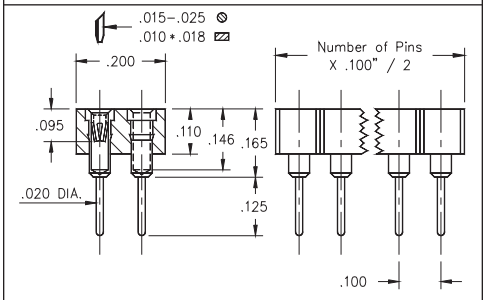


FIG. 3

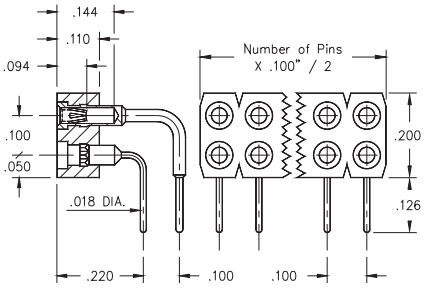


FIG. 4

- Series 4XX are available with straight and right angle solder tails
- Series 450 & 499...009 use MM #3404 and #5011/5113 pins. See pages 212 and 214 for details
- Series 410 & 499...003 use MM #1001 and #1103/1602 receptacles. See pages 165, 166 and 167 for details
- Receptacles use Hi-Rel, 4-finger #30 BeCu contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 450...006**	**Straight Pin Header**
	450-XX-2__-00-006000	
	Specify number of pins ← 02-64	
FIG. 2	**Series 499...009**	**Straight Pin Header**
	499-10-2__-10-009000	
	Specify number of pins ← 02-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3	**Series 410...001**	**Solder Tail Socket**
	410-XX-2__-41-001000	
	Specify number of pins ← 02-64	
FIG. 4	**Series 499...003**	**Right Angle Socket**
	499-XX-2__-10-003000	
	Specify number of pins ← 02-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	11 ◆	13 ◆	91	93	41 ◆	43 ◆	
Sleeve (Pin)	10 µ" Au	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	

SERIES 329, 380, 429, 480 • .100" GRID SOLDER CUP HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS

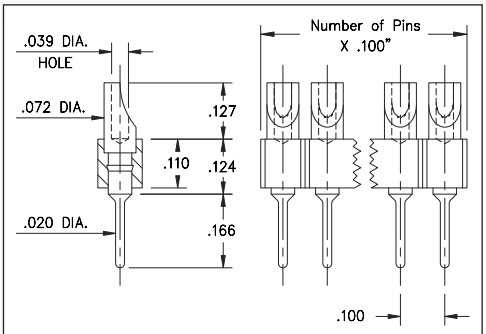


FIG. 1

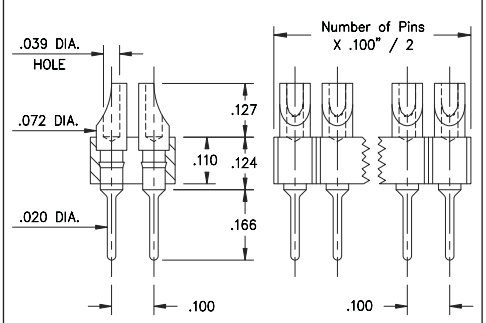


FIG. 2

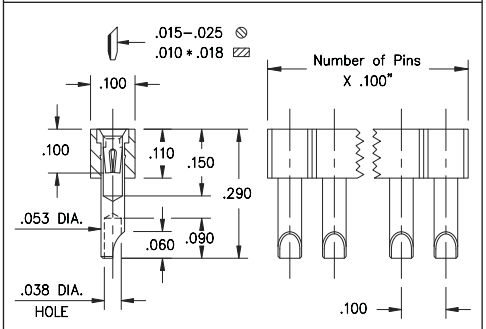


FIG. 3

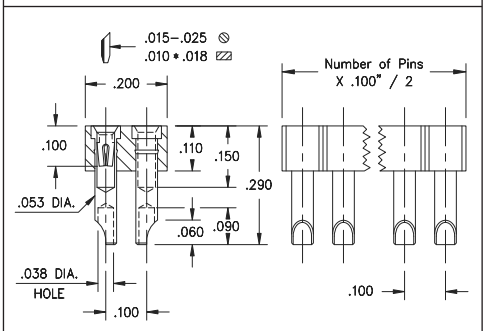
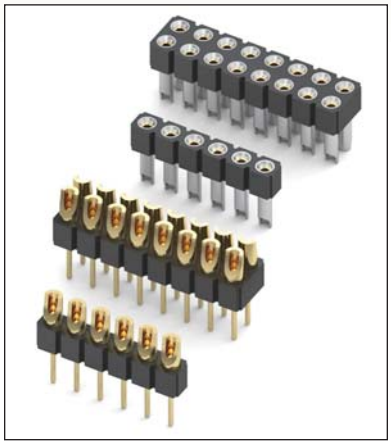


FIG. 4

- Series 380 & 480 use MM #8000 pins. See page 216 for details
- Series 329 & 429 use MM #2954 receptacles and accept pin diameters from .015"-.025". See page 171 for details
- Series 329 & 429 receptacles use Hi-Rel, 4-finger BeCu #30 contact rated at 3 amps. See page 253 for details
- Soldercups are pre-aligned
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 380...001** **Single Row Solder Cup / Solder Tail**

380-XX-1__-00-001000

Specify number of pins 01-64

FIG. 2 — **Series 480...001** **Double Row Solder Cup / Solder Tail**

480-10-2__-00-001000

Specify number of pins 02-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3 — **Series 329...540** **Single Row Solder Cup Sockets**

329-XX-1__-41-540000

Specify number of pins 01-64

FIG. 4 — **Series 429...540** **Double Row Solder Cup Sockets**

429-XX-2__-41-540000

Specify number of pins 02-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	11 ◆	13 ◆			41 ◆	43 ◆	
Sleeve (Pin)	10 µ" Au	10 µ" Au			200 µ" Sn	200 µ" Sn	
Contact (Clip)	10 µ" Au	30 µ" Au			10 µ" Au	30 µ" Au	

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 329, 340, 414, 429 • .100" GRID SURFACE MOUNT HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS

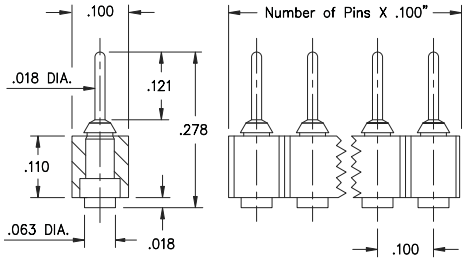


FIG. 1

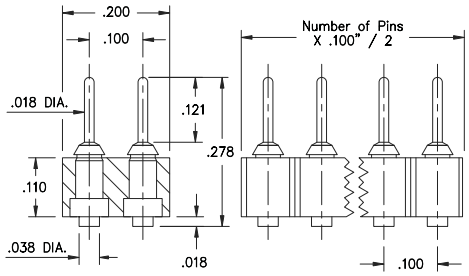


FIG. 2

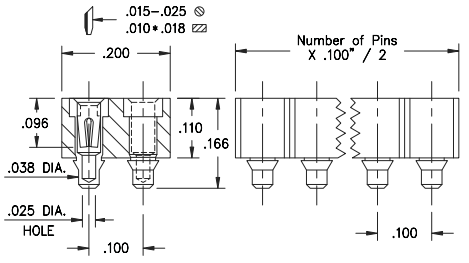
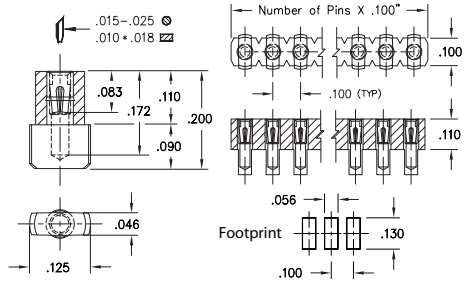


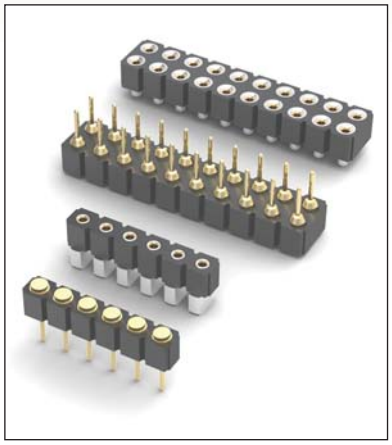
FIG. 3



Coplanarity .005". For pin counts >10 positions, consult Technical Support.

FIG. 4

- Series 329 and 429 pin interconnects feature space saving, pad style SMT termination using MM #2956-X pins. See page 218 for details
- Series 429 and 414 combine for a mated height of .323"
- Series 340 and 414 surface mount sockets use MM #4078 and #1434 receptacles. See pages 162 and 167 for details
- Series 340 and 414 receptacles use Hi-Rel, 4-finger BeCu #30 contacts rated at 3 amps. Receptacles accept .015"-.025" diameter pins See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 329...560 Single Row Surface Mount Pin Header**

329-10-1__-00-560000

Specify number of pins 02-64

FIG. 2 — **Series 429...560 Double Row Surface Mount Pin Header**

429-10-2__-00-560000

Specify number of pins 04-72

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

FIG. 3 — **Series 414...117 Double Row Surface Mount Socket**

414-XX-2__-41-117000

Specify number of pins 04-72

FIG. 4 — **Series 340...780 Single Row Surface Mount Socket**

340-XX-1__-30-780100

Specify number of pins 02-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

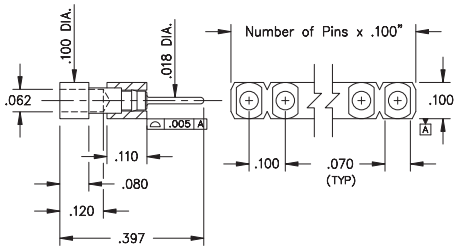
For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=				99	41 ◆	43 ◆	44 ◆
Sleeve (Pin)				200 µ"Sn/Pb	200 µ"Sn	200 µ"Sn	200 µ"Sn
Contact (Clip)				100 µ"Sn/Pb	10 µ" Au	30 µ" Au	100 µ"Sn

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 310, 330, 351 • .100" GRID (.018" DIA. PINS), SURFACE MOUNT HEADERS AND SOCKETS • SINGLE ROW STRIPS

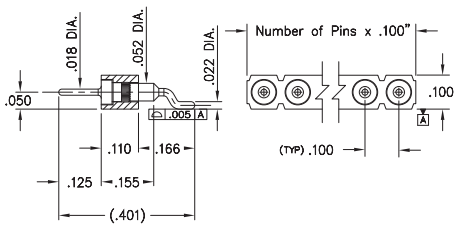
Mates with Series 310...023 Surface Mount Z-Bend Socket (See Fig. 3)



Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 1

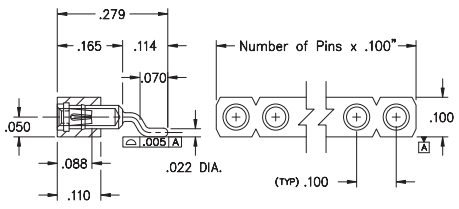
Mates with Series 310...023 Surface Mount Z-Bend Socket (See Fig. 3)



Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 2

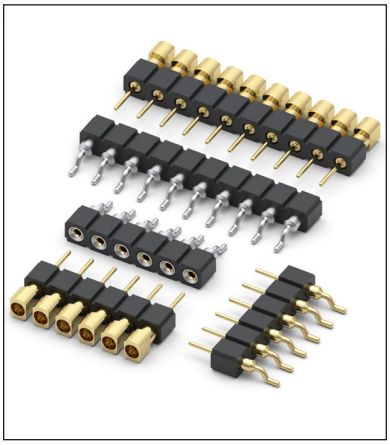
Mates with Series 351...002 and 330...027 Surface Mount Header (See Fig. 1 & 2)



Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 3

- Series 351 horizontal surface mount headers are availble with .018" dia. pluggable pins (MM #5102). Series 330 horizontal surface mount z-bend headers use MM #3027 pins. See page 224 for details
- Series 310 horizontal surface mount Z-Bend sockets uses MM #1023 receptacles that accept pin diameters from .015"-.025". See pages 171 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- Ideal for daisy chaining parallel boards



ORDERING INFORMATION

FIG. 1 — **Series 351...002 .018" Dia. Surface Mount Header**

351-10-1__-40-002000

Specify number of pins → 02-10

FIG. 2 — **Series 330...027 .018" Dia. Surface Mount Z-Bend Header**

330-XX-1__-40-027000

Specify number of pins → 02-10

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆		40 ◆	
Pin Plating	10 µ" Au		200 µ" Sn	

FIG. 3 — **Series 310...023 .018" Dia. Surface Mount Z-Bend Socket**

310-XX-1__-40-023000

Specify number of pins → 02-10

RoHS-2 2011/65/EU

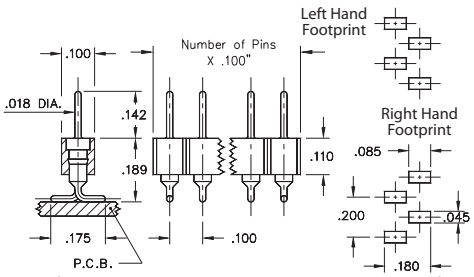
XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93	99	41 ◆	43 ◆	44 ◆
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	200 µ" Sn
Contact (Clip)		10 µ" Au	30 µ" Au	100 µ" Sn/Pb	10 µ" Au	30 µ" Au	100 µ" Sn

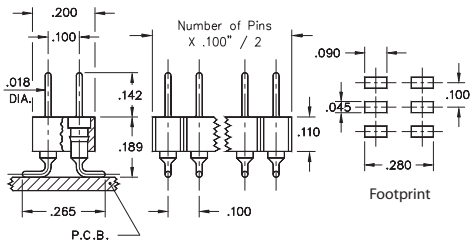
MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 310, 350, 410, 450 • .100" GRID (.018" DIA. PINS), SMT GULL WING HEADERS & SOCKETS • SINGLE AND DOUBLE ROW STRIPS



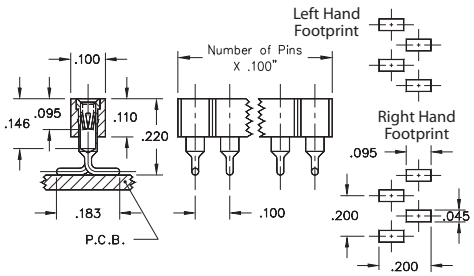
Coplanarity .005". For pin counts >10 positions, consult Technical Support.

FIG. 1



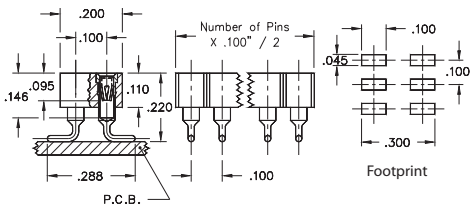
Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 2



Coplanarity .005". For pin counts >10 positions, consult Technical Support.

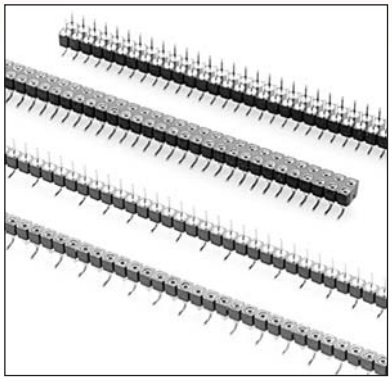
FIG. 3



Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 4

- Headers (350 & 450) use MM #3404 pins. See page 212 for details
- Sockets (310 & 410) use MM #1005 receptacles and accept pin diameters from .015"-.025". See page 166 for details
- Contact is rated at 3 amps
- Coplanarity .005" (single row max. 10 pins; double row max. 20 pins). For higher pin counts, contact Technical Support
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1L	**Single Row Header, Left Hand Footprint, Odd or Even # of pins**			
	350-XX-1__-00-106000			
	Specify number of pins 02-64			
FIG. 1R	**Single Row Header, Right Hand Footprint, Even # of pins**			
	350-XX-1__-00-107000			
	Specify number of pins 02-64			
FIG. 2	**Double Row Header, Even # of pins**			
	450-XX-2__-00-106000			
	Specify number of pins 04-72			
SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	
FIG. 3L	**Single Row Socket, Left Hand Footprint, Odd or Even # of pins**			
	310-XX-1__-41-105000			
	Specify number of pins 02-64			
FIG. 3R	**Single Row Socket, Right Hand Footprint, Even # of pins**			
	310-XX-1__-41-107000			
	Specify number of pins 02-64			
FIG. 4	**Double Row Socket, Even # of pins**			
	410-XX-2__-41-105000			
	Specify number of pins 04-72			

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

SERIES 350, 450, 801, 803 • .100" GRID (.025" DIA. PINS), LOW PROFILE HEADERS & VERSATILE SOCKETS • SINGLE & DOUBLE ROW STRIPS

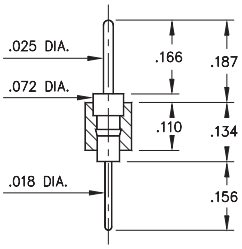


FIG. 1

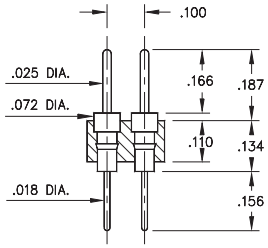


FIG. 2

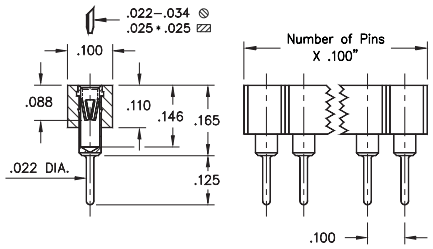


FIG. 3

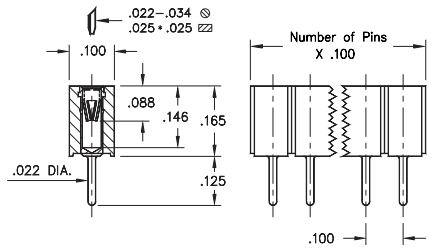


FIG. 4

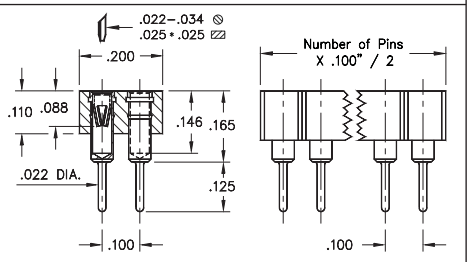


FIG. 5

- Series 350 and 450 single and double row pin headers use MM #0290 pins. See page 215 for details
- Series 801 and 803 single and double row low profile sockets use MM #1303 receptacles. See page 180 for details
- Series 801 and 803 receptacles use Hi-Rel, 6-finger BeCu #16 contact rated at 4.5 amps. Receptacles accept .025" diameter and .025" square pins. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 350...001** **Single Row .025" Pin / .018" Solder Tail**

350-XX-1__-00-001000

Specify number of pins 01-64

FIG. 2 — **Series 450...001** **Double Row .025" Pin / .018" Solder Tail**

450-XX-2__-00-001000

Specify number of pins 02-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3 — **Series 801...003** **Low Profile Socket** (short insulator)

801-XX-0__-10-003000

Specify number of pins 01-64

FIG. 4 — **Series 801...013** **Low Profile Socket** (long insulator)

801-XX-0__-10-013000

Specify number of pins 01-36

FIG. 5 — **Series 803...003** **Double Row Low Profile Socket**

803-XX-0__-10-003000

Specify number of pins 02-72

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=					41 ◆	43 ◆	
Sleeve (Pin)					200 µ" Sn	200 µ" Sn	
Contact (Clip)					10 µ" Au	30 µ" Au	

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 800, 801, 802, 803 • .100" GRID (.030" DIA. PINS), LOW PROFILE HEADERS & VERSATILE SOCKETS • SINGLE & DOUBLE ROW STRIPS

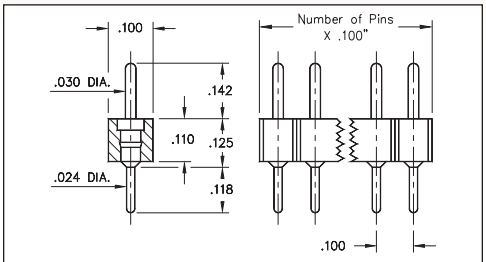


FIG. 1

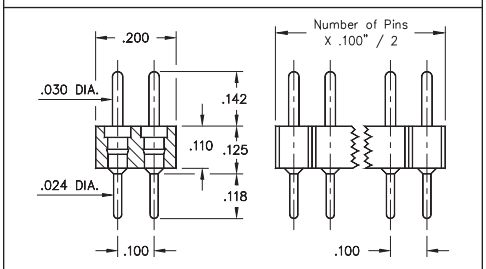


FIG. 2

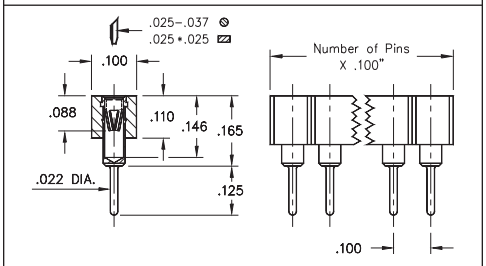


FIG. 3

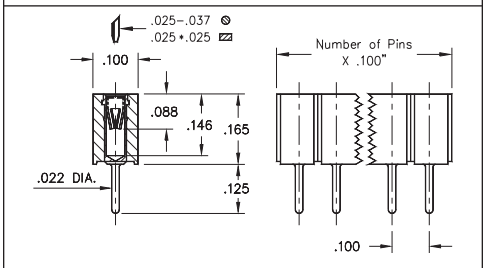


FIG. 4

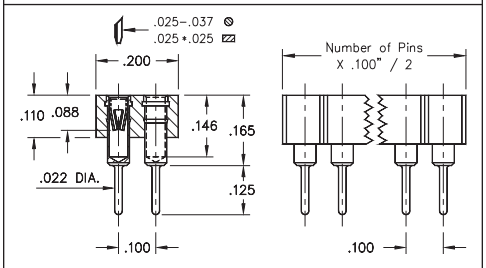


FIG. 5

- Series 800 and 802 single and double row pin headers use MM #5016 pins. See page 215 for details
- Series 801 and 803 single and double row sockets use MM #1303 receptacles. See page 180 for details
- Series 801 and 803 receptacles use Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. Receptacles accept .030" diameter and .025" square pins. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 800...002 Single Row Low Profile Pin Header**

800-XX-0__-10-002000

Specify number of pins 01-64

FIG. 2 — **Series 802...002 Double Row Low Profile Pin Header**

802-XX-0__-10-002000

Specify number of pins 04-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3 — **Series 801...002 Low Profile Socket** (short insulator)

801-XX-0__-10-002000

Specify number of pins 01-64

FIG. 4 — **Series 801...012 Low Profile Socket** (long insulator)

801-XX-0__-10-012000

Specify number of pins 01-36

FIG. 5 — **Series 803...002 Double Row Low Profile Socket**

803-XX-0__-10-002000

Specify number of pins 04-72

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93	99	41 ◆	43 ◆	
Sleeve (Pin)		200 µ"Sn/Pb	200 µ"Sn/Pb	200 µ"Sn/Pb	200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au	100 µ"Sn/Pb	10 µ" Au	30 µ" Au	

SERIES 800 & 801 • .100" GRID (.030" DIA. PINS), STRAIGHT & RIGHT ANGLE HEADERS AND SOCKETS • SINGLE ROW STRIPS

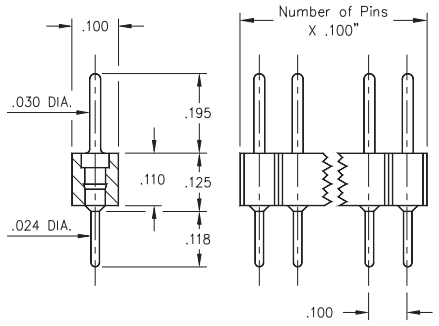


FIG. 1

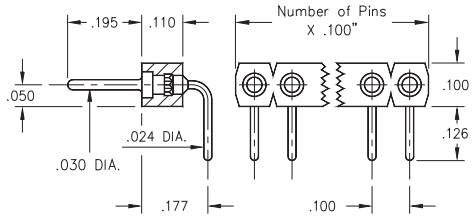


FIG. 2

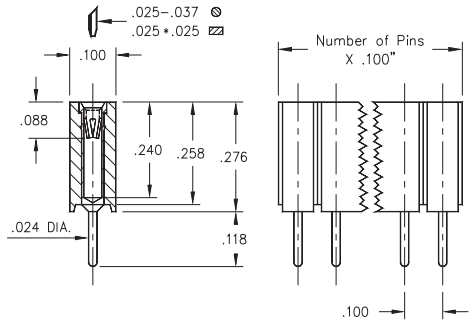


FIG. 3

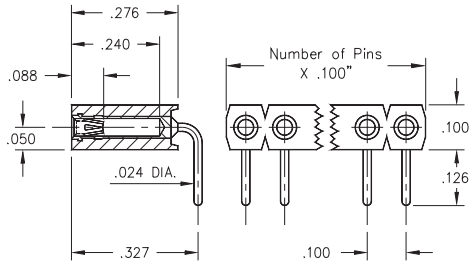
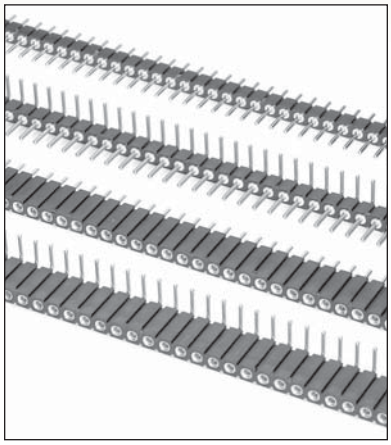


FIG. 4

- Pin interconnects available with straight MM #7007 or right angle MM #5005 solder tails. See page 215 for details
- Sockets are available with straight MM #1304 or right angle MM #1305 soldertails. See pages 177 and 179 for details
- MM #1304 and MM #1305 receptacles use Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. Receptacles accept .030" diameter and .025" square pins. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 800...10-001** — **Straight Pin Header**

800-XX-0__-10-001000

Specify number of pins ← 01-64

FIG. 2 — **Series 800...20-001** — **Right Angle Pin Header**

800-XX-0__-20-001000

Specify number of pins ← 02-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3 — **Series 801...10-001** — **Straight Socket**

801-XX-0__-10-001000 ★

Specify number of pins ← 01-50

FIG. 4 — **Series 801...20-001** — **Right Angle Socket**

801-XX-0__-20-001000 ★

Specify number of pins ← 01-50

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93	99	41 ◆	43 ◆	44 ◆
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	200 µ" Sn
Contact (Clip)		10 µ" Au	30 µ" Au	100 µ" Sn/Pb	10 µ" Au	30 µ" Au	100 µ" Sn

★ 44 Plating Non-Standard

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

SERIES 802 & 803 • .100" GRID (.030" DIA. PINS), STRAIGHT & RIGHT ANGLE HEADERS AND SOCKETS • DOUBLE ROW STRIPS

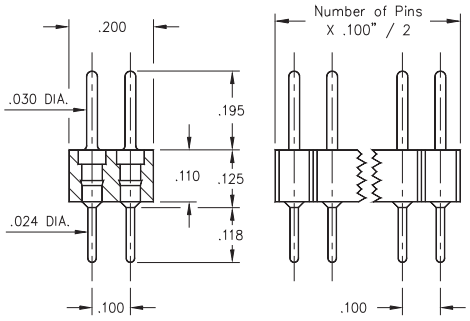


FIG. 1

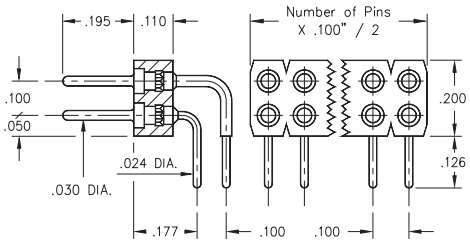


FIG. 2

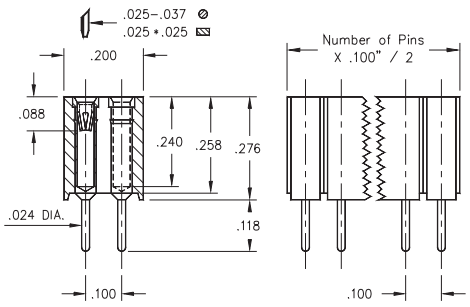


FIG. 3

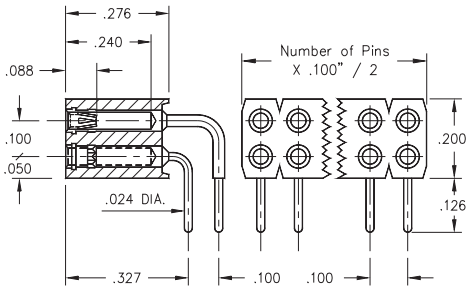
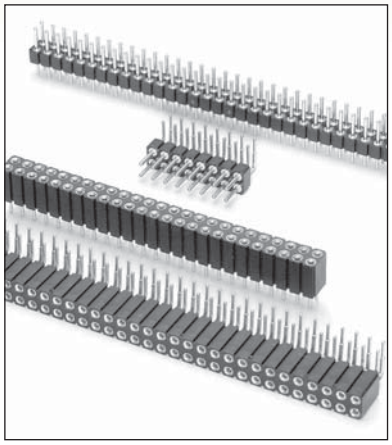


FIG. 4

- Pin interconnects available with straight MM #7007 or right angle MM #5005/5107 solder tails. See page 215 for details
- Sockets are available with straight MM #1304 or right angle MM #1305/1306 soldertails. See pages 177 and 179 for details
- MM #1304, #1305 and #1306 receptacles use Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. Receptacles accept .030" diameter and .025" square pins. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 802...10-001**	**Straight Pin Header**
	802-XX-0__-10-001000	
	Specify number of pins ← 04-64	
FIG. 2	**Series 802...20-001**	**Right Angle Pin Header**
	802-XX-0__-20-001000	
	Specify number of pins ← 02-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3	**Series 803...10-001**	**Straight Socket**
	803-XX-___-10-001000	
	Specify number of pins ← 004-100	
FIG. 4	**Series 803...20-001**	**Right Angle Socket**
	803-XX-___-20-001000	
	Specify number of pins ← 002-100	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93	99	41 ◆	43 ◆	
Sleeve (Pin)		200 µ"Sn/Pb	200 µ"Sn/Pb	200 µ"Sn/Pb	200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au	100 µ"Sn/Pb	10 µ" Au	30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 800 & 801 • .100" GRID (.030" DIA. PINS), SOLDERLESS PRESS-FIT • SINGLE ROW STRIPS

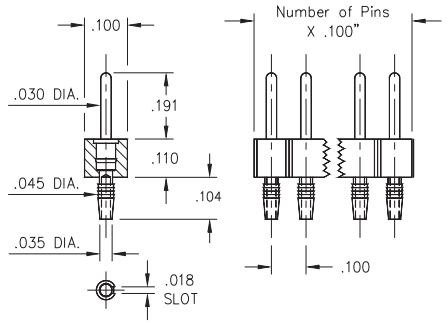


FIG. 1

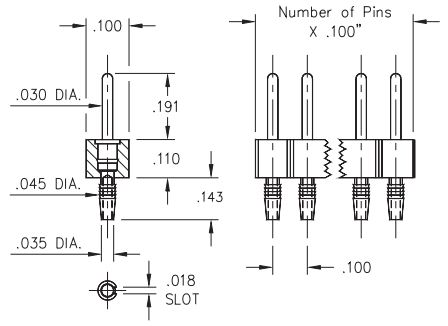


FIG. 2

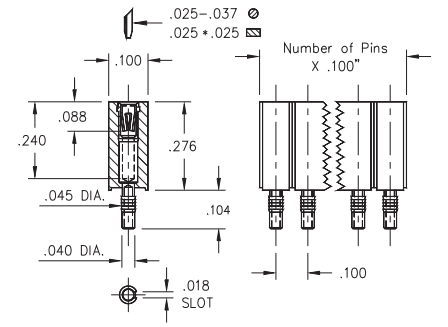


FIG. 3

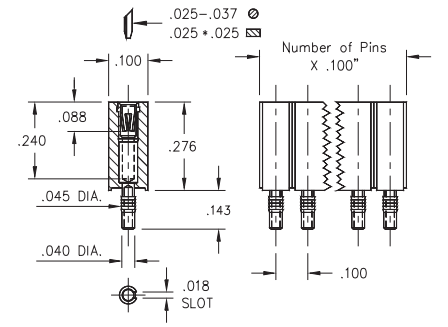
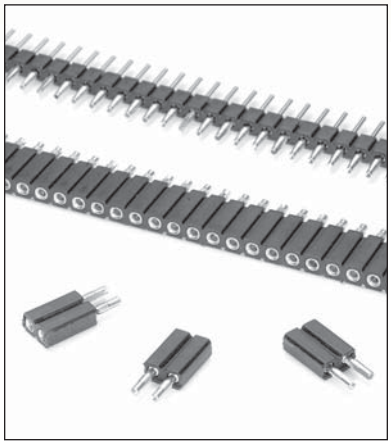


FIG. 4

- The unique compliant tail pins conform to .040"± .003" finished hole without stressing inner layers. Patent No. 4,799,904
- Headers and sockets are available for board thicknesses of .060" - .100" and .090" - .130". See ordering information for details
- Series 800 pin headers use MM #5601 and #5602 compliant tail pins featuring a .030" dia. mating lead. See page 220 for details
- Series 801 sockets MM #4614 or #4615 use Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. Receptacles accept .030" diameter pins & .025" square pins. See pg. 256 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Compliant Tail Pin Header for .060" - .100" Thick Boards**
	800-XX-0__-61-001000
	Specify number of pins ← 01-64
FIG. 2	**Compliant Tail Pin Header for .090" - .130" Thick Boards**
	800-XX-0__-62-001000
	Specify number of pins ← 01-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3	**Compliant Tail Socket for .060" - .100" Thick Boards**
	801-XX-0__-61-001000
	Specify number of pins ← 01-50
FIG. 4	**Compliant Tail Socket for .090" - .130" Thick Boards**
	801-XX-0__-62-001000
	Specify number of pins ← 01-50

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93	99	41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au	100 µ" Sn/Pb	10 µ" Au	30 µ" Au	

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

SERIES 802 & 803 • .100" GRID (.030" DIA. PINS), SOLDERLESS PRESS-FIT • DOUBLE ROW STRIPS

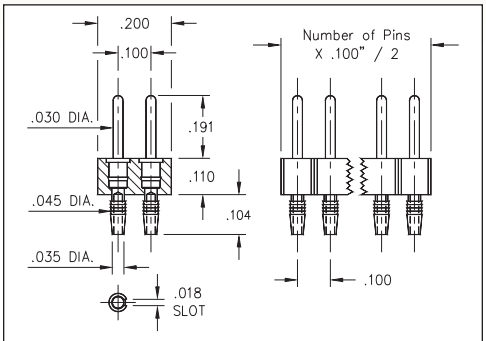


FIG. 1

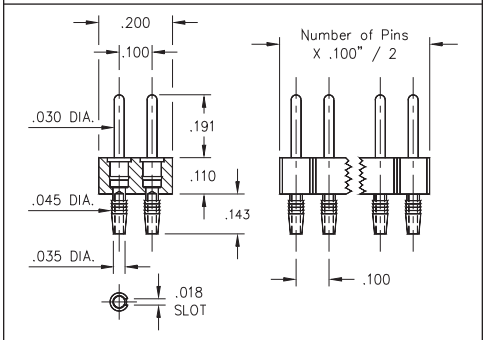


FIG. 2

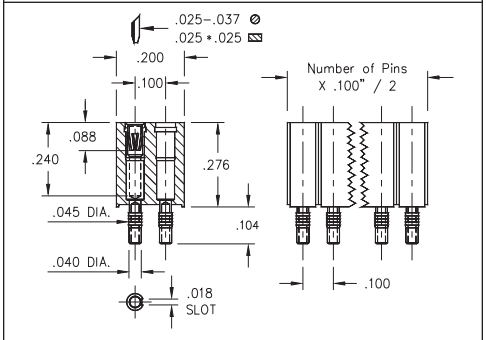


FIG. 3

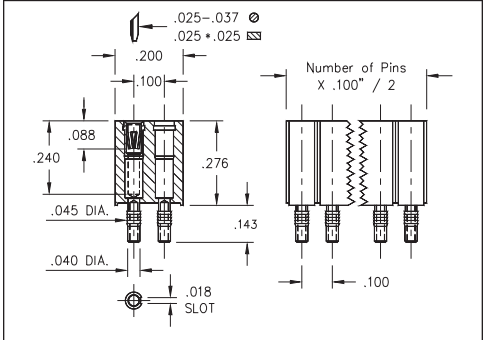


FIG. 4

- The unique compliant tail pins conform to .040"± .003" finished hole without stressing inner layers. Patent No. 4,799,904
- Headers and sockets are available for board thicknesses of .060" - .100" and .090" - .130". See ordering information for details
- Series 802 pin headers use MM #5601 and #5602 compliant tail pins featuring a .030" dia. mating lead. See page 220 for details
- Series 803 sockets with MM #4614 or #4615 pins use Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. Receptacles accept .030" diameter pins & .025" square pins. See pg. 256 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Compliant Tail Pin Header for .060" - .100" Thick Boards**
	802-XX-0__-61-001000 **Specify number of pins** ← 02-64
FIG. 2	**Compliant Tail Pin Header for .090" - .130" Thick Boards**
	802-XX-0__-62-001000 **Specify number of pins** ← 04-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3	**Compliant Tail Socket for .060" - .100" Thick Boards**
	803-XX-___-61-001000 **Specify number of pins** ← 002-100
FIG. 4	**Compliant Tail Socket for .090" - .130" Thick Boards**
	803-XX-___-62-001000 **Specify number of pins** ← 004-100

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	11 ◆	13 ◆	91	93	99	41 ◆	43 ◆	44 ◆
Sleeve (Pin)	10 µ" Au	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	100 µ" Sn/Pb	10 µ" Au	30 µ" Au	100 µ" Sn

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 800 & 802 • .100" GRID (.030" DIA. PINS), SHROUDED STRAIGHT, SURFACE MOUNT & SOLDERLESS PRESS-FIT • SINGLE AND DOUBLE ROW STRIPS

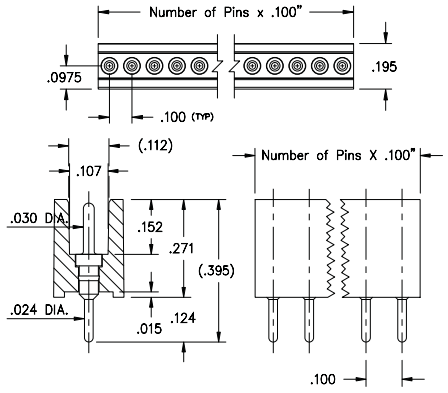


FIG. 1

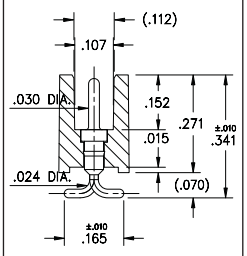


FIG. 2

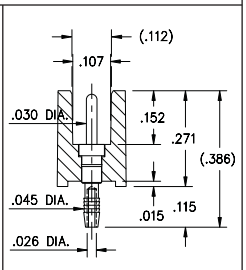


FIG. 3

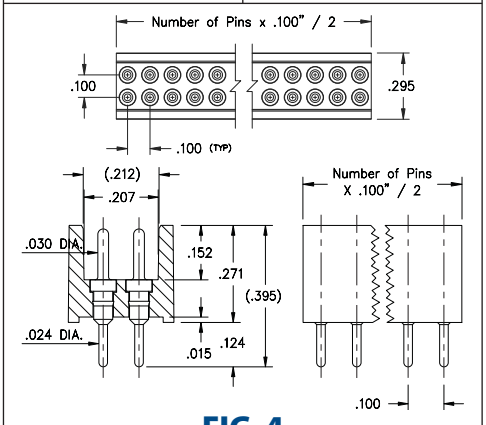


FIG. 4

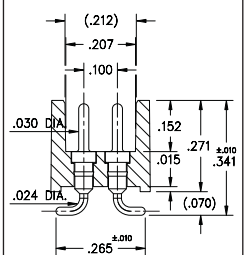


FIG. 5

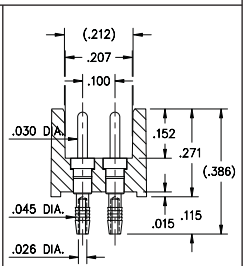
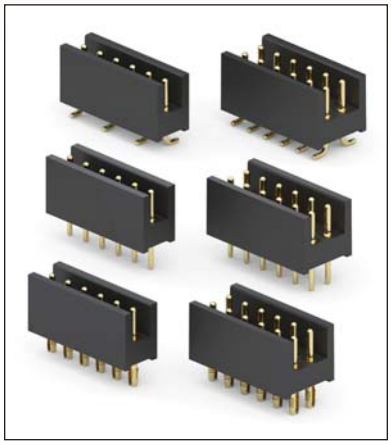


FIG. 6

- Shrouded pin interconnects available with straight Series 800...10-052 and 802...10-052 or surface mount 800...30-052 and 802...30-052 use MM #5016 pins. See page 215 for details
- Shrouded pin interconnects with solderless press-fit Series 800...61-051 and 802...61-051 use MM #5607 pins. See page 213 for details. The unique compliant tail pins conform to .040"± .003" finished hole without stressing inner layers. Patent No. 4,799,904
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 800...10-052**	**Straight Pin Header**
	800-10-0__-10-052000	
	Specify number of pins	01-32
FIG. 2	**Series 800...30-052**	**Surface Mount Pin Header**
	800-10-0__-30-052000	
	Specify number of pins	03-32
FIG. 3	**Series 800...61-051**	**Compliant Tail Pin Header**
	800-10-0__-61-051000	
	Specify number of pins	01-32
FIG. 4	**Series 802...10-052**	**Straight Pin Header**
	802-10-0__-10-052000	
	Specify number of pins	04-64
FIG. 5	**Series 802...30-052**	**Surface Mount Pin Header**
	802-10-0__-30-052000	
	Specify number of pins	04-64
FIG. 6	**Series 802...61-051**	**Compliant Tail Pin Header**
	802-10-0__-61-051000	
	Specify number of pins	04-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◇			
Pin Plating	10 µ" Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 349, 449, 800, 801, 802, 803 • .100" GRID (.030" DIA. PINS), SURFACE MOUNT HEADERS & SOCKETS • SINGLE AND DOUBLE ROW STRIPS

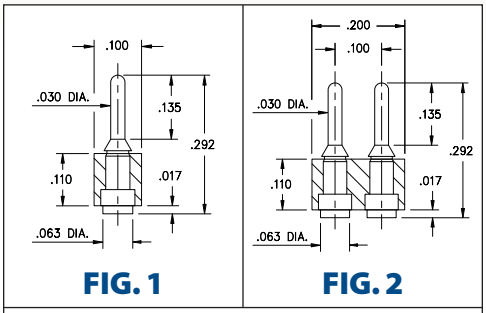
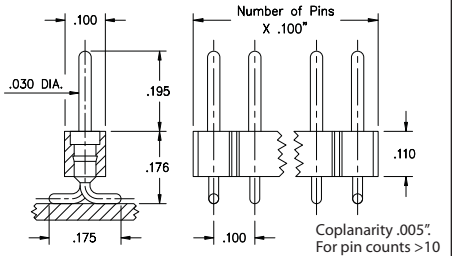


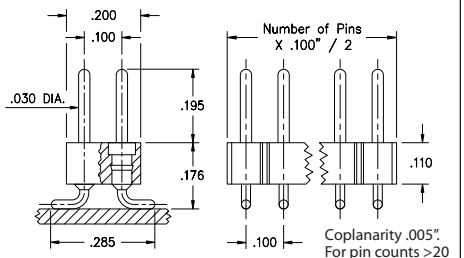
FIG. 1

FIG. 2



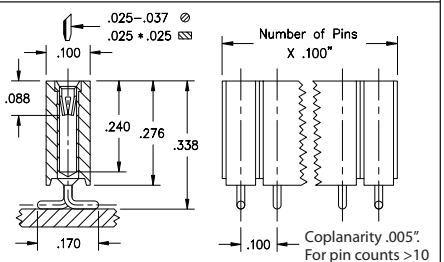
Coplanarity .005". For pin counts >10 positions, consult Technical Support.

FIG. 3



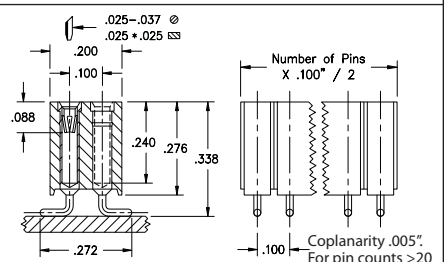
Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 4



Coplanarity .005". For pin counts >10 positions, consult Technical Support.

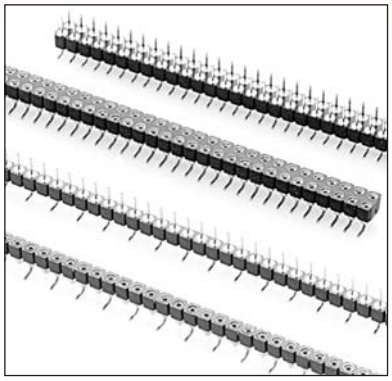
FIG. 5



Coplanarity .005". For pin counts >20 positions, consult Technical Support.

FIG. 6

- Series 349 & 449 use MM #4956-1 pins. See page 218 for details
- Series 800 & 802 use MM #7007 pins. See page 215 for details
- Series 801 & 803 use MM #1304 receptacles and accept pin diameters from .025"-.037" and .025" square pins. See page 177 for details
- Receptacles use Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 349...560** Single Row Surface Mount Header					
	349-10-1_ _-00-560000					
	Specify number of pins 02-64					
FIG. 2	**Series 449...560** Double Row Surface Mount Header					
	449-10-2_ _-00-560000					
	Specify number of pins 04-64					
FIG. 3	**Series 800...001** Single Row Surface Mount Header					
	800-10-0_ _-30-001000					
	Specify number of pins 03-64					
FIG. 4	**Series 802...001** Double Row Surface Mount Header					
	802-10-0_ _-30-001000					
	Specify number of pins 04-72					
SPECIFY PLATING CODE XX=	10 ◆					
Pin Plating	10 µ" Au					
FIG. 5	**Series 801...001** Single Row Surface Mount Socket					
	801-43-0_ _-30-001000					
	Specify number of pins 03-50					
FIG. 6	**Series 803...001** Double Row Surface Mount Socket					
	803-XX-_ _ _-30-001000					
	Specify number of pins 004-100					

RoHS-2 2011/65/EU

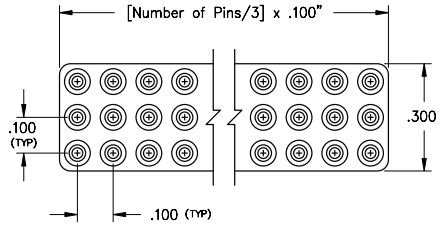
XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=			93			43 ◆	
Sleeve (Pin)			200 µ" Sn/Pb			200 µ" Sn	
Contact (Clip)			30 µ" Au			30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 804 & 805 • .100" GRID (.030" DIA. PINS), HEADERS AND SOCKETS • TRIPLE ROW



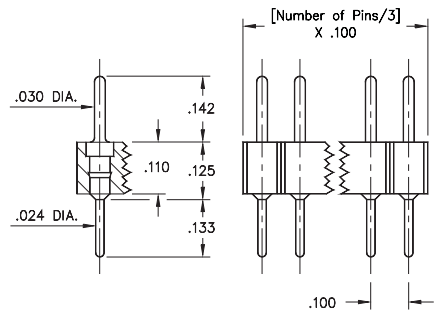
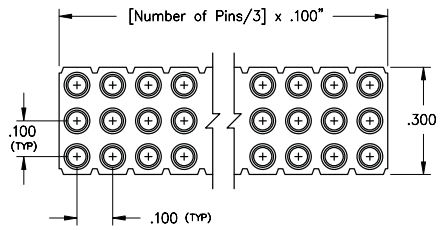


FIG. 1



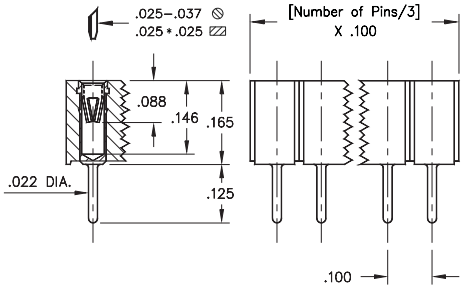
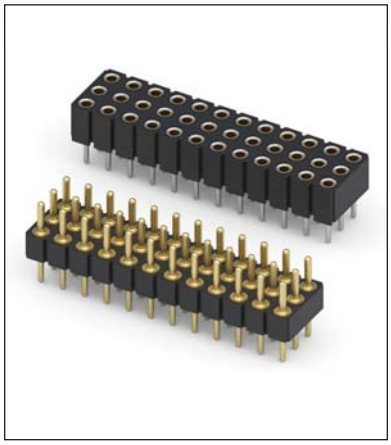


FIG. 2

- Series 804 triple row .100" grid headers uses MM #5016 pins. See page 215 for details
- Series 805 triple row .100" grid sockets uses MM #1303 pins. See page 180 for details
- Series 805 triple row .100" grid sockets uses Hi-Rel, 6-finger BeCu #47 contact rated at 4.5 amps. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 804...002** — **Straight Pin Header**

804-10-0__-10-002000

Specify number of pins 09-96

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

FIG. 2 — **Series 805...012** — **Straight Pin Socket**

805-43-0__-10-012000

Specify number of pins 09-96

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=						43 ◆	
Sleeve (Pin)						200 µ" Sn	
Contact (Clip)						30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 800, 801, 802, 803 • .100" GRID SOLDER CUP HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS

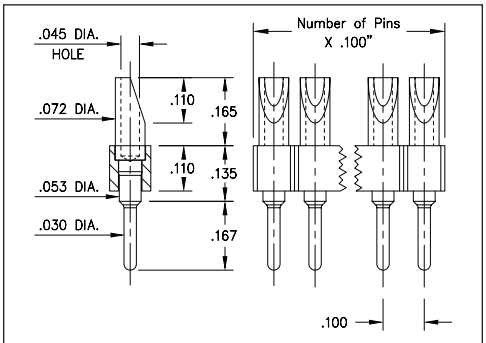


FIG. 1

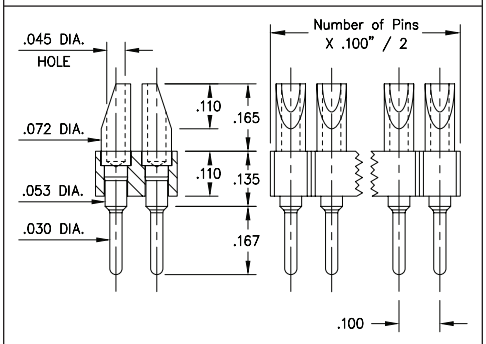


FIG. 2

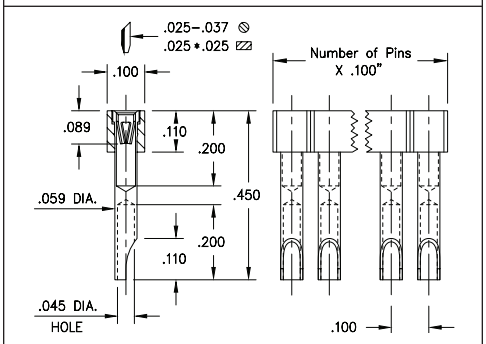


FIG. 3

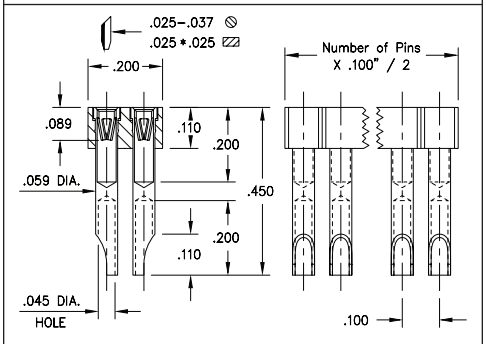
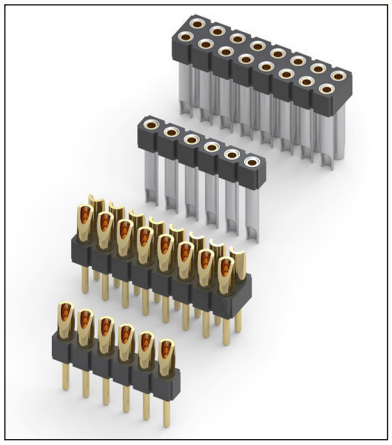


FIG. 4

- Series 800 and 802 use MM #1107 pins. See page 218 for details
- Series 801 and 803 use MM #1134 pin receptacles and accept pin diameters from .025"-.037" and .025" square pins. See page 177 for details
- Series 801 and 803 receptacles use Hi-Rel, 4-finger BeCu #47 contact rated at 4.5 amps. See page 256 for details
- Solder cups are pre-aligned and accept up to 20 AWG wire
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 800...007 Single Row Solder Cup / Solder Tail**

800-XX-0__-10-007000

Specify number of pins → 02-64

FIG. 2 — **Series 802...007 Double Row Solder Cup / Solder Tail**

802-XX-0__-10-007000

Specify number of pins → 02-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆		40 ◆	
Pin Plating	10 µ" Au		200 µ" Sn	

FIG. 3 — **Series 801...007 Single Row Solder Cup Sockets**

801-13-0__-10-007000

Specify number of pins → 02-64

FIG. 4 — **Series 803...007 Double Row Solder Cup Sockets**

803-13-0__-10-007000

Specify number of pins → 02-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	13 ◆						
Sleeve (Pin)	10 µ" Au						
Contact (Clip)	30 µ" Au						

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 800, 801, 802, 803 • .100" GRID (.040" DIA. PINS), HEADERS AND SOCKETS • SINGLE AND DOUBLE ROW STRIPS

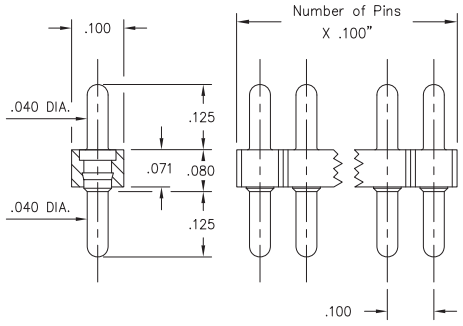


FIG. 1

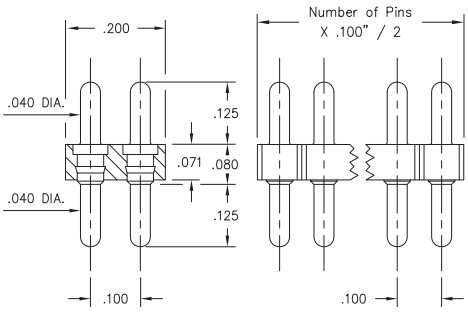


FIG. 2

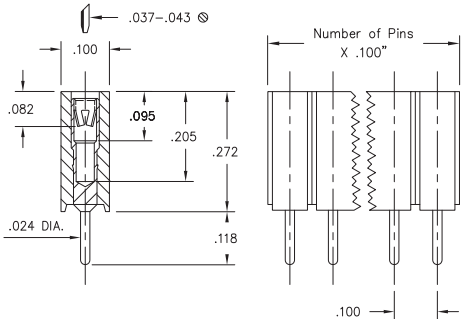


FIG. 3

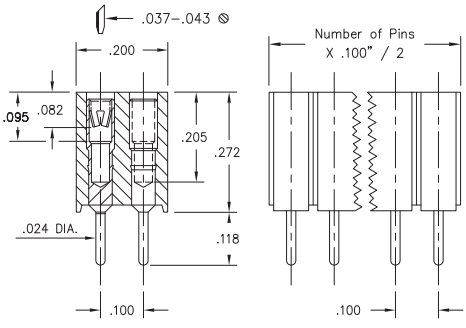
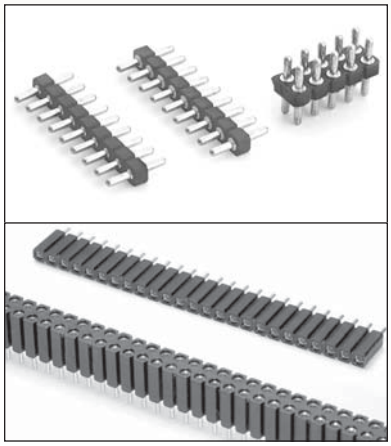


FIG. 4

- Series 800 and 802 single and double row interconnects feature sturdy .040" dia. leads (MM #3077) and low profile (.071" thick) insulator. See page 215 for details
- Series 801 and 803 single and double row sockets use MM #1313 receptacles. See page 181 for details
- Series 801 and 803 receptacles use Hi-Rel, 6-finger BeCu #18 contact rated at 8 amps. Receptacles accept .037"-.043" diameter pins. See page 257 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 800...10-004 — Single Row Pin Header**

800-XX-0_ _-10-004000

Specify number of pins ← 01-50

FIG. 2 — **Series 802...10-004 — Double Row Pin Header**

802-XX-_ _ _-10-004000

Specify number of pins ← 004-100

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

FIG. 3 — **Series 801...10-004 — Single Row Socket**

801-XX-0_ _-10-004000

Specify number of pins ← 01-50

FIG. 4 — **Series 803...10-004 — Double Row Socket**

803-XX-_ _ _-10-004000

Specify number of pins ← 004-100

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

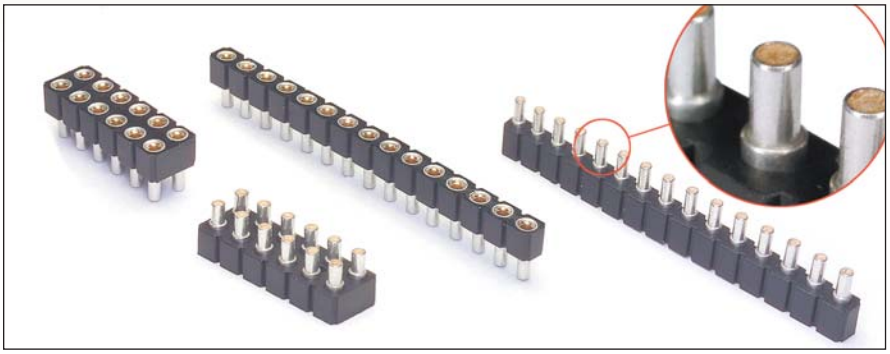
SPECIFY PLATING CODE XX=	13 ◆	91	93	99	41 ◆	43 ◆	44 ◆
Sleeve (Pin)	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	200 µ" Sn
Contact (Clip)	30 µ" Au	10 µ" Au	30 µ" Au	100 µ" Sn/Pb	10 µ" Au	30 µ" Au	100 µ" Sn

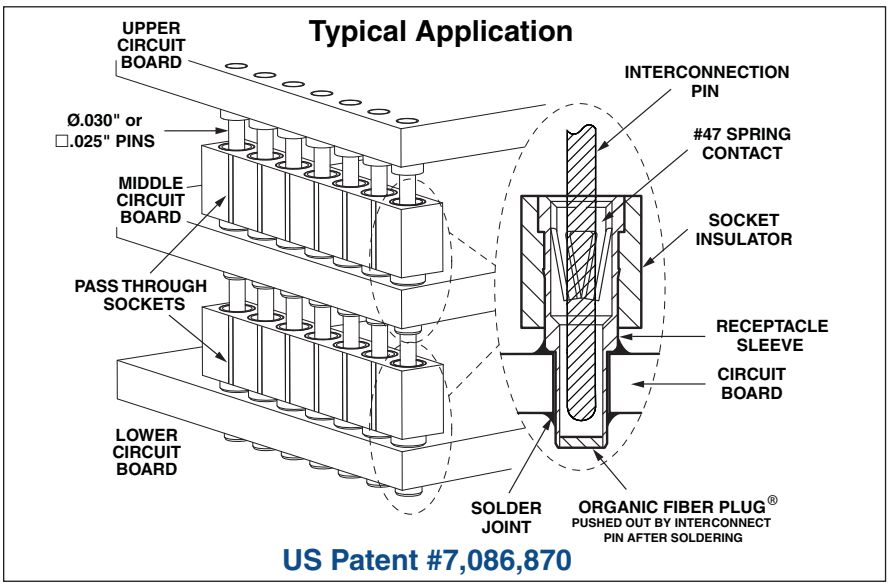
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 834 & 835 • .100" GRID OFP® PASS-THROUGH SOCKETS Ø.030" & □.025" PINS • SINGLE AND DOUBLE ROW STRIPS

- 834/835 Series Pass-Through Sockets have a low .130" profile and will accept Ø.030" round pin, as well as industry standard .025" square pin headers.
- They are typically used to interconnect two or more parallel circuit boards.
- Sockets are designed for hand, wave or reflow* soldering. The high temperature insulator is compatible with all solder processes.
- Unique ORGANIC FIBRE PLUG® barriers prevent solder, paste or flux from contaminating the internal spring contacts. After soldering, the OFP® barriers are pushed out of the socket when the mating header is inserted.
- Mill-Max sockets use a receptacle consisting of a precision-machined brass sleeve with a press-fit beryllium copper "multi-finger" spring contact.
- Recommended mounting holes are Ø.046 ±.003" PTH (1,2 mm drilled prior to plating).

**Intrusive reflow (also called "pin-in-paste") is a technique of using conventional through-hole components in a reflow soldering process. The pass-through socket is placed into plated through-holes in the circuit board (solder paste has previously been screen printed on pads adjacent to the holes) and the board is reflowed in the same pass as other SMT components. Solder will fill the plated through-holes and achieve solder joints as reliable as wave soldering. The OFP® barrier prevents solder paste from being picked up inside the contact during assembly.*





US Patent #7,086,870

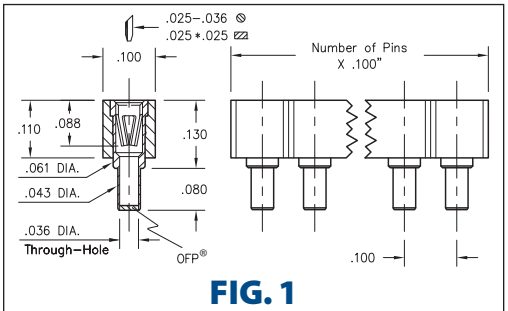


FIG. 1

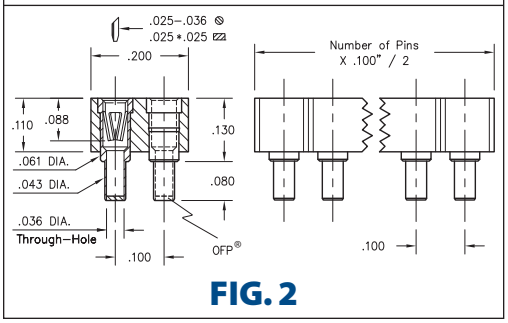


FIG. 2

ORDERING INFORMATION

FIG. 1	**Series 834...001**	**Single Row OFP® Pass-Through Socket**
	834-XX-0 _ _-10-001000	
	Specify number of pins ↑	01-64
FIG. 2	**Series 835...001**	**Double Row OFP® Pass-Through Socket**
	835-XX-0 _ _-10-001000	
	Specify number of pins ↑	04-72

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=			93			43 ◆	
Sleeve (Pin)			200 µ" Sn/Pb			200 µ" Sn	
Contact (Clip)			30 µ" Au			30 µ" Au	

SERIES 800 & 801 • .200" GRID (.030" DIA. PINS), STRAIGHT AND RIGHT ANGLE • SINGLE ROW STRIPS

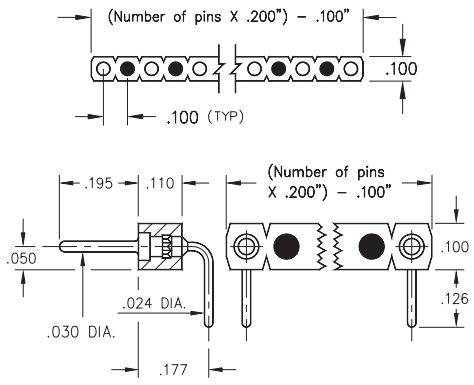


FIG. 1

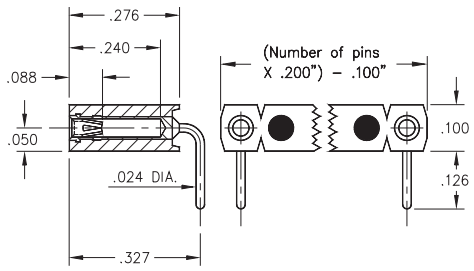


FIG. 2

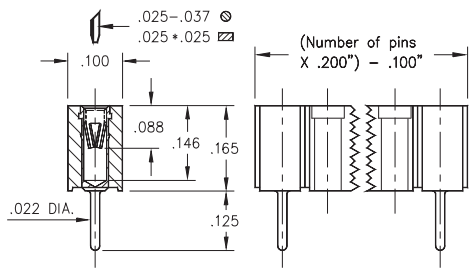


FIG. 3

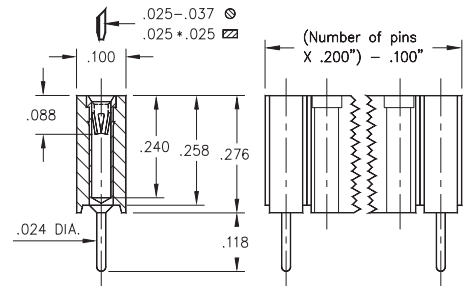
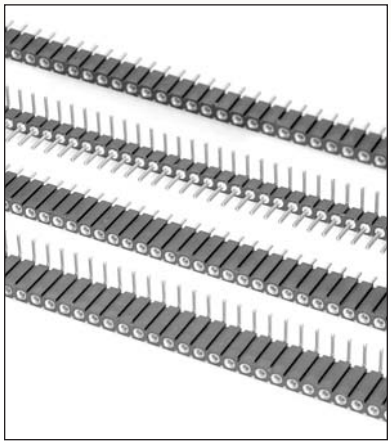


FIG. 4

- Series 800 selectively loaded headers uses MM #5005 pins. See page 215 for details
- Series 801 selectively loaded sockets use MM #1303, #1304 and #1305 pins. See pages 177, 179 & 180 for details
- Series 801 selectively loaded sockets use Hi-Rel, 6-finger BeCu #47 contact rated at 3 amps. See page 256 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1 — **Series 800...20-201** — **Right Angle Header**

800-10-0__-20-201000

Specify number of pins → 02-32

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

FIG. 2 — **Series 801...20-201** — **Right Angle Socket**

801-XX-0__-20-201000

Specify number of pins → 02-25

FIG. 3 — **Series 801...10-212** — **Straight Socket**

801-43-0__-10-212000

Specify number of pins → 02-18

FIG. 4 — **Series 801...10-201** — **Straight Socket**

801-43-0__-10-201000

Specify number of pins → 02-25

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=					41 ◆	43 ◆	
Sleeve (Pin)					200 µ" Sn	200 µ" Sn	
Contact (Clip)					10 µ" Au	30 µ" Au	

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 310, 311, 315 • .100" GRID SOLDER TAIL • SINGLE ROW STRIPS

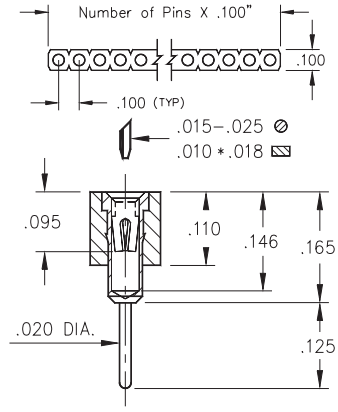


FIG. 1

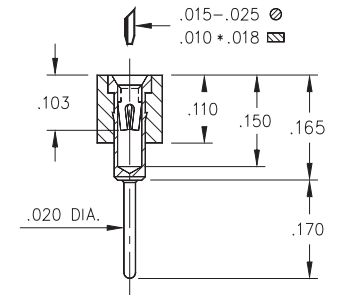


FIG. 2

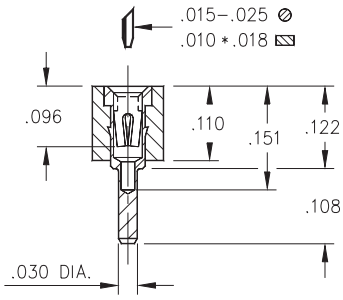


FIG. 3

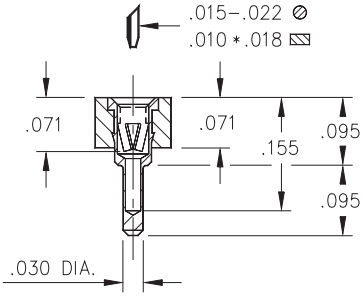
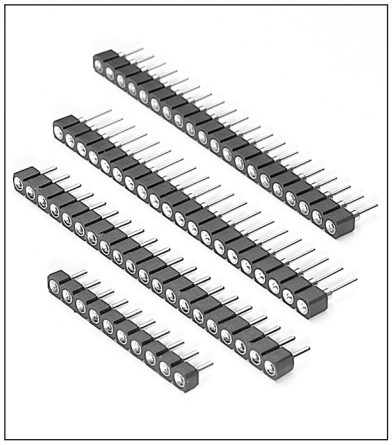


FIG. 4

- SIP sockets accept .015 - .025" diameter pins and standard IC leads
- Various solder tails available: standard length, long for multi-layer boards, very low and ultra low profile. See Mill-Max #1001, #0134, #0501 or #1534 pins. See pages 161, 162 and 165 for details
- Hi-Rel, 4-finger BeCu #12 and #30 contact are rated at 3 amps. See pages 252 and 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 310...001**	**Standard Solder Tail**
	310-XX-1__-41-001000 **Specify number of pins** ← 01-64	
FIG. 2	**Series 311...001**	**Long Solder Tail**
	311-XX-1__-41-001000 ★ **Specify number of pins** ← 01-64	
FIG. 3	**Series 315...001**	**Very Low Profile**
	315-XX-1__-41-001000 ★ **Specify number of pins** ← 01-64	
FIG. 4	**Series 315...003**	**Ultra Low Profile**
	315-XX-1__-41-003000 ★ **Specify number of pins** ← 01-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	11 ◆	13 ◆	91	93	99	41 ◆	43 ◆	44 ◆
Sleeve (Pin)	10 µ" Au	10 µ" Au	200 µ"Sn/Pb	200 µ"Sn/Pb	200 µ"Sn/Pb	200 µ" Sn	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	100 µ"Sn/Pb	10 µ" Au	30 µ" Au	100 µ" Sn

★ 41 & 91 Platings Non-Standard

SERIES 410, 411, 415 • .100" GRID SOLDER TAIL • DOUBLE ROW STRIPS

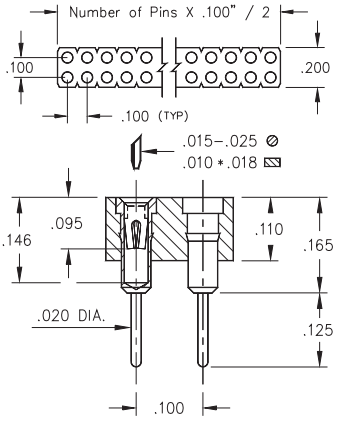


FIG. 1

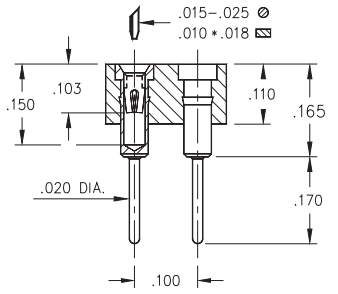


FIG. 2

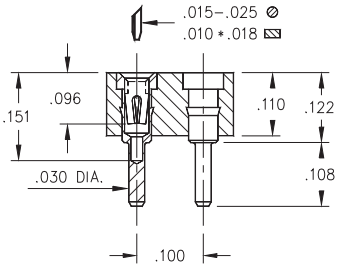


FIG. 3

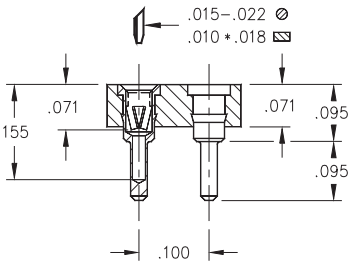


FIG. 4

- Series 41X double row strip sockets are on .100" grid
- Various solder tails available: standard length, long for multi-layer boards, very low and ultra low profile. See Mill-Max #1001, #0134, #0501 or #1534 pins. See pages 161, 162 and 165 for details
- Hi-Rel, 4-finger BeCu #12 and #30 contact are rated at 3 amps. See pages 252 and 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 410...001**	**Standard Solder Tail**
	410-XX-2__-41-001000	
	Specify number of pins ↑ 04-64	
FIG. 2	**Series 411...001**	**Long Solder Tail**
	411-XX-2__-41-001000	
	Specify number of pins ↑ 04-64	
FIG. 3	**Series 415...001**	**Very Low Profile**
	415-XX-2__-41-001000	
	Specify number of pins ↑ 04-64	
FIG. 4	**Series 415...003**	**Ultra Low Profile**
	415-XX-2__-41-003000	
	Specify number of pins ↑ 04-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	11 ◆	13 ◆	91	93	41 ◆	43 ◆
Sleeve (Pin)	10 µ" Au	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 316 • .100" GRID ELEVATED • SINGLE ROW STRIPS

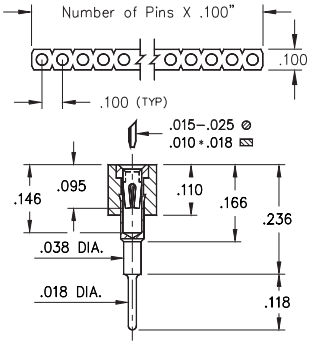


FIG. 1

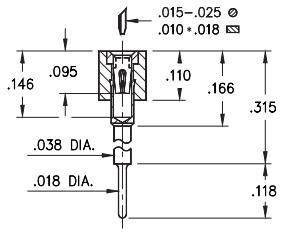


FIG. 2

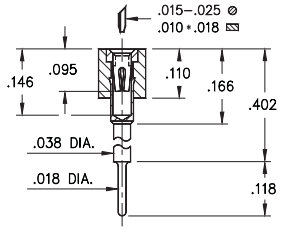


FIG. 3

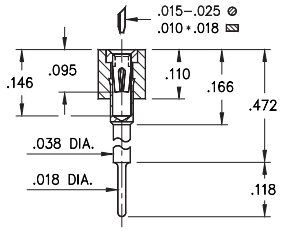


FIG. 4

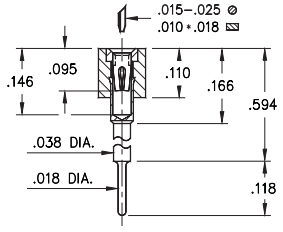


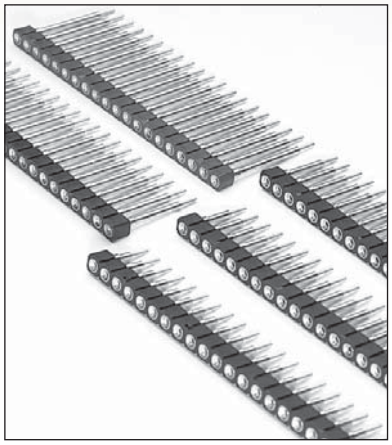
FIG. 5

- Elevated socket strips are available in 5 different heights:

  316...006 uses pin # 0153-1
  316...003 uses pin # 0153-2
  316...007 uses pin # 0153-3
  316...008 uses pin # 0153-4
  316...001 uses pin # 0153-5
  See page 167 for details

- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 316...006**	**Standoff Height = .236**
	316-XX-1__-41-006000	
	Specify number of pins ← 01-64	
FIG. 2	**Series 316...003**	**Standoff Height = .315**
	316-XX-1__-41-003000	
	Specify number of pins ← 01-64	
FIG. 3	**Series 316...007**	**Standoff Height = .402**
	316-XX-1__-41-007000	
	Specify number of pins ← 01-64	
FIG. 4	**Series 316...008**	**Standoff Height = .472**
	316-XX-1__-41-008000	
	Specify number of pins ← 01-64	
FIG. 5	**Series 316...001**	**Standoff Height = .594**
	316-XX-1__-41-001000	
	Specify number of pins ← 01-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

SERIES 416 • .100" GRID ELEVATED • DOUBLE ROW STRIPS

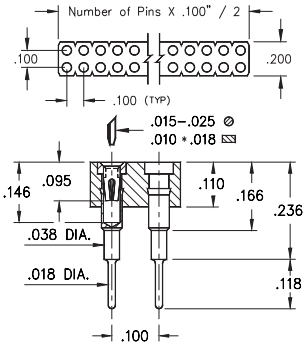


FIG. 1

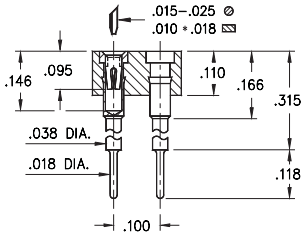


FIG. 2

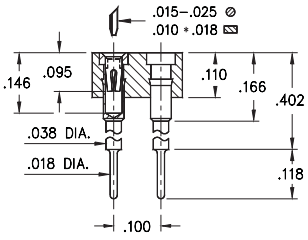


FIG. 3

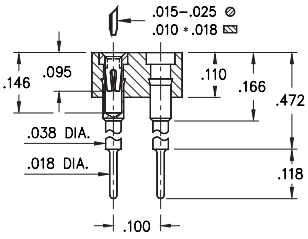


FIG. 4

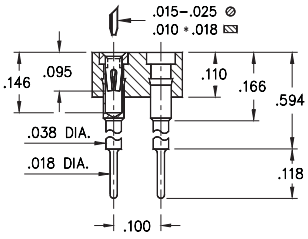


FIG. 5

- Elevated socket strips are available in 5 different heights:

  416...006 uses pin # 0153-1
  416...003 uses pin # 0153-2
  416...007 uses pin # 0153-3
  416...008 uses pin # 0153-4
  416...001 uses pin # 0153-5
  See page 167 for details

- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 416...006**	**Standoff Height = .236**
	416-XX-2__-41-006000	
	Specify number of pins ↑ 04-64	
FIG. 2	**Series 416...003**	**Standoff Height = .315**
	416-XX-2__-41-003000	
	Specify number of pins ↑ 04-64	
FIG. 3	**Series 416...007**	**Standoff Height = .402**
	416-XX-2__-41-007000	
	Specify number of pins ↑ 04-64	
FIG. 4	**Series 416...008**	**Standoff Height = .472**
	416-XX-2__-41-008000	
	Specify number of pins ↑ 04-64	
FIG. 5	**Series 416...001**	**Standoff Height = .594**
	416-XX-2__-41-001000	
	Specify number of pins ↑ 04-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

SERIES 321, 322, 323, 324 • .100" GRID WRAPOST • SINGLE ROW STRIPS

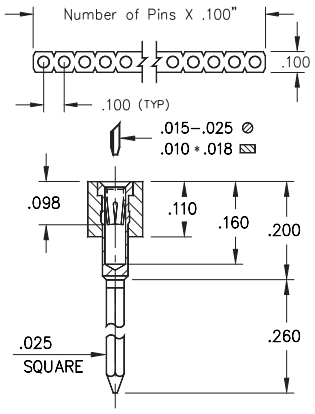


FIG. 1

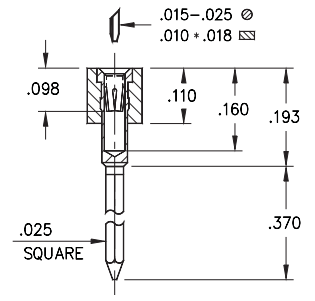


FIG. 2

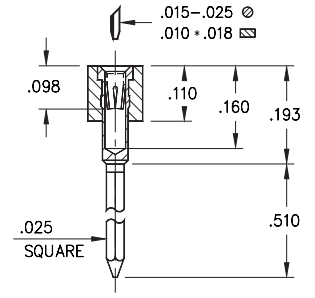


FIG. 3

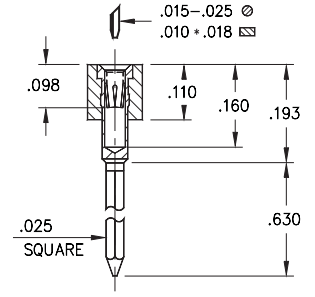


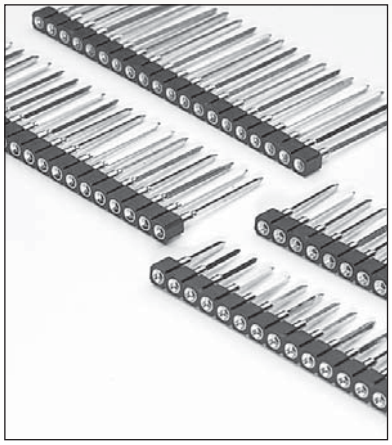
FIG. 4

- Wraposts available in 1 - 4 levels using MM pin numbers:

  1-Level uses pin # 0040-1
  2-Level uses pin # 0089-2
  3-Level uses pin # 0088-3
  4-Level uses pin # 0086-4
  See page 198 for details

- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 321...001**	**1 Level Wrapost**
	321-13-1__-41-001000 **Specify number of pins** ← 01-64	
FIG. 2	**Series 322...001**	**2 Level Wrapost**
	322-XX-1__-41-001000 **Specify number of pins** ← 01-64	
FIG. 3	**Series 323...001**	**3 Level Wrapost**
	323-XX-1__-41-001000 **Specify number of pins** ← 01-64	
FIG. 4	**Series 324...002**	**4 Level Wrapost**
	324-XX-1__-41-002000 **Specify number of pins** ← 01-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	11 ◆	13 ◆	91	93	41 ◆	43 ◆
Sleeve (Pin)	10 µ" Au	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 421, 422, 423, 424 • .100" GRID WRAPOST • DOUBLE ROW STRIPS

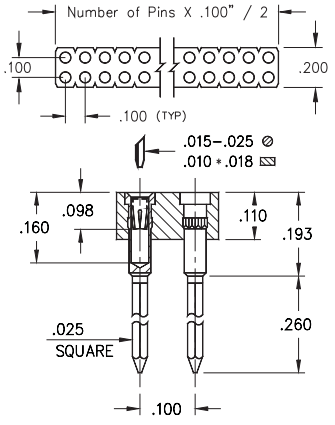


FIG. 1

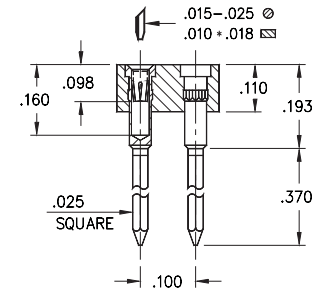


FIG. 2

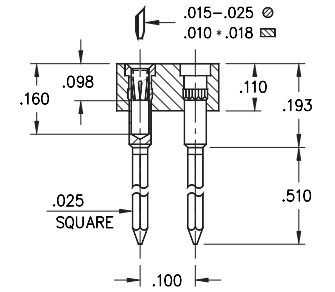


FIG. 3

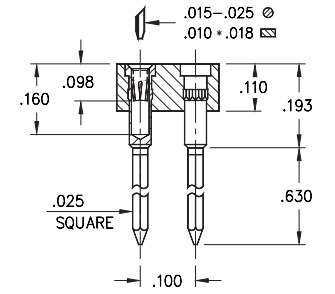


FIG. 4

- Wrapost double row strip sockets are available with 1 - 4 level wraposts:

  1-Level uses pin # 0040-1
  2-Level uses pin # 0089-2
  3-Level uses pin # 0088-3
  4-Level uses pin # 0086-4
  See page 198 for details

- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 421...001**	**1 Level Wrapost**
	421-XX-2__-41-001000 **Specify number of pins** ← 04-64	
FIG. 2	**Series 422...001**	**2 Level Wrapost**
	422-XX-2__-41-001000 **Specify number of pins** ← 04-64	
FIG. 3	**Series 423...001**	**3 Level Wrapost**
	423-XX-2__-41-001000 **Specify number of pins** ← 04-64	
FIG. 4	**Series 424...002**	**4 Level Wrapost**
	424-XX-2__-41-002000 **Specify number of pins** ← 04-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	13 ◆		93			43 ◆	
Sleeve (Pin)	10 µ" Au		200 µ" Sn/Pb			200 µ" Sn	
Contact (Clip)	30 µ" Au		30 µ" Au			30 µ" Au	

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 326 • .100" GRID WRAPOST WITH SOLDER TAIL • SINGLE ROW STRIPS

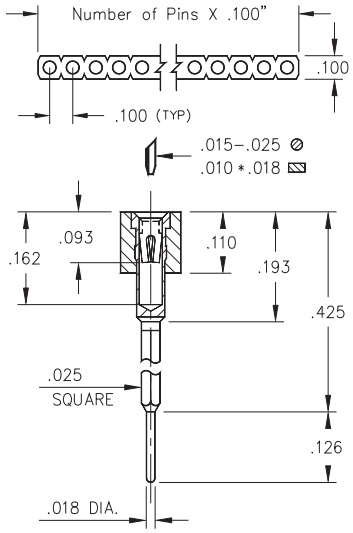


FIG. 1

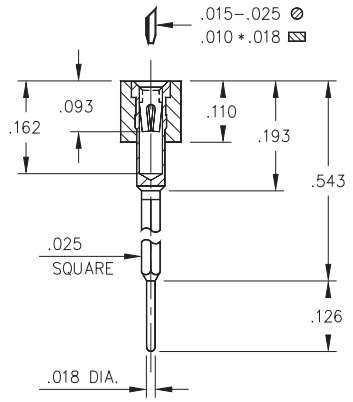


FIG. 2

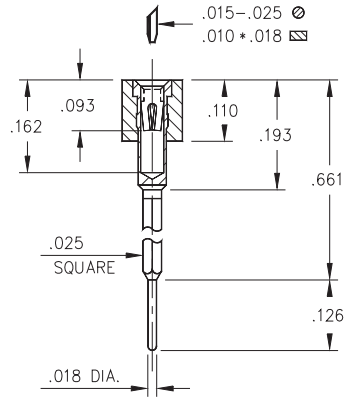


FIG. 3

- Wrapost / Solder Tail combinations are available in 3 lengths using MM pin numbers:

  326...001 uses pin # 2601
  326...002 uses pin # 2602
  326...003 uses pin # 2603
  See page 199 for details

- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 326...001**	**1 Level Wrapost**
	326-XX-1__-41-001000 **Specify number of pins** ← 01-64	
FIG. 2	**Series 326...002**	**2 Level Wrapost**
	326-XX-1__-41-002000 **Specify number of pins** ← 01-64	
FIG. 3	**Series 326...003**	**3 Level Wrapost**
	326-XX-1__-41-003000 **Specify number of pins** ← 01-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 426 • .100" GRID WRAPOST WITH SOLDER TAIL • DOUBLE ROW STRIPS

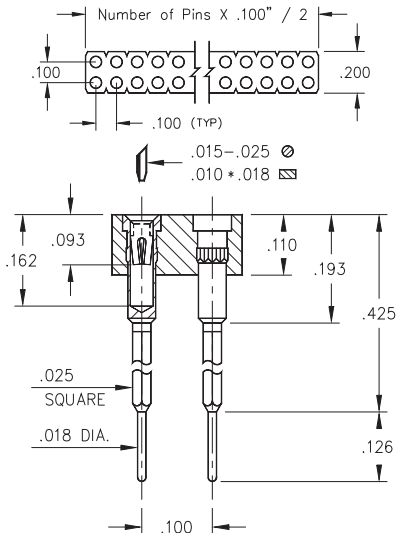


FIG. 1

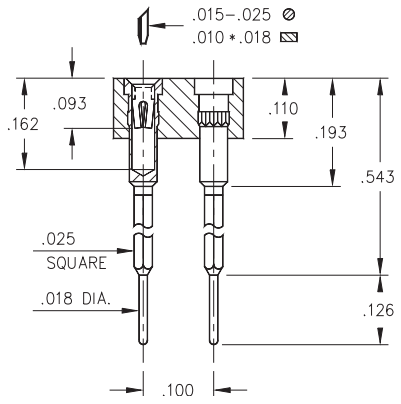


FIG. 2

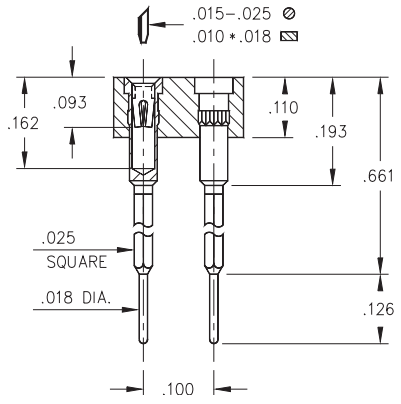


FIG. 3

- Wrapost / Solder Tail combination for interconnect purposes are available in 3 lengths using pin numbers:

  426...001 uses pin # 2601
  426...002 uses pin # 2602
  426...003 uses pin # 2603
  See page 199 for details

- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 426...001**	**1 Level Wrapost**
	426-XX-2__-41-001000 **Specify number of pins** ← 04-64	
FIG. 2	**Series 426...002**	**2 Level Wrapost**
	426-XX-2__-41-002000 **Specify number of pins** ← 04-64	
FIG. 3	**Series 426...003**	**3 Level Wrapost**
	426-XX-2__-41-003000 **Specify number of pins** ← 04-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	13 ◆		93			43 ◆	
Sleeve (Pin)	10 µ" Au		200 µ" Sn/Pb			200 µ" Sn	
Contact (Clip)	30 µ" Au		30 µ" Au			30 µ" Au	

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 304, 346 • .100" GRID SOLDERLESS PRESS-FIT • SINGLE ROW STRIPS

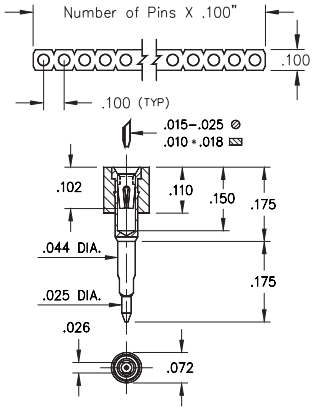


FIG. 1

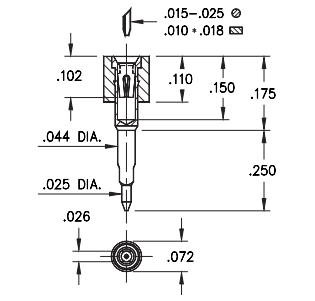


FIG. 2

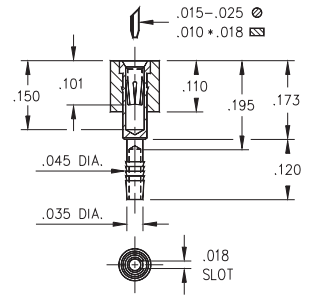


FIG. 3

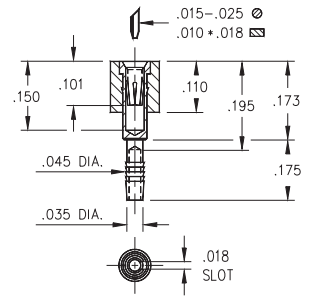


FIG. 4

- Unique compliant tail pins conform to the plated through-hole without stressing the inner layers of a multilayer board
- Recommended plated through-hole for 304 series: .036"-.041" use a 1.1mm drill prior to plating. Using MM #0477 & #0478 pins. See page 162 for details
- For 346 series: .040"+.003" finished plated through-hole. Using MM #4612 & #4613 pins. See page 162 for details. Patent No. 4,799,904
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 304...770**	**Solderless Press-Fit**
	For .062" Thick Boards	
	304-XX-1__-41-770000	
	Specify number of pins ↑ 01-64	
FIG. 2	**Series 304...780**	**Solderless Press-Fit**
	For .125" Thick Boards	
	304-XX-1__-41-780000	
	Specify number of pins ↑ 01-64	
Mill-Max recommends plating Code 13 for Series 304...770 and 304...780		
FIG. 3	**Series 346...012**	**Compliant Solderless Press-Fit**
	For .060"-.100" Thick Boards	
	346-XX-1__-41-012000	
	Specify number of pins ↑ 01-64	
FIG. 4	**Series 346...013**	**Compliant Solderless Press-Fit**
	For .090"-.130" Thick Boards	
	346-XX-1__-41-013000	
	Specify number of pins ↑ 01-64	

RoHS-2 2011/65/EU

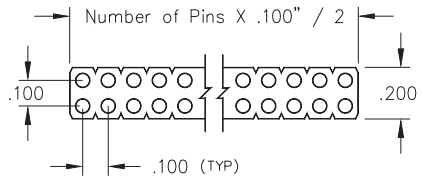
XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

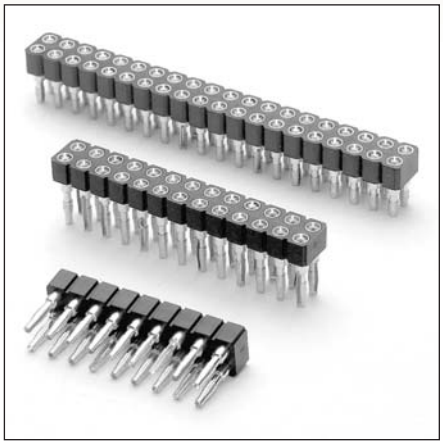
SPECIFY PLATING CODE XX=	11 ◆	13 ◆	91	93	99	41 ◆	43 ◆	44 ◆
Sleeve (Pin)	10 µ" Au	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	100 µ" Sn/Pb	10 µ" Au	30 µ" Au	100 µ" Sn

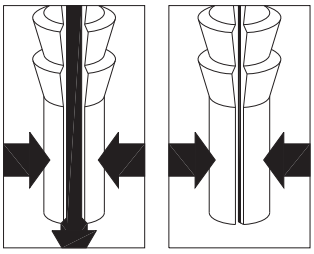
MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

SERIES 446 • .100" GRID COMPLIANT TAIL • DOUBLE ROW STRIPS



- Compliant tail solderless press-fit: MM #4612 or #4613 pins. Use series 446...012 for .060"-.120" thick boards and series 446...013 for .090"-.130" thick boards. See page 162 for details
- Compliant tail receptacles can be inserted and removed without any degradation of the plated through-hole
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic





APPLICATION OF COMPLIANT TAIL PINS

Mill-Max's patented* compliant tail features precision-machined pins that are hollow and slotted to conform to a .040" ± .003" diameter PTH. As the pin is inserted, the slot compresses to fit the PTH, thus avoiding damage (see illustration at left). The pin's tail has fine serrations that form a perfect "gas tight" connection that doesn't require soldering. And since the pin doesn't damage the hole, compliant tail sockets and connectors can be easily replaced.
*Patent No. 4,799,904.

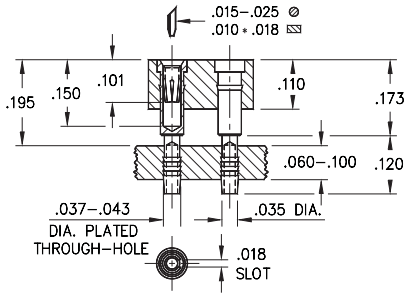


FIG. 1

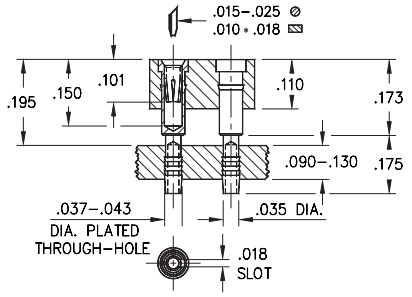


FIG. 2

ORDERING INFORMATION

FIG. 1	**Series 446...012**	**Compliant Tail Socket**
	446-XX-2__-41-012000	
	Specify number of pins ←	04-64
FIG. 2	**Series 446...013**	**Compliant Tail Socket**
	446-XX-2__-41-013000	
	Specify number of pins ←	04-64

RoHS-2 2011/65/EU

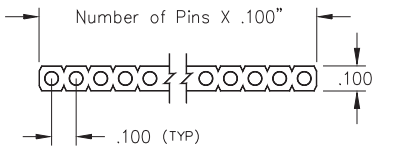
XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	13 ◆		93	99		43 ◆	44 ◆
Sleeve (Pin)	10 µ" Au		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn
Contact (Clip)	30 µ" Au		30 µ" Au	100 µ" Sn/Pb		30 µ" Au	100 µ" Sn

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 712 • .100" GRID CARRIER WITH SOLDER TAIL • SINGLE AND DOUBLE ROW STRIPS



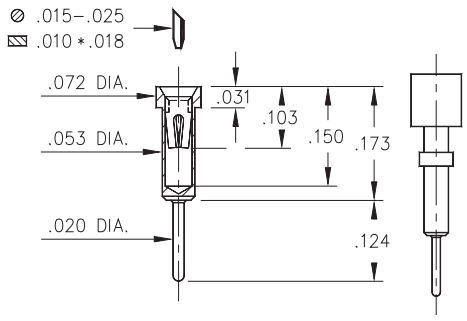
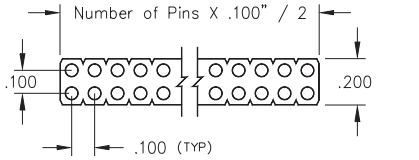


FIG. 1



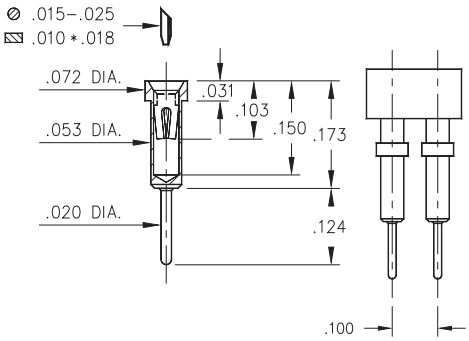


FIG. 2

- Standard solder tail receptacles can be mounted as a low profile receptacle or by the solder tail for use in smaller diameter holes
- Series 712 use MM #0255 pins. See page 165 for details
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Single Row (.028" or .055" min. mounting holes)**
	712-XX-1__-41-001000 **Specify number of pins** ← 01-64
FIG. 2	**Double Row (.028" or .055" min. mounting holes)**
	712-XX-2__-41-001000 **Specify number of pins** ← 04-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	11◆	13◆	91	93	41◆	43◆	
Sleeve (Pin)	10 µ" Au	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 714...00X • .100" GRID LOW PROFILE CARRIERS • SINGLE AND DOUBLE ROW STRIPS

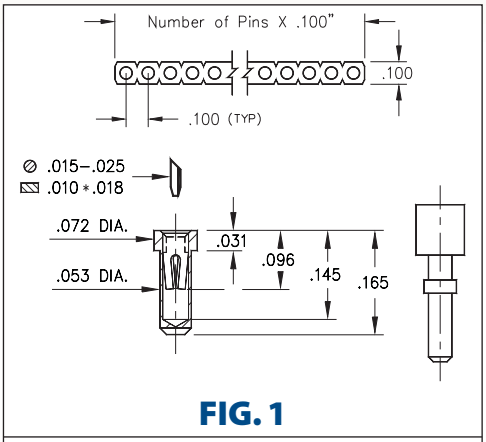


FIG. 1

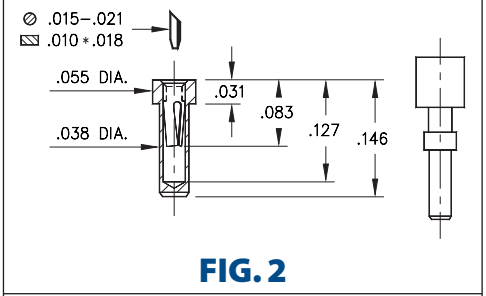


FIG. 2

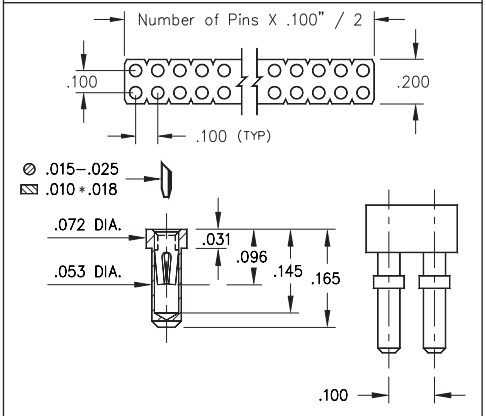


FIG. 3

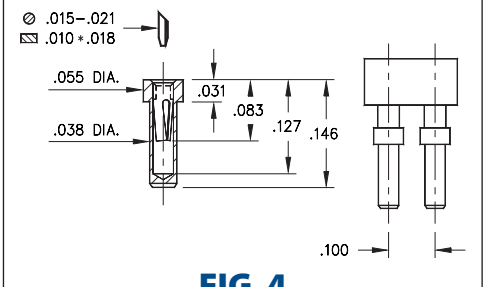
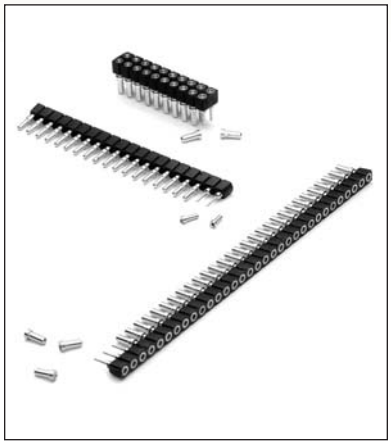


FIG. 4

- Low profile receptacles sit .031" above the board
- Series 714 use MM #1401 and MM #1407 pin receptacles. See pages 157 and 170 for details
- Hi-Rel, 4-finger BeCu #30 contact is used in the #1401 receptacle and a BeCu #11 contact is used in the #1407. Both contacts are rated at 3 amps. See pages 251 and 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Single Row (.055" min. mounting hole)** 714-XX-1__-41-001000 **Specify number of pins** 01-64
FIG. 2	**Single Row (.039" min. mounting hole)** 714-XX-1__-31-007000 **Specify number of pins** 01-64
FIG. 3	**Double Row (.055" min. mounting hole)** 714-XX-2__-41-001000 **Specify number of pins** 04-64
FIG. 4	**Double Row (.039" min. mounting hole)** 714-XX-2__-31-007000 **Specify number of pins** 04-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 714...01X • .100" GRID ULTRA LOW PROFILE CARRIERS • SINGLE AND DOUBLE ROW STRIPS

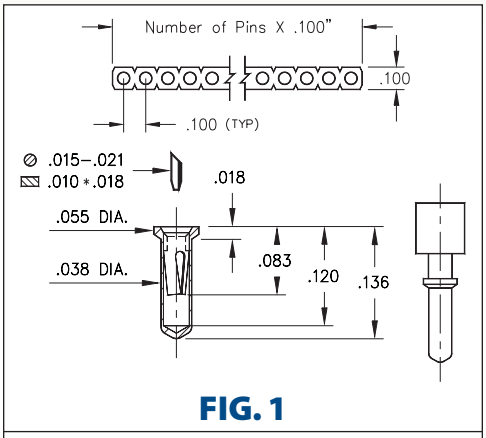


FIG. 1

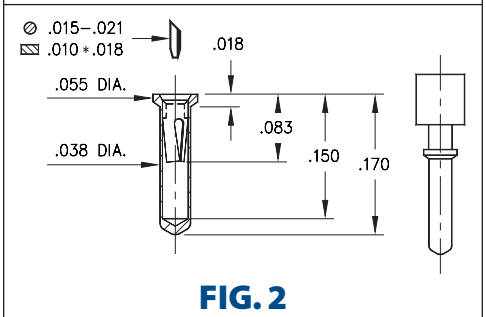


FIG. 2

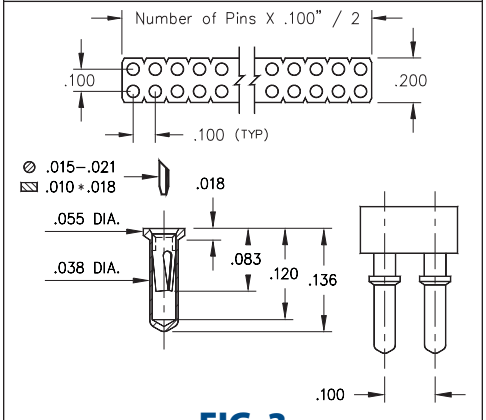


FIG. 3

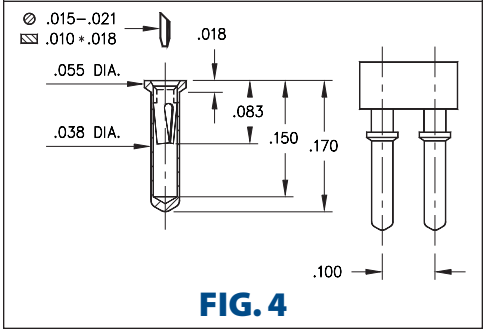
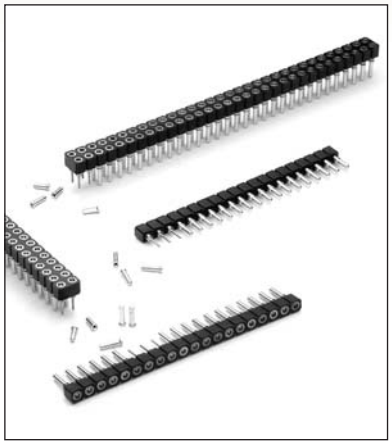


FIG. 4

- Ultra low profile receptacles sit .018" above the board
- Series 714 use MM #0552-1 and MM #0552-2 pin receptacles. See page 158 for details
- Hi-Rel, 3-finger BeCu #11 contact is rated at 3 amps. See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Single Row (.039" min. mounting hole)** 714-XX-1__-31-012000 **Specify number of pins** ← 01-64
FIG. 2	**Single Row (.039" min. mounting hole)** 714-XX-1__-31-018000 **Specify number of pins** ← 01-64
FIG. 3	**Double Row (.039" min. mounting hole)** 714-XX-2__-31-012000 **Specify number of pins** ← 04-64
FIG. 4	**Double Row (.039" min. mounting hole)** 714-XX-2__-31-018000 **Specify number of pins** ← 04-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 335, 364, 435, 464 • .100" GRID (.018" DIA. PINS), LOW PROFILE • SINGLE AND DOUBLE ROW STRIPS

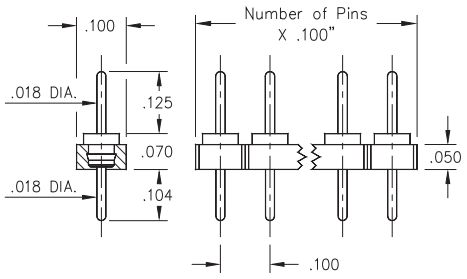


FIG. 1

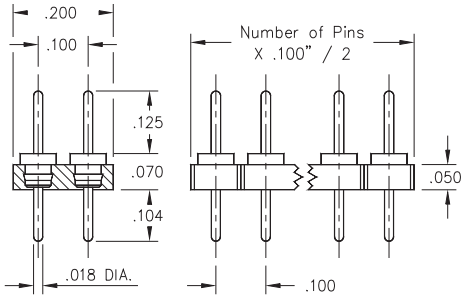


FIG. 2

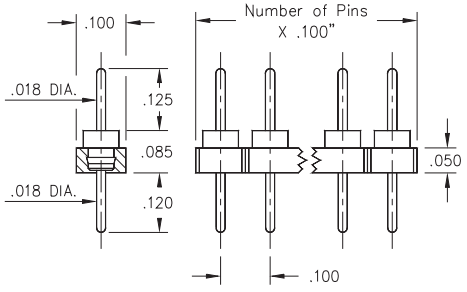


FIG. 3

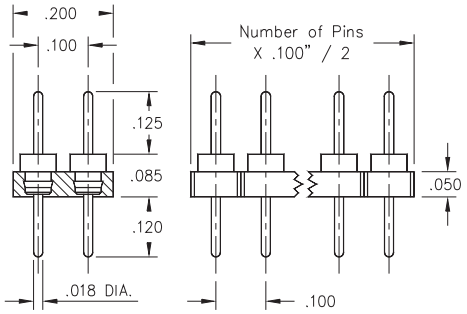


FIG. 4

- Series 335 and 435 single and double row PCB interconnects offer a .070" profile, the lowest available
- Series 364 and 464 single and double row PCB interconnects offer .085" profile above board
- Series 335 and 435 use MM #3516 pins. See page 212 for details
- Series 364 and 464 use MM #6458 pins. See page 213 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 335...160**	**Single Row .070" Profile Pin Header**
	335-XX-1__-00-160000	
	Specify number of pins ←	01-32
FIG. 2	**Series 435...160**	**Double Row .070" Profile Pin Header**
	435-XX-2__-00-160000	
	Specify number of pins ←	04-72
FIG. 3	**Series 364...580**	**Single Row .085" Profile Pin Header**
	364-10-1__-00-580000	
	Specify number of pins ←	01-32
FIG. 4	**Series 464...580**	**Double Row .085" Profile Pin Header**
	464-10-2__-00-580000	
	Specify number of pins ←	04-72

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

SERIES 351 • .100" GRID INTERCONNECT HEADERS • SINGLE ROW STRIPS

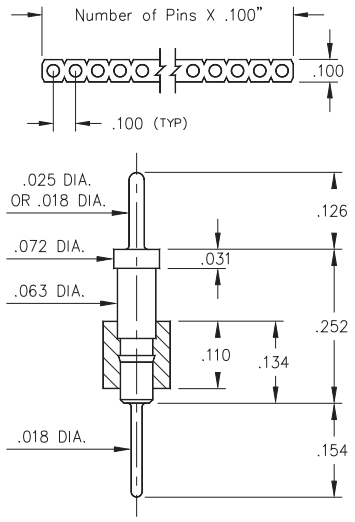


FIG. 1

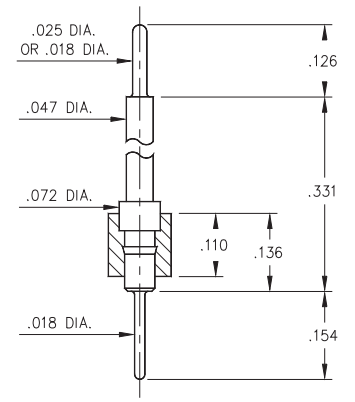


FIG. 2

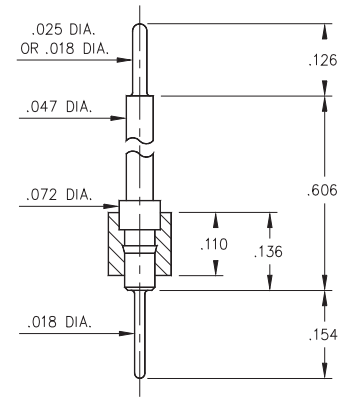


FIG. 3

- Series 351 interconnect header strips come in three lengths with .018" dia. pluggable solder tails at one end and .025" dia. pins at the other. Please see series:
  351...003 uses pin #5503
  351...004 uses pin #5504
  351...005 uses pin #5505
- .018" pluggable solder tails are available at both ends. Please see series:
  351...009 uses pin #5509
  351...010 uses pin #5510
  351...011 uses pin #5511
  See pages 212 and 214 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 351...003**	**.018" / .025" Dia. Solder Tails**
	351-10-1__-00-003000	
	Specify number of pins ↑ 01-64	
	Series 351...009	**.018" / .018" Dia. Solder Tails**
	351-10-1__-00-009000	
	Specify number of pins ↑ 01-64	
FIG. 2	**Series 351...004**	**.018" / .025" Dia. Solder Tails**
	351-10-1__-00-004000	
	Specify number of pins ↑ 01-64	
	Series 351...010	**.018" / .018" Dia. Solder Tails**
	351-10-1__-00-010000	
	Specify number of pins ↑ 01-64	
FIG. 3	**Series 351...005**	**.018" / .025" Dia. Solder Tails**
	351-10-1__-00-005000	
	Specify number of pins ↑ 01-64	
	Series 351...011	**.018" / .018" Dia. Solder Tails**
	351-10-1__-00-011000	
	Specify number of pins ↑ 01-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

SERIES 451 • .100" GRID INTERCONNECT HEADERS • DOUBLE ROW STRIPS

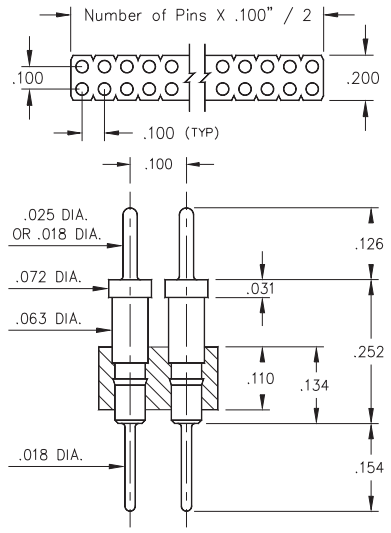


FIG. 1

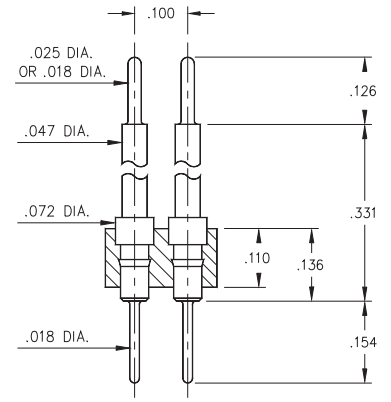


FIG. 2

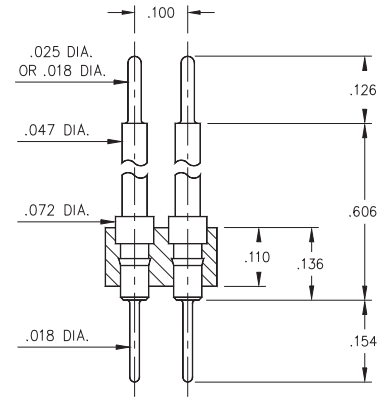


FIG. 3

- Series 451 interconnect header strips come in three lengths with .018" dia. pluggable solder tails at one end and .025" dia. pins at the other. Please see series:
  451...003 uses pin #5503
  451...004 uses pin #5504
  451...005 uses pin #5505
- .018" pluggable solder tails are available at both ends. Please see series:
  451...009 uses pin #5509
  451...010 uses pin #5510
  451...011 uses pin #5511
  See pages 212 and 214 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 451...003**	**.018" / .025" Dia. Solder Tails**
	451-10-2__-00-003000	
	Specify number of pins ↑ 04-64	
	Series 451...009	**.018" / .018" Dia. Solder Tails**
	451-10-2__-00-009000	
	Specify number of pins ↑ 04-64	
FIG. 2	**Series 451...004**	**.018" / .025" Dia. Solder Tails**
	451-10-2__-00-004000	
	Specify number of pins ↑ 04-64	
	Series 451...010	**.018" / .018" Dia. Solder Tails**
	451-10-2__-00-010000	
	Specify number of pins ↑ 04-64	
FIG. 3	**Series 451...005**	**.018" / .025" Dia. Solder Tails**
	451-10-2__-00-005000	
	Specify number of pins ↑ 04-64	
	Series 451...011	**.018" / .018" Dia. Solder Tails**
	451-10-2__-00-011000	
	Specify number of pins ↑ 04-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

SERIES 334 • .100" GRID INTERCONNECT HEADERS • SINGLE ROW STRIPS

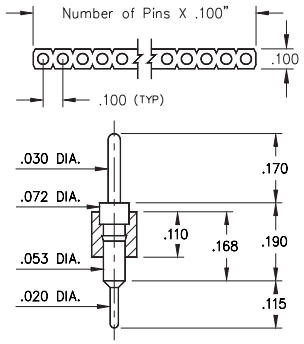


FIG. 1

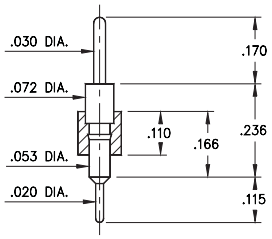


FIG. 2

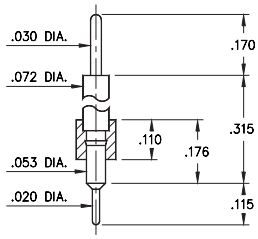


FIG. 3

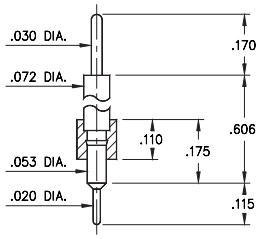


FIG. 4

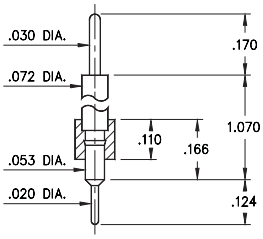


FIG. 5

- Series 334 interconnect header strips are available in 5 lengths:

  334...020 uses pin #3402 (L = .190")
  334...010 uses pin #3401 (L = .236")
  334...050 uses pin #3405 (L = .315")
  334...000 uses pin #3400 (L = .606")
  334...100 uses pin #3410 (L = 1.070")
  See page 215 for details

- Strips come with .020" pluggable soldertails at one end and .030" tails at the other

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 334...020**	**.020" / .030" Dia. Solder Tails**
	334-XX-1__-00-020000	
	Specify number of pins ↑ 01-64	
FIG. 2	**Series 334...010**	**.020" / .030" Dia. Solder Tails**
	334-XX-1__-00-010000	
	Specify number of pins ↑ 01-64	
FIG. 3	**Series 334...050**	**.020" / .030" Dia. Solder Tails**
	334-XX-1__-00-050000	
	Specify number of pins ↑ 01-64	
FIG. 4	**Series 334...000**	**.020" / .030" Dia. Solder Tails**
	334-XX-1__-00-000000	
	Specify number of pins ↑ 01-64	
FIG. 5	**Series 334...100**	**.020" / .030" Dia. Solder Tails**
	334-XX-1__-00-100000	
	Specify number of pins ↑ 01-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

SERIES 342 • .100" GRID BOARD STACKING HEADERS • SINGLE ROW STRIPS

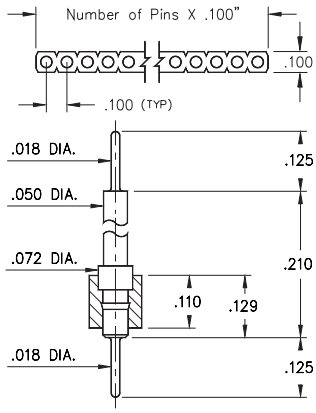


FIG. 1

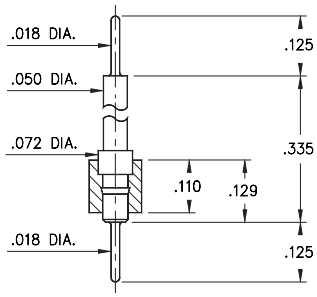


FIG. 2

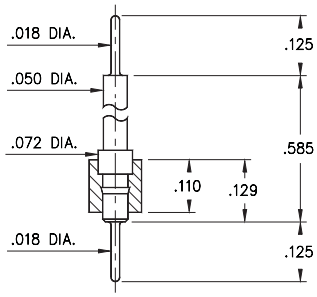


FIG. 3

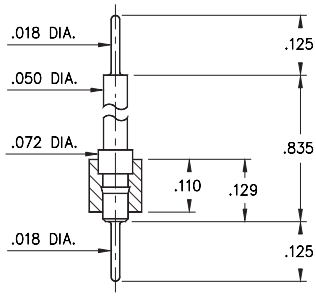


FIG. 4

- Series 342 interconnect header strips come in four heights with .018" dia. pluggable solder tails at both ends

  342...591 uses pin #4259-1 (L = .210")
  342...592 uses pin #4259-2 (L = .335")
  342...593 uses pin #4259-3 (L = .585")
  342...594 uses pin #4259-4 (L = .835")
  See page 212 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 342...591**	**.018" / .018" Dia. Solder Tails**
	342-XX-1__-00-591000	
	Specify number of pins ← 01-64	
FIG. 2	**Series 342...592**	**.018" / .018" Dia. Solder Tails**
	342-XX-1__-00-592000	
	Specify number of pins ← 01-64	
FIG. 3	**Series 342...593**	**.018" / .018" Dia. Solder Tails**
	342-XX-1__-00-593000	
	Specify number of pins ← 01-64	
FIG. 4	**Series 342...594**	**.018" / .018" Dia. Solder Tails**
	342-XX-1__-00-594000	
	Specify number of pins ← 01-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 442 • .100" GRID BOARD STACKING HEADERS • DOUBLE ROW STRIPS

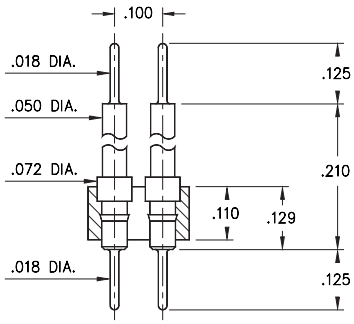


FIG. 1

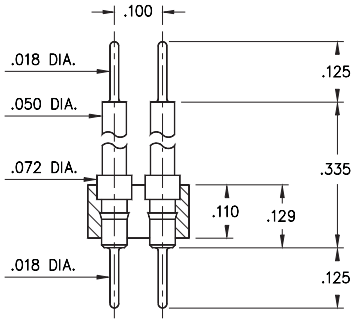


FIG. 2

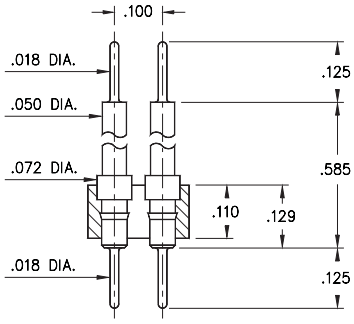


FIG. 3

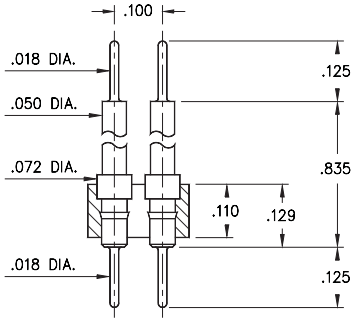
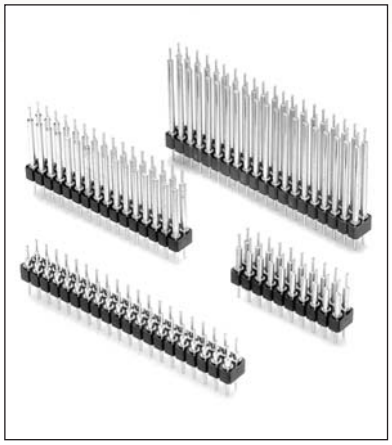


FIG. 4

- Series 442 interconnect header strips come in four heights with .018" dia. pluggable solder tails at both ends

  442...591 uses pin #4259-1 (L = .210")
  442...592 uses pin #4259-2 (L = .335")
  442...593 uses pin #4259-3 (L = .585")
  442...594 uses pin #4259-4 (L = .835")
  See page 212 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 442...591**	**.018" / .018" Dia. Solder Tails**
	442-XX-2__-00-591000 **Specify number of pins** ← 04-64	
FIG. 2	**Series 442...592**	**.018" / .018" Dia. Solder Tails**
	442-XX-2__-00-592000 **Specify number of pins** ← 04-64	
FIG. 3	**Series 442...593**	**.018" / .018" Dia. Solder Tails**
	442-XX-2__-00-593000 **Specify number of pins** ← 04-64	
FIG. 4	**Series 442...594**	**.018" / .018" Dia. Solder Tails**
	442-XX-2__-00-594000 **Specify number of pins** ← 04-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 350, 360, 370, 380 • .100" GRID SOLDER TAIL • SINGLE ROW STRIPS

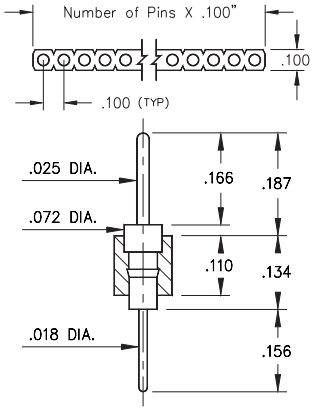


FIG. 1

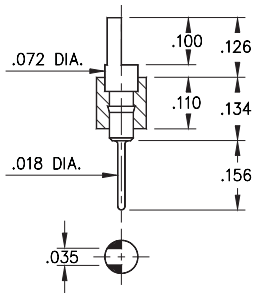


FIG. 2

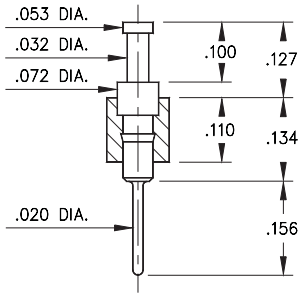


FIG. 3

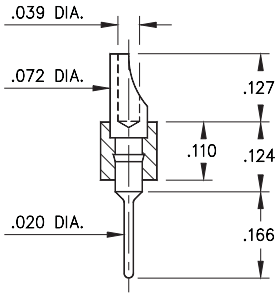


FIG. 4

- Series 350, 360, 370 & 380 single row header strips come in various styles (pin, slotted, head, turret and solder cup) with pluggable solder tails

  350...001 uses pin #0290
  360...001 uses pin #0282
  370...001 uses pin #0700
  380...001 uses pin #8000
  See pages 215 and 216 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 350...001**	**.025" / .018" Dia. Solder Tails**
	350-XX-1__-00-001000	
	Specify number of pins ← 01-64	
FIG. 2	**Series 360...001**	**Slotted Head / Solder Tail**
	360-XX-1__-00-001000	
	Specify number of pins ← 01-64	
FIG. 3	**Series 370...001**	**Turret / Solder Tail**
	370-XX-1__-00-001000	
	Specify number of pins ← 01-64	
FIG. 4	**Series 380...001**	**Solder Cup / Solder Tail**
	380-XX-1__-00-001000	
	Specify number of pins ← 01-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 450, 460, 470, 480 • .100" GRID SOLDER TAIL • DOUBLE ROW STRIPS

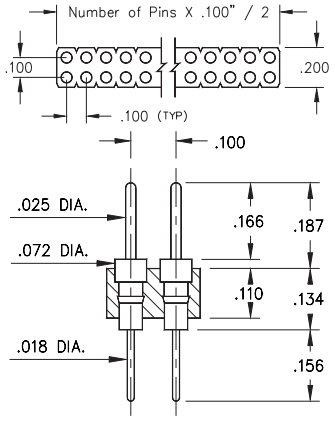


FIG. 1

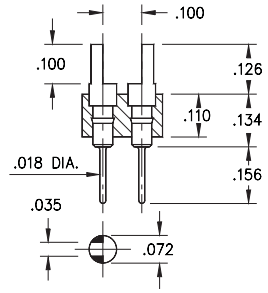


FIG. 2

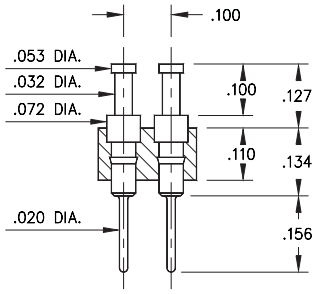


FIG. 3

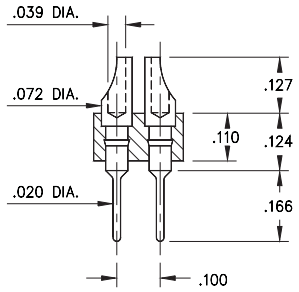
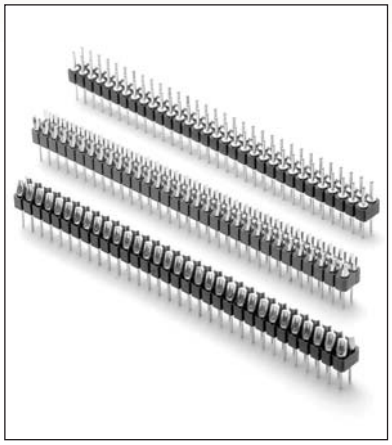


FIG. 4

- Series 450, 460, 470 & 480 double row header strips come in various styles (pin, slotted, head, turret and solder cup) with pluggable solder tails

  450...001 uses pin #0290
  460...001 uses pin #0282
  470...001 uses pin #0700
  480...001 uses pin #8000
  See pages 215 and 216 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 450...001**	**.025" / .018" Dia. Solder Tails**
	450-XX-2__-00-001000 **Specify number of pins** ← 04-64	
FIG. 2	**Series 460...001**	**Slotted Head / Solder Tail**
	460-10-2__-00-001000 **Specify number of pins** ← 02-64	
FIG. 3	**Series 470...001**	**Turret / Solder Tail**
	470-XX-2__-00-001000 **Specify number of pins** ← 04-64	
FIG. 4	**Series 480...001**	**Solder Cup / Solder Tail**
	480-10-2__-00-001000 **Specify number of pins** ← 02-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 353, 362, 363, 373, 382, 383 • .100" GRID WRAPOST • SINGLE ROW STRIPS

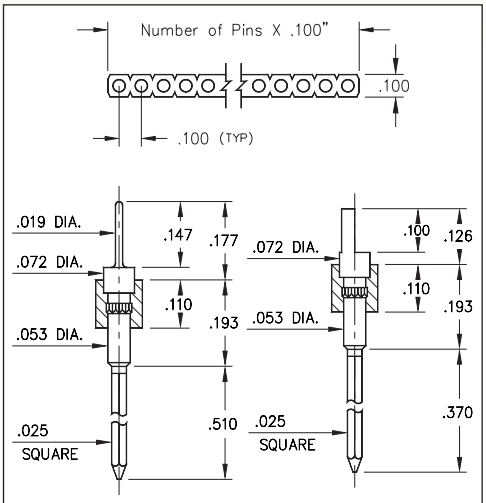


FIG. 1 FIG. 2

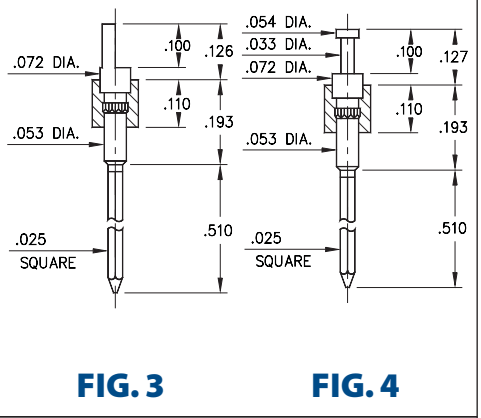


FIG. 3 FIG. 4

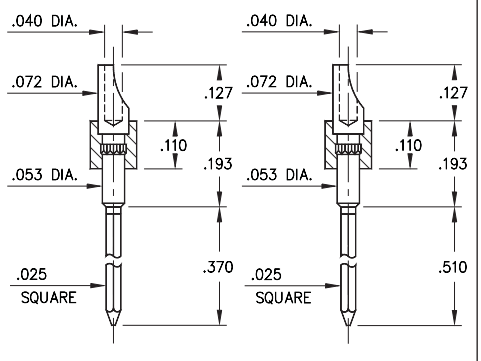
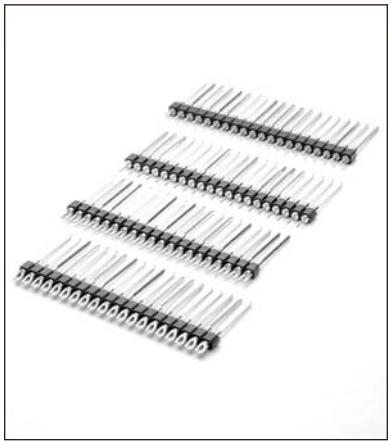


FIG. 5 FIG. 6

- Series 353, 362, 363, 373, 382 and 383 single row header strips come in various styles (pin, slotted head, turret and solder cup) with wrapost tails

  353...001 uses pin #5301
  362...001 uses pin #1106-2
  363...001 uses pin #1106-3
  373...001 uses pin #0730-3
  382...001 uses pin #8301-2
  383...001 uses pin #8301-3
  See pages 227 and 228 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	Series 353...001	Pin / 3 Level Wrapost
	353-XX-1__-00-001000	
	Specify number of pins	01-64
FIG. 2	Series 362...001	Slotted Head / 2 Level Wrapost
	362-XX-1__-00-001000	
	Specify number of pins	01-64
FIG. 3	Series 363...001	Slotted Head / 3 Level Wrapost
	363-XX-1__-00-001000	
	Specify number of pins	01-64
FIG. 4	Series 373...001	Turret / 3 Level Wrapost
	373-XX-1__-00-001000	
	Specify number of pins	01-64
FIG. 5	Series 382...001	Solder Cup / 2 Level Wrapost
	382-XX-1__-00-001000	
	Specify number of pins	01-64
FIG. 6	Series 383...001	Solder Cup / 3 Level Wrapost
	383-XX-1__-00-001000	
	Specify number of pins	01-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 453, 463, 473, 483 • .100" GRID WRAPOST • DOUBLE ROW STRIPS

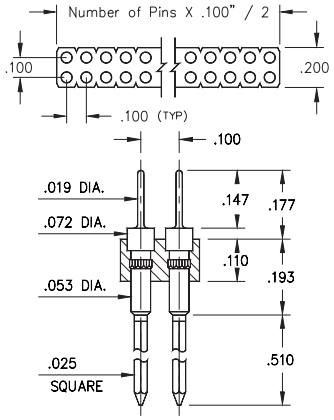


FIG. 1

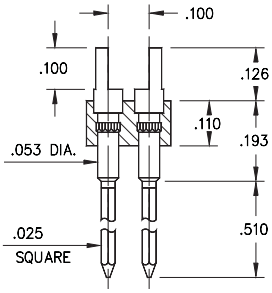


FIG. 2

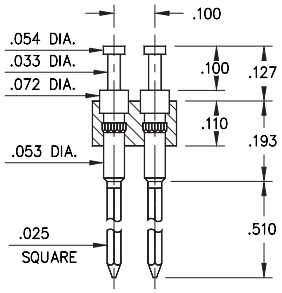


FIG. 3

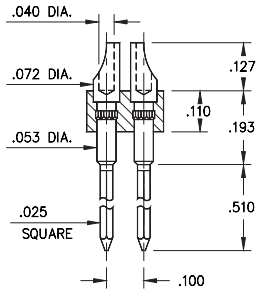


FIG. 4

- Series 453, 463, 473, and 483 double row header strips come in various styles (pin, slotted head, turret and solder cup) with wrapost tails

  453...001 uses pin #5301
  463...001 uses pin #1106-3
  473...001 uses pin #0730-3
  483...001 uses pin #8301-3
  See pages 227 and 228 for details

- Insulators are high temperature thermoplastic, suitable for all soldering operations



ORDERING INFORMATION

FIG. 1	**Series 453...001**	**Pin / 3 Level Wrapost**
	453-10-2__-00-001000 **Specify number of pins** ← 04-64	
FIG. 2	**Series 463...001**	**Slotted Head / 3 Level Wrapost**
	463-XX-2__-00-001000 **Specify number of pins** ← 02-64	
FIG. 3	**Series 473...001**	**Turret / 3 Level Wrapost**
	473-XX-2__-00-001000 **Specify number of pins** ← 04-64	
FIG. 4	**Series 483...001**	**Solder Cup / 3 Level Wrapost**
	483-XX-2__-00-001000 **Specify number of pins** ← 02-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

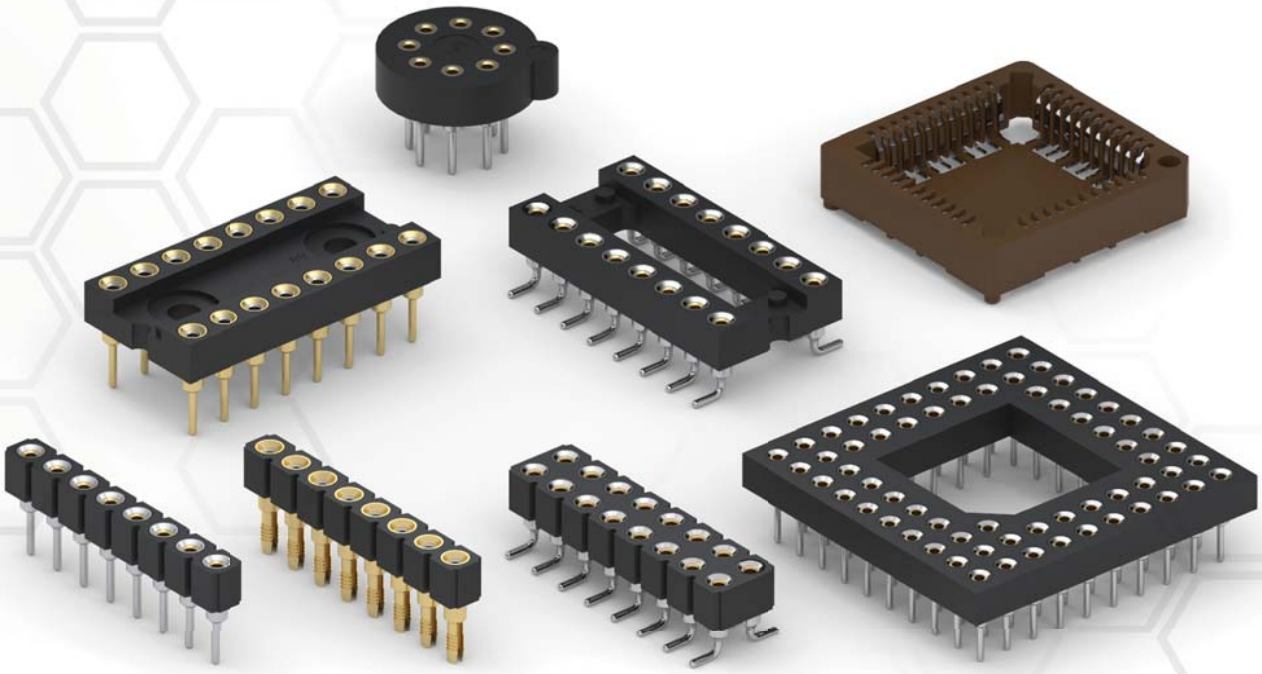
For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

WWW.MILL-MAX.COM

IC SOCKETS
TO SOCKETS

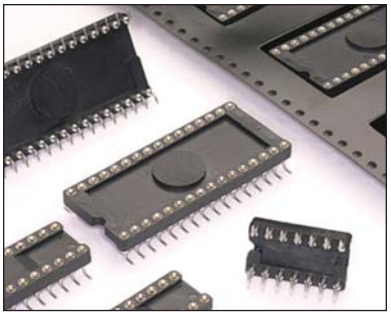


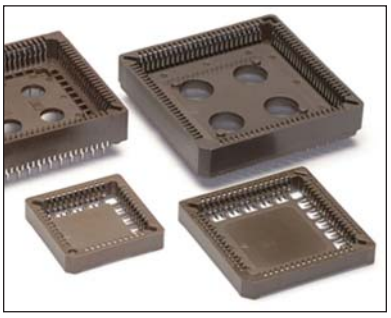
WWW.MILL-MAX.COM

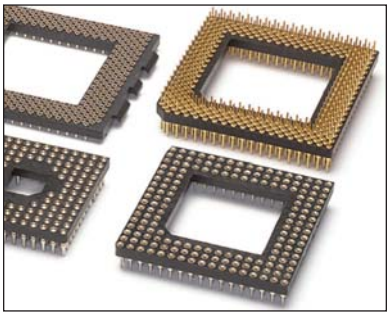
MILL-MAX IC SOCKETS PROVIDE A VARIETY OF OPTIONS FOR MAKING DEVICE-TO-BOARD CONNECTIONS. Our IC Sockets utilize the Mill-Max receptacle as the connection between the IC device and the circuit board. The precision-machined receptacle shell is available in multiple variations to fit many applications. We offer a wide choice of sockets in several board termination types including: solder-tail, press-fit, surface mount and wrapost. These sockets allow for upgradeability and field repair and provide versatility for device substitution between models of a product line.

IC Sockets can be loaded manually for soldering or press-fitting, or when volume placement is required, sockets can be packaged on tape and reel providing labor-saving solutions for our customers.

We will gladly quote custom application-specific products in addition to the products found on the following pages.

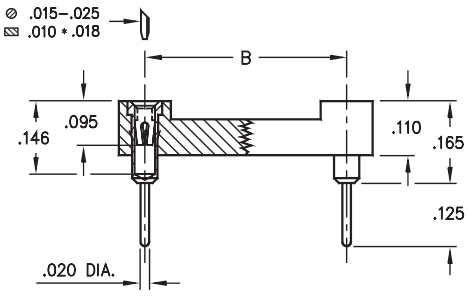






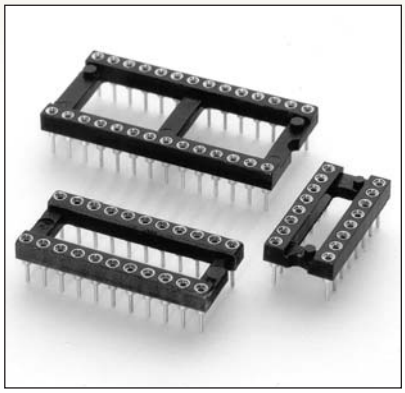
DUAL-IN-LINE SOCKETS

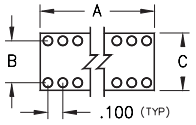
SERIES 110...001 • STANDARD SOLDER TAIL • OPEN FRAME



See page 130 for Insulator Details

- All DIP sockets accept .015" - .025" diameter and standard IC leads
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 110 uses MM #1001 pins. See page 165 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details





Total number of pins	A	B	C	Quantity per tube	ORDERING INFORMATION
10	0.5	0.2	0.3	40	110-XX-210-41-001000
4	0.2	0.3	0.4	102	110-XX-304-41-001000
6	0.3	0.3	0.4	67	110-XX-306-41-001000
8	0.4	0.3	0.4	50	110-XX-308-41-001000
10	0.5	0.3	0.4	40	110-XX-310-41-001000
14	0.7	0.3	0.4	28	110-XX-314-41-001000
16	0.8	0.3	0.4	25	110-XX-316-41-001000
18	0.9	0.3	0.4	22	110-XX-318-41-001000
20	1.0	0.3	0.4	20	110-XX-320-41-001000
22	1.1	0.3	0.4	18	110-XX-322-41-001000
24	1.2	0.3	0.4	16	110-XX-324-41-001000
28	1.4	0.3	0.4	14	110-XX-328-41-001000
20	1.0	0.4	0.5	20	110-XX-420-41-001000
22	1.1	0.4	0.5	18	110-XX-422-41-001000
24	1.2	0.4	0.5	16	110-XX-424-41-001000
28	1.4	0.4	0.5	14	110-XX-428-41-001000
32	1.6	0.4	0.5	12	110-XX-432-41-001000
24	1.2	0.6	0.7	16	110-XX-624-41-001000
28	1.4	0.6	0.7	14	110-XX-628-41-001000
32	1.6	0.6	0.7	12	110-XX-632-41-001000
36	1.8	0.6	0.7	11	110-XX-636-41-001000
40	2.0	0.6	0.7	10	110-XX-640-41-001000
42	2.1	0.6	0.7	9	110-XX-642-41-001000
48	2.4	0.6	0.7	8	110-XX-648-41-001000
50	2.5	0.6	0.7	8	110-XX-650-41-001000
52	2.6	0.6	0.7	7	110-XX-652-41-001000
50	2.5	0.9	1.0	8	110-XX-950-41-001000
52	2.6	0.9	1.0	7	110-XX-952-41-001000
64	3.2	0.9	1.0	6	110-XX-964-41-001000

XX=Plating Code See Below

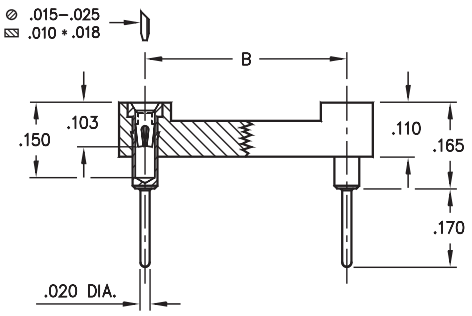
RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =	11 ◆	13 ◆	91	93	99	41 ◆	43 ◆	44 ◆
Sleeve (Pin)	10 µ" Au	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	100 µ" Sn/Pb	10 µ" Au	30 µ" Au	100 µ" Sn

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

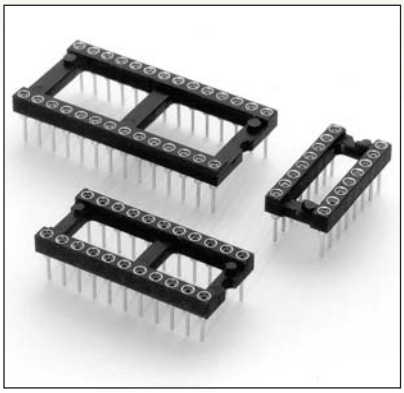
DUAL-IN-LINE SOCKETS

SERIES 111 • LONG SOLDER TAIL FOR MULTI-LAYER PCB • OPEN FRAME



See page 130 for Insulator Details

- DIP sockets with increased solder tail length of .170", allowing application on multi-layer PCBs up to .139" thick
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 111 uses MM #0134 pins. See page 165 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins	A	B	C	Quantity per tube	ORDERING INFORMATION
10	0.5	0.2	0.3	40	111-XX-210-41-001000
4	0.2	0.3	0.4	102	111-XX-304-41-001000
6	0.3	0.3	0.4	67	111-XX-306-41-001000
8	0.4	0.3	0.4	50	111-XX-308-41-001000
10	0.5	0.3	0.4	40	111-XX-310-41-001000
14	0.7	0.3	0.4	28	111-XX-314-41-001000
16	0.8	0.3	0.4	25	111-XX-316-41-001000
18	0.9	0.3	0.4	22	111-XX-318-41-001000
20	1.0	0.3	0.4	20	111-XX-320-41-001000
22	1.1	0.3	0.4	18	111-XX-322-41-001000
24	1.2	0.3	0.4	16	111-XX-324-41-001000
28	1.4	0.3	0.4	14	111-XX-328-41-001000
20	1.0	0.4	0.5	20	111-XX-420-41-001000
22	1.1	0.4	0.5	18	111-XX-422-41-001000
24	1.2	0.4	0.5	16	111-XX-424-41-001000
28	1.4	0.4	0.5	14	111-XX-428-41-001000
32	1.6	0.4	0.5	12	111-XX-432-41-001000
24	1.2	0.6	0.7	16	111-XX-624-41-001000
28	1.4	0.6	0.7	14	111-XX-628-41-001000
32	1.6	0.6	0.7	12	111-XX-632-41-001000
36	1.8	0.6	0.7	11	111-XX-636-41-001000
40	2.0	0.6	0.7	10	111-XX-640-41-001000
42	2.1	0.6	0.7	9	111-XX-642-41-001000
48	2.4	0.6	0.7	8	111-XX-648-41-001000
50	2.5	0.6	0.7	8	111-XX-650-41-001000
52	2.6	0.6	0.7	7	111-XX-652-41-001000
50	2.5	0.9	1.0	8	111-XX-950-41-001000
52	2.6	0.9	1.0	7	111-XX-952-41-001000
64	3.2	0.9	1.0	6	111-XX-964-41-001000

XX=Plating Code See Below

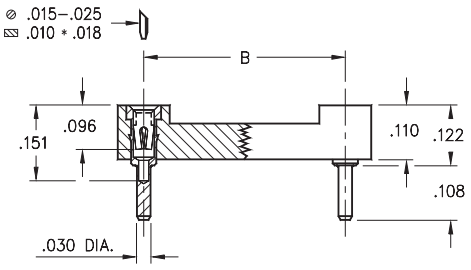
RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

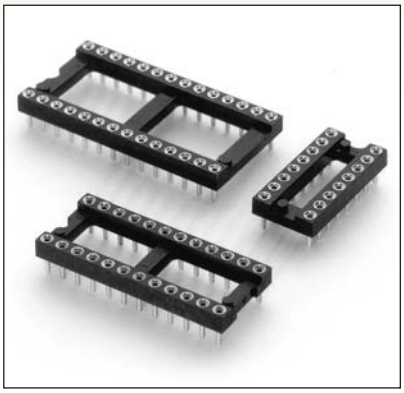
DUAL-IN-LINE SOCKETS

SERIES 115...001 • VERY LOW PROFILE • OPEN FRAME



See page 130 for Insulator Details

- Low profile DIP socket, sits only .122" above the PCB
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 115 uses MM #0501 pins. See page 162 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins	A	B	C	Quantity per tube	ORDERING INFORMATION
10	0.5	0.2	0.3	41	115-XX-210-41-001000
4	0.2	0.3	0.4	102	115-XX-304-41-001000
6	0.3	0.3	0.4	67	115-XX-306-41-001000
8	0.4	0.3	0.4	50	115-XX-308-41-001000
10	0.5	0.3	0.4	40	115-XX-310-41-001000
14	0.7	0.3	0.4	28	115-XX-314-41-001000
16	0.8	0.3	0.4	25	115-XX-316-41-001000
18	0.9	0.3	0.4	22	115-XX-318-41-001000
20	1.0	0.3	0.4	20	115-XX-320-41-001000
22	1.1	0.3	0.4	18	115-XX-322-41-001000
24	1.2	0.3	0.4	16	115-XX-324-41-001000
28	1.4	0.3	0.4	14	115-XX-328-41-001000
20	1.0	0.4	0.5	20	115-XX-420-41-001000
22	1.1	0.4	0.5	18	115-XX-422-41-001000
24	1.2	0.4	0.5	16	115-XX-424-41-001000
28	1.4	0.4	0.5	14	115-XX-428-41-001000
32	1.6	0.4	0.5	12	115-XX-432-41-001000
24	1.2	0.6	0.7	16	115-XX-624-41-001000
28	1.4	0.6	0.7	14	115-XX-628-41-001000
32	1.6	0.6	0.7	12	115-XX-632-41-001000
36	1.8	0.6	0.7	11	115-XX-636-41-001000
40	2.0	0.6	0.7	10	115-XX-640-41-001000
42	2.1	0.6	0.7	9	115-XX-642-41-001000
48	2.4	0.6	0.7	8	115-XX-648-41-001000
50	2.5	0.6	0.7	8	115-XX-650-41-001000
52	2.6	0.6	0.7	7	115-XX-652-41-001000
50	2.5	0.9	1.0	8	115-XX-950-41-001000
52	2.6	0.9	1.0	7	115-XX-952-41-001000
64	3.2	0.9	1.0	6	115-XX-964-41-001000

XX=Plating Code See Below

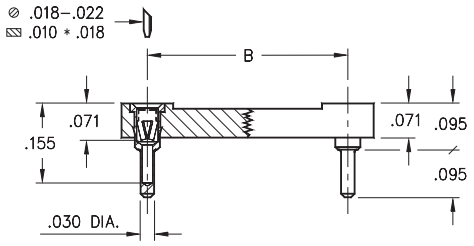
RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

MILL-MAX *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

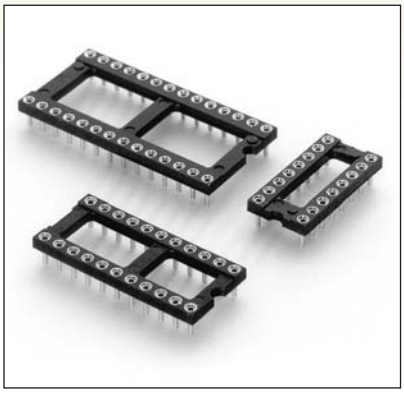
DUAL-IN-LINE SOCKETS

SERIES 115...003 • ULTRA LOW PROFILE • OPEN FRAME



See page 131 for Insulator Details

- Our lowest profile DIP socket with an above PCB height of only .095"
- Special short Hi-Rel, 4-finger BeCu #12 contact is rated at 3 amps. See page 252 for details
- Series 115 uses MM #1534 pins. See page 161 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	
6	0.3	0.3	0.4	68	115-XX-306-41-003000
8	0.4	0.3	0.4	50	115-XX-308-41-003000
14	0.7	0.3	0.4	28	115-XX-314-41-003000
16	0.8	0.3	0.4	25	115-XX-316-41-003000
18	0.9	0.3	0.4	22	115-XX-318-41-003000
20	1.0	0.3	0.4	20	115-XX-320-41-003000
22	1.1	0.3	0.4	18	115-XX-322-41-003000
24	1.2	0.3	0.4	16	115-XX-324-41-003000
28	1.4	0.3	0.4	14	115-XX-328-41-003000
20	1.0	0.4	0.5	20	115-XX-420-41-003000
22	1.1	0.4	0.5	18	115-XX-422-41-003000
24	1.2	0.4	0.5	16	115-XX-424-41-003000
28	1.4	0.4	0.5	14	115-XX-428-41-003000
24	1.2	0.6	0.7	16	115-XX-624-41-003000
28	1.4	0.6	0.7	14	115-XX-628-41-003000
32	1.6	0.6	0.7	12	115-XX-632-41-003000
36	1.8	0.6	0.7	11	115-XX-636-41-003000
40	2.0	0.6	0.7	10	115-XX-640-41-003000
48	2.4	0.6	0.7	8	115-XX-648-41-003000
50	2.5	0.6	0.7	8	115-XX-650-41-003000

XX=Plating Code See Below

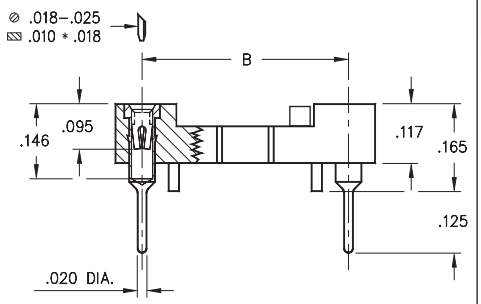
RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =		91	93		41 ◆	43 ◆	44 ◆
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	200 µ" Sn
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	100 µ" Sn

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

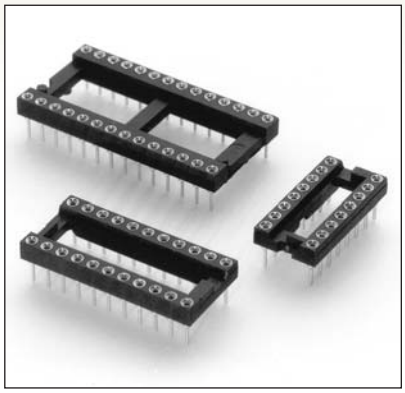
DUAL-IN-LINE SOCKETS

SERIES 110...605 • AUTOMATIC INSERTION • OPEN FRAME



See page 132 for Insulator Details

- High temperature thermoplastic insulator with standoffs is compatible with standard automatic insertion equipment and all soldering processes
- Soft copper alloy machined pins allow clinching. Chamfered contact entry allows for ease of IC insertion without bent leads
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 110 uses MM #1005 pins. See page 166 for details
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Ordering Information
6	0.3	0.3	0.4	67	110-XX-306-41-605000
8	0.4	0.3	0.4	50	110-XX-308-41-605000
14	0.7	0.3	0.4	28	110-XX-314-41-605000
16	0.8	0.3	0.4	25	110-XX-316-41-605000
18	0.9	0.3	0.4	22	110-XX-318-41-605000
20	1.0	0.3	0.4	20	110-XX-320-41-605000
24	1.2	0.3	0.4	16	110-XX-324-41-605000
22	1.1	0.4	0.5	18	110-XX-422-41-605000
24	1.2	0.6	0.7	16	110-XX-624-41-605000
28	1.4	0.6	0.7	14	110-XX-628-41-605000
32	1.6	0.6	0.7	12	110-XX-632-41-605000
40	2.0	0.6	0.7	10	110-XX-640-41-605000

XX=Plating Code See Below

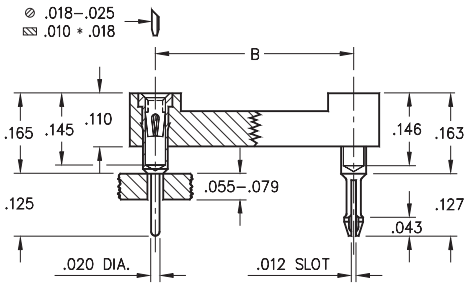
RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

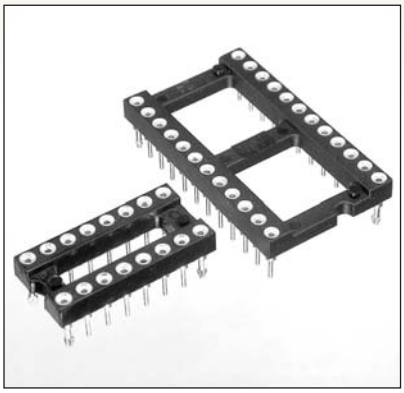
DUAL-IN-LINE SOCKETS

SERIES 101 • CLINCH PIN • OPEN FRAME



See page 130 for Insulator Details

- Special lock-down feature prevents floating of socket during soldering. Open insulator with ladder construction
- Socket pins feature closed end construction eliminating any solder wicking problems
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 101 uses MM #1001 and MM #0156 pins. See page 165 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins	A	B	C	Quantity per tube	ORDERING INFORMATION
6	0.3	0.3	0.4	67	101-93-306-41-56X000
8	0.4	0.3	0.4	50	101-93-308-41-56X000
14	0.7	0.3	0.4	28	101-93-314-41-56X000
16	0.8	0.3	0.4	25	101-93-316-41-56X000
18	0.9	0.3	0.4	22	101-93-318-41-56X000
20	1.0	0.3	0.4	20	101-93-320-41-56X000
24	1.2	0.3	0.4	16	101-93-324-41-56X000
28	1.4	0.3	0.4	14	101-93-328-41-56X000
22	1.1	0.4	0.5	18	101-93-422-41-56X000
24	1.2	0.6	0.7	16	101-93-624-41-56X000
28	1.4	0.6	0.7	14	101-93-628-41-56X000
32	1.6	0.6	0.7	12	101-93-632-41-56X000
40	2.0	0.6	0.7	10	101-93-640-41-56X000
48	2.4	0.6	0.7	8	101-93-648-41-56X000
64	3.2	0.9	1.0	6	101-93-964-41-56X000

Clinch Pins:

Two Opposite Corner Pins **X = 0**

Four Corner Pins **X = 8**

XX=Plating Code See Below

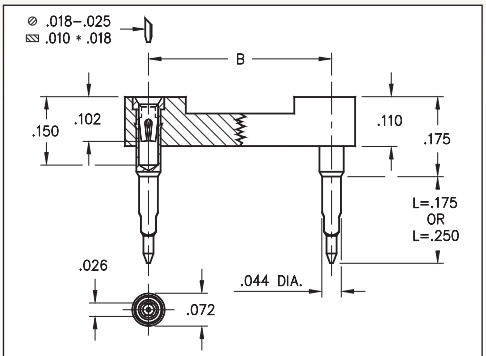
RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =			93				
Sleeve (Pin)			200 µ" Sn/Pb				
Contact (Clip)			30 µ" Au				

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

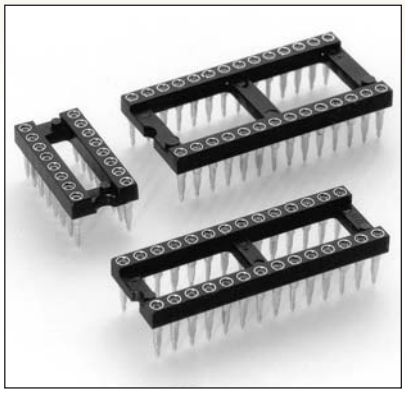
DUAL-IN-LINE SOCKETS

SERIES 104 • SOLDERLESS PRESS-FIT • OPEN FRAME



See page 130 for Insulator Details

- Designed for solderless press-fit into plated through-holes
- Pin lengths are suitable for .062" and .093"-.125" thick panels
- Required plated through hole is .036"-.041". Use a 1.1mm drill prior to plating
- Series 104 uses MM #0477 or MM #0478 pins with a BeCu #30 contact, rated at 3 amps. See page 162 for details
- Insulators are high temperature thermoplastic
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	L = .175 (for .062" thick panel)	L = .250 (for .125" thick panel)
10	0.5	0.2	0.3	40	104-XX-210-41-770000	104-XX-210-41-780000
4	0.2	0.3	0.4	102	104-XX-304-41-770000	104-XX-304-41-780000
6	0.3	0.3	0.4	67	104-XX-306-41-770000	104-XX-306-41-780000
8	0.4	0.3	0.4	50	104-XX-308-41-770000	104-XX-308-41-780000
10	0.5	0.3	0.4	40	104-XX-310-41-770000	104-XX-310-41-780000
14	0.7	0.3	0.4	28	104-XX-314-41-770000	104-XX-314-41-780000
16	0.8	0.3	0.4	25	104-XX-316-41-770000	104-XX-316-41-780000
18	0.9	0.3	0.4	22	104-XX-318-41-770000	104-XX-318-41-780000
20	1.0	0.3	0.4	20	104-XX-320-41-770000	104-XX-320-41-780000
22	1.1	0.3	0.4	18	104-XX-322-41-770000	104-XX-322-41-780000
24	1.2	0.3	0.4	16	104-XX-324-41-770000	104-XX-324-41-780000
28	1.4	0.3	0.4	14	104-XX-328-41-770000	104-XX-328-41-780000
20	1.0	0.4	0.5	20	104-XX-420-41-770000	104-XX-420-41-780000
22	1.1	0.4	0.5	18	104-XX-422-41-770000	104-XX-422-41-780000
24	1.2	0.4	0.5	16	104-XX-424-41-770000	104-XX-424-41-780000
28	1.4	0.4	0.5	14	104-XX-428-41-770000	104-XX-428-41-780000
32	1.6	0.4	0.5	12	104-XX-432-41-770000	104-XX-432-41-780000
24	1.2	0.6	0.7	16	104-XX-624-41-770000	104-XX-624-41-780000
28	1.4	0.6	0.7	14	104-XX-628-41-770000	104-XX-628-41-780000
32	1.6	0.6	0.7	12	104-XX-632-41-770000	104-XX-632-41-780000
36	1.8	0.6	0.7	11	104-XX-636-41-770000	104-XX-636-41-780000
40	2.0	0.6	0.7	10	104-XX-640-41-770000	104-XX-640-41-780000
42	2.1	0.6	0.7	9	104-XX-642-41-770000	104-XX-642-41-780000
48	2.4	0.6	0.7	8	104-XX-648-41-770000	104-XX-648-41-780000
50	2.5	0.6	0.7	8	104-XX-650-41-770000	104-XX-650-41-780000
52	2.6	0.6	0.7	7	104-XX-652-41-770000	104-XX-652-41-780000
50	2.5	0.9	1.0	8	104-XX-950-41-770000	104-XX-950-41-780000
52	2.6	0.9	1.0	7	104-XX-952-41-770000	104-XX-952-41-780000
64	3.2	0.9	1.0	6	104-XX-964-41-770000	104-XX-964-41-780000

RoHS-2 2011/65/EU

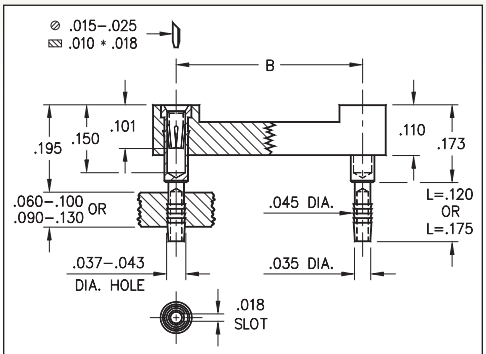
XX=Plating Code See Below

SPECIFY PLATING CODE XX =	11 ◆	13 ◆
Sleeve (Pin)	10 µ" Au	10 µ" Au
Contact (Clip)	10 µ" Au	30 µ" Au

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

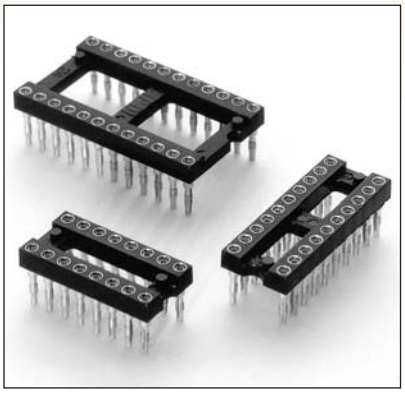
DUAL-IN-LINE SOCKETS

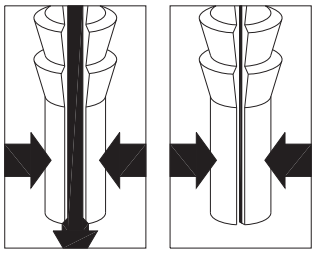
SERIES 146 • SOLDERLESS PRESS-FIT, COMPLIANT TAIL • OPEN FRAME



See page 130 for Insulator Details

- Unique compliant tail pins conform to a .040"± .003" finished plated through hole diameter without stressing inner layers
- Two tails lengths are offered for .060"-.100" and .090"-.130" thick panels
- Series 146 uses MM #4612 or MM #4613 pins with a BeCu #30 contact, rated at 3 amps. See page 162 for details
- Insulators are high temperature thermoplastic
- For Electrical, Mechanical and Environmental Data, see page 264 for details





APPLICATION OF COMPLIANT TAIL PINS

Mill-Max's patented* precision-machined pins feature compliant tails that are hollow and slotted to conform to a .040" ± .003" diameter PTH. As the pin is inserted, the slot compresses to fit the PTH, thus avoiding damage (see illustration at left). The pin's tail has fine serrations that form a perfect "gas tight" connection that doesn't require soldering. And since the pin doesn't damage the hole, compliant tail sockets and connectors can be easily replaced.
*Patent No. 4,799,904.

ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	L = .120 (for .060"-.100" thick panel)	L = .175 (for .090"-.130" thick panel)
6	0.3	0.3	0.4	67	146-XX-306-41-012000	146-XX-306-41-013000
8	0.4	0.3	0.4	50	146-XX-308-41-012000	146-XX-308-41-013000
14	0.7	0.3	0.4	28	146-XX-314-41-012000	146-XX-314-41-013000
16	0.8	0.3	0.4	25	146-XX-316-41-012000	146-XX-316-41-013000
18	0.9	0.3	0.4	22	146-XX-318-41-012000	146-XX-318-41-013000
20	1.0	0.3	0.4	20	146-XX-320-41-012000	146-XX-320-41-013000
24	1.2	0.3	0.4	16	146-XX-324-41-012000	146-XX-324-41-013000
22	1.1	0.4	0.5	18	146-XX-422-41-012000	146-XX-422-41-013000
24	1.2	0.6	0.7	16	146-XX-624-41-012000	146-XX-624-41-013000
28	1.4	0.6	0.7	14	146-XX-628-41-012000	146-XX-628-41-013000
32	1.6	0.6	0.7	12	146-XX-632-41-012000	146-XX-632-41-013000
40	2.0	0.6	0.7	10	146-XX-640-41-012000	146-XX-640-41-013000

RoHS-2 2011/65/EU

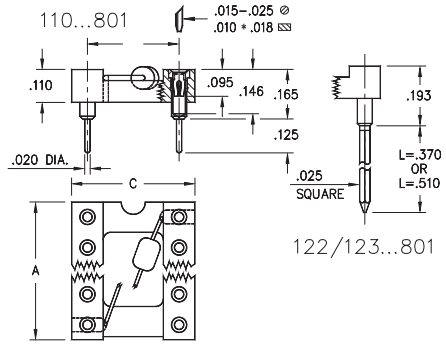
XX=Plating Code See Below

SPECIFY PLATING CODE XX =		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

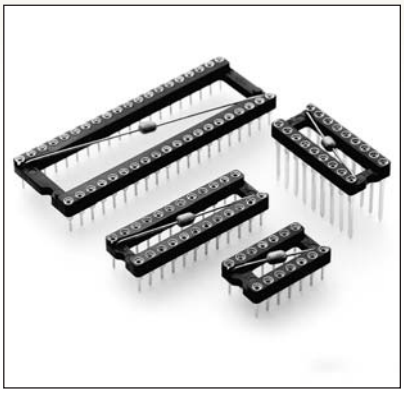
DUAL-IN-LINE SOCKETS

SERIES 110, 122, 123 • INTEGRAL DECOUPLING CAPACITOR • OPEN FRAME



See page 130 for Insulator Details

- Low profile DIP sockets w/ integral decoupling capacitor: .1µ F 20%-50V multi-layer ceramic epoxy encapsulated. Temp. range: -25° C to +85° C
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 110, 122 and 123 use MM #1001, #0088 or #0089 pins. See pages 165 & 198 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Solder Tail	L = .370 (2 Level Wrapost)	L = .510 (3 Level Wrapost)
14	0.7	0.3	0.4	28	110-XX-314-41-801000	122-XX-314-41-801000	123-XX-314-41-801000
16	0.8	0.3	0.4	25	110-XX-316-41-801000	122-XX-316-41-801000	123-XX-316-41-801000
18	0.9	0.3	0.4	22	110-XX-318-41-801000	122-XX-318-41-801000	123-XX-318-41-801000
20	1.0	0.3	0.4	20	110-XX-320-41-801000	122-XX-320-41-801000	123-XX-320-41-801000
22	1.1	0.3	0.4	18	110-XX-322-41-801000	122-XX-322-41-801000	123-XX-322-41-801000
24	1.2	0.3	0.4	16	110-XX-324-41-801000	122-XX-324-41-801000	123-XX-324-41-801000
28	1.4	0.3	0.4	14	110-XX-328-41-801000	122-XX-328-41-801000	123-XX-328-41-801000
22	1.1	0.4	0.5	18	110-XX-422-41-801000	122-XX-422-41-801000	123-XX-422-41-801000
24	1.2	0.6	0.7	16	110-XX-624-41-801000	122-XX-624-41-801000	123-XX-624-41-801000
28	1.4	0.6	0.7	14	110-XX-628-41-801000	122-XX-628-41-801000	123-XX-628-41-801000
32	1.6	0.6	0.7	12	110-XX-632-41-801000	122-XX-632-41-801000	123-XX-632-41-801000
40	2.0	0.6	0.7	10	110-XX-640-41-801000	122-XX-640-41-801000	123-XX-640-41-801000

XX=Plating Code See Below

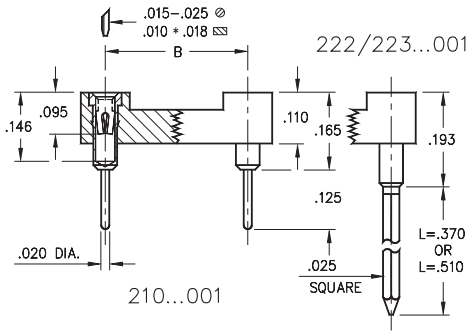
RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =	13 ◆		93			43 ◆	
Sleeve (Pin)	10 µ" Au		200 µ" Sn/Pb			200 µ" Sn	
Contact (Clip)	30 µ" Au		30 µ" Au			30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

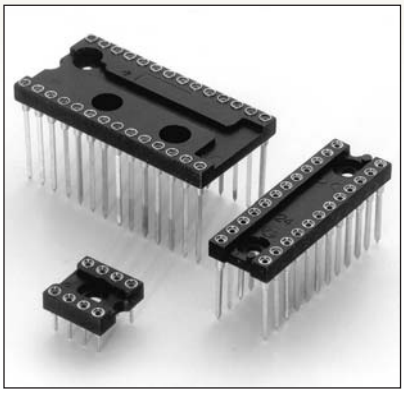
DUAL-IN-LINE SOCKETS

SERIES 210, 222, 223 • SOLDER TAIL AND WRAPOST • CLOSED FRAME



See page 131 for Insulator Details

- Closed frame insulator withstands high mechanical impact
- Available with standard solder pins, 2-level or 3-level wraposts
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 210, 222 and 223 use MM #1001, #0088 or #0089 pins. See pages 165 & 198 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Solder Tail	L = .370 (2 Level Wrapost)	L = .510 (3 Level Wrapost)
6	0.3	0.3	0.4	67	210-XX-306-41-001000	222-XX-306-41-001000	223-XX-306-41-001000
8	0.4	0.3	0.4	50	210-XX-308-41-001000	222-XX-308-41-001000	223-XX-308-41-001000
10	0.5	0.3	0.4	40	210-XX-310-41-001000	222-XX-310-41-001000	223-XX-310-41-001000
14	0.7	0.3	0.4	28	210-XX-314-41-001000	222-XX-314-41-001000	223-XX-314-41-001000
16	0.8	0.3	0.4	25	210-XX-316-41-001000	222-XX-316-41-001000	223-XX-316-41-001000
18	0.9	0.3	0.4	22	210-XX-318-41-001000	222-XX-318-41-001000	223-XX-318-41-001000
20	1.0	0.3	0.4	20	210-XX-320-41-001000	222-XX-320-41-001000	223-XX-320-41-001000
22	1.1	0.3	0.4	18	210-XX-322-41-001000	222-XX-322-41-001000	223-XX-322-41-001000
24	1.2	0.3	0.4	16	210-XX-324-41-001000	222-XX-324-41-001000	223-XX-324-41-001000
22	1.1	0.4	0.5	18	210-XX-422-41-001000	222-XX-422-41-001000	223-XX-422-41-001000
24	1.2	0.4	0.5	16	210-XX-424-41-001000	222-XX-424-41-001000	223-XX-424-41-001000
24	1.2	0.6	0.7	16	210-XX-624-41-001000	222-XX-624-41-001000	223-XX-624-41-001000
28	1.4	0.6	0.7	14	210-XX-628-41-001000	222-XX-628-41-001000	223-XX-628-41-001000
32	1.6	0.6	0.7	12	210-XX-632-41-001000	222-XX-632-41-001000	223-XX-632-41-001000
36	1.8	0.6	0.7	11	210-XX-636-41-001000	222-XX-636-41-001000	223-XX-636-41-001000
40	2.0	0.6	0.7	10	210-XX-640-41-001000	222-XX-640-41-001000	223-XX-640-41-001000
64	3.2	0.9	1.0	6	210-XX-964-41-001000	222-XX-964-41-001000	223-XX-964-41-001000

XX=Plating Code See Below

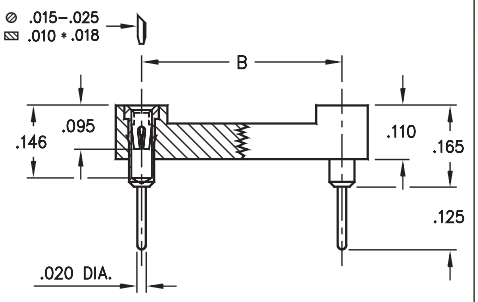
RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =	11 ◆	13 ◆	91	93	99	41 ◆	43 ◆	44 ◆
Sleeve (Pin)	10 µ" Au	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	100 µ" Sn/Pb	10 µ" Au	30 µ" Au	100 µ" Sn

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

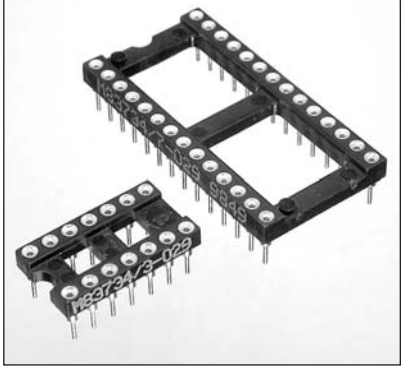
DUAL-IN-LINE SOCKETS

SERIES 110...530 • MIL-DTL-83734 APPROVED, SOLDER TAIL • OPEN FRAME



See page 130 for Insulator Details

- Sockets are XY stackable
- Socket pins feature closed end construction eliminating any solder wicking problems
- Packaged in tubes compatible with automatic insertion equipment
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 110 uses MM #1001 pins. See page 165 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Mill-Max Part Number	Military Part Number
8	0.4	0.3	0.4	50	110-XX-308-41-530000	M83734/2-YYY
14	0.7	0.3	0.4	28	110-XX-314-41-530000	M83734/3-YYY
16	0.8	0.3	0.4	25	110-XX-316-41-530000	M83734/4-YYY
18	0.9	0.3	0.4	22	110-XX-318-41-530000	M83734/5-YYY
20	1.0	0.3	0.4	20	110-XX-320-41-530000	M83734/13-YYY
22	1.1	0.4	0.5	18	110-XX-422-41-530000	M83734/6-YYY
24	1.2	0.6	0.7	16	110-XX-624-41-530000	M83734/8-YYY
28	1.4	0.6	0.7	14	110-XX-628-41-530000	M83734/7-YYY
40	2.0	0.6	0.7	10	110-XX-640-41-530000	M83734/10-YYY
48	2.4	0.6	0.7	8	110-XX-648-41-530000	M83734/14-YYY
64	3.2	0.9	1.0	6	110-XX-964-41-530000	M83734/15-YYY

XX=Plating Code See Below

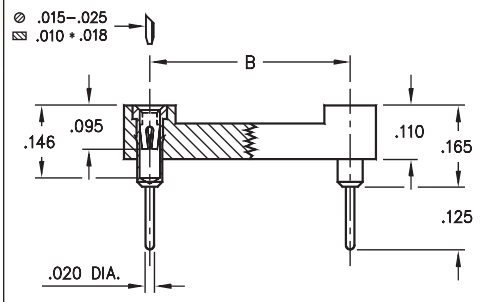
SEE PAGE 103 FOR COMPLETE MIL-DTL-83734 QPL

SPECIFY MILL-MAX PLATING CODE XX =	33	83	88
FOR MILITARY PLATING CODE YYY =	028	029	030
Sleeve (Pin)	30 µ" min. Au	300 µ" Sn/Pb	300 µ" Sn/Pb
Contact (Clip)	30 µ" min. Au	30 µ" min. Au	100 µ" Sn/Pb

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

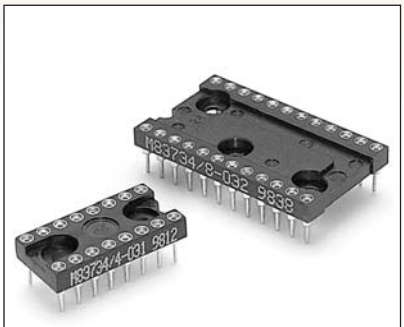
DUAL-IN-LINE SOCKETS

SERIES 210...101 • MIL-DTL-83734 APPROVED, SOLDER TAIL • CLOSED FRAME



See page 131 for Insulator Details

- Sockets are XY stackable
- Socket pins feature closed end construction eliminating any solder wicking problems
- Packaged in tubes compatible with automatic insertion equipment
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 210 uses MM #1001 pins. See page 165 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Mill-Max Part Number	Military Part Number
6	0.3	0.3	0.4	67	210-XX-306-41-101000	M83734/1-YYY
8	0.4	0.3	0.4	50	210-XX-308-41-101000	M83734/2-YYY
14	0.7	0.3	0.4	28	210-XX-314-41-101000	M83734/3-YYY
16	0.8	0.3	0.4	25	210-XX-316-41-101000	M83734/4-YYY
18	0.9	0.3	0.4	22	210-XX-318-41-101000	M83734/5-YYY
20	1.0	0.3	0.4	20	210-XX-320-41-101000	M83734/13-YYY
22	1.1	0.4	0.5	18	210-XX-422-41-101000	M83734/6-YYY
24	1.2	0.6	0.7	16	210-XX-624-41-101000	M83734/8-YYY
28	1.4	0.6	0.7	14	210-XX-628-41-101000	M83734/7-YYY
32	1.6	0.6	0.7	10	210-XX-632-41-101000	M83734/17-YYY
40	2.0	0.6	0.7	8	210-XX-640-41-101000	M83734/10-YYY
64	3.2	0.9	1.0	6	210-XX-964-41-101000	M83734/15-YYY

XX=Plating Code See Below

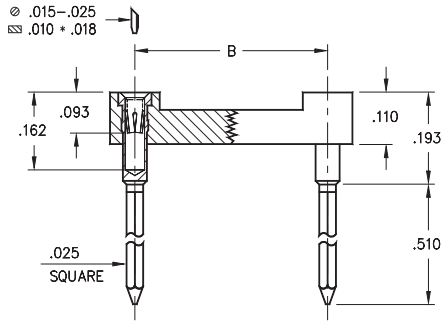
SEE PAGE 103 FOR COMPLETE MIL-DTL-83734 QPL

SPECIFY MILL-MAX PLATING CODE XX =	33	83	88
FOR MILITARY PLATING CODE YYY =	031	032	033
(6 PIN ONLY) YYY =	025	026	027
(32 PIN ONLY) YYY =	013	014	015
Sleeve (Pin)	30 µ" min. Au	300 µ" Sn/Pb	300 µ" Sn/Pb
Contact (Clip)	30 µ" min. Au	30 µ" min. Au	100 µ" Sn/Pb

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

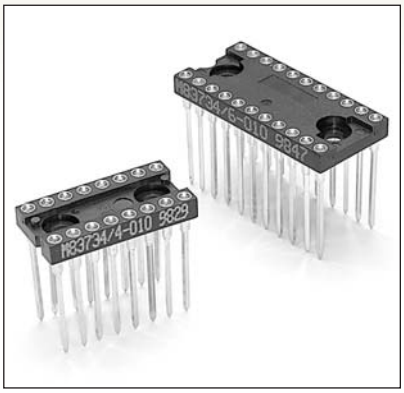
DUAL-IN-LINE SOCKETS

SERIES 223...101 • MIL-DTL-83734 APPROVED, 3 LEVEL WRAPOST • CLOSED FRAME

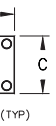


See page 131 for Insulator Details

- Sockets are XY stackable
- Socket pins feature closed end construction eliminating any solder wicking problems
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 223 uses MM #0038-3 or #0088-3 pins. See page 198 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins	A	B	C	Quantity per tube	Mill-Max Part Number	Military Part Number
6	0.3	0.3	0.4	67	223-XX-306-41-101000	M83734/1-YYY
8	0.4	0.3	0.4	50	223-XX-308-41-101000	M83734/2-YYY
14	0.7	0.3	0.4	28	223-XX-314-41-101000	M83734/3-YYY
16	0.8	0.3	0.4	25	223-XX-316-41-101000	M83734/4-YYY
18	0.9	0.3	0.4	22	223-XX-318-41-101000	M83734/5-YYY
20	1.0	0.3	0.4	20	223-XX-320-41-101000	M83734/13-YYY
22	1.1	0.4	0.5	18	223-XX-422-41-101000	M83734/6-YYY
24	1.2	0.6	0.7	16	223-XX-624-41-101000	M83734/8-YYY
28	1.4	0.6	0.7	14	223-XX-628-41-101000	M83734/7-YYY
32	1.6	0.6	0.7	12	223-XX-632-41-101000	M83734/17-YYY
40	2.0	0.6	0.7	10	223-XX-640-41-101000	M83734/10-YYY
64	3.2	0.9	1.0	6	223-XX-964-41-101000	M83734/15-YYY



ORDERING INFORMATION

XX=Plating Code See Below

SEE PAGE 103 FOR COMPLETE MIL-DTL-83734 QPL

SPECIFY MILL-MAX PLATING CODE XX =	**33**	**83**	**88**
SPECIFY MILL-MAX PLATING CODE XX =	**010**	**011**	**012**
(32 PIN ONLY) YYY =	**007**	**008**	**009**
Sleeve (Pin)	30 µ" min. Au	300 µ" Sn/Pb	300 µ" Sn/Pb
Contact (Clip)	30 µ" min. Au	30 µ" min. Au	100 µ" Sn/Pb

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

DUAL-IN-LINE SOCKETS

DIP SOCKETS QUALIFIED TO MIL-DTL-83734

MIL SPEC #	MILL-MAX #
M83734/1-010	223-33-306-41-101000
M83734/1-011	223-83-306-41-101000
M83734/1-012	223-88-306-41-101000
M83734/1-025	210-33-306-41-101000
M83734/1-026	210-83-306-41-101000
M83734/1-027	210-88-306-41-101000
M83734/2-010	223-33-308-41-101000
M83734/2-011	223-83-308-41-101000
M83734/2-012	223-88-308-41-101000
M83734/2-028	110-33-308-41-530000
M83734/2-029	110-83-308-41-530000
M83734/2-030	110-88-308-41-530000
M83734/2-031	210-33-308-41-101000
M83734/2-032	210-83-308-41-101000
M83734/2-033	210-88-308-41-101000
M83734/3-010	223-33-314-41-101000
M83734/3-011	223-83-314-41-101000
M83734/3-012	223-88-314-41-101000
M83734/3-028	110-33-314-41-530000
M83734/3-029	110-83-314-41-530000
M83734/3-030	110-88-314-41-530000
M83734/3-031	210-33-314-41-101000
M83734/3-032	210-83-314-41-101000
M83734/3-033	210-88-314-41-101000
M83734/4-010	223-33-316-41-101000
M83734/4-011	223-83-316-41-101000
M83734/4-012	223-88-316-41-101000
M83734/4-028	110-33-316-41-530000
M83734/4-029	110-83-316-41-530000
M83734/4-030	110-88-316-41-530000
M83734/4-031	210-33-316-41-101000
M83734/4-032	210-83-316-41-101000
M83734/4-033	210-88-316-41-101000
M83734/5-010	223-33-318-41-101000
M83734/5-011	223-83-318-41-101000
M83734/5-012	223-88-318-41-101000
M83734/5-028	110-33-318-41-530000
M83734/5-029	110-83-318-41-530000
M83734/5-030	110-88-318-41-530000
M83734/5-031	210-33-318-41-101000
M83734/5-032	210-83-318-41-101000
M83734/5-033	210-88-318-41-101000
M83734/6-010	223-33-422-41-101000
M83734/6-011	223-83-422-41-101000
M83734/6-012	223-88-422-41-101000
M83734/6-028	110-33-422-41-530000
M83734/6-029	110-83-422-41-530000
M83734/6-030	110-88-422-41-530000
M83734/6-031	210-33-422-41-101000
M83734/6-032	210-83-422-41-101000
M83734/6-033	210-88-422-41-101000

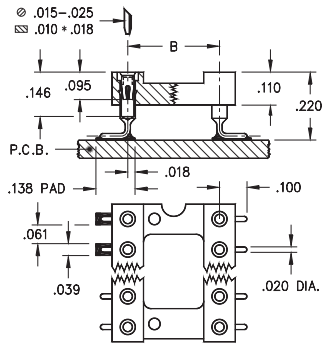
MIL SPEC #	MILL-MAX #
M83734/7-010	223-33-628-41-101000
M83734/7-011	223-83-628-41-101000
M83734/7-012	223-88-628-41-101000
M83734/7-028	110-33-628-41-530000
M83734/7-029	110-83-628-41-530000
M83734/7-030	110-88-628-41-530000
M83734/7-031	210-33-628-41-101000
M83734/7-032	210-83-628-41-101000
M83734/7-033	210-88-628-41-101000
M83734/8-010	223-33-624-41-101000
M83734/8-011	223-83-624-41-101000
M83734/8-012	223-88-624-41-101000
M83734/8-028	110-33-624-41-530000
M83734/8-029	110-83-624-41-530000
M83734/8-030	110-88-624-41-530000
M83734/8-031	210-33-624-41-101000
M83734/8-032	210-83-624-41-101000
M83734/8-033	210-88-624-41-101000
M83734/9-010	223-33-636-41-101000
M83734/9-011	223-83-636-41-101000
M83734/9-012	223-88-636-41-101000
M83734/9-031	210-33-636-41-101000
M83734/9-032	210-83-636-41-101000
M83734/9-033	210-88-636-41-101000
M83734/10-010	223-33-640-41-101000
M83734/10-011	223-83-640-41-101000
M83734/10-012	223-88-640-41-101000
M83734/10-028	110-33-640-41-530000
M83734/10-029	110-83-640-41-530000
M83734/10-030	110-88-640-41-530000
M83734/10-031	210-33-640-41-101000
M83734/10-032	210-83-640-41-101000
M83734/10-033	210-88-640-41-101000
M83734/13-010	223-33-320-41-101000
M83734/13-011	223-83-320-41-101000
M83734/13-012	223-88-320-41-101000
M83734/13-028	110-33-320-41-530000
M83734/13-029	110-83-320-41-530000
M83734/13-030	110-88-320-41-530000
M83734/13-031	210-33-320-41-101000
M83734/13-032	210-83-320-41-101000
M83734/13-033	210-88-320-41-101000
M83734/14-028	110-33-648-41-530000
M83734/14-029	110-83-648-41-530000
M83734/14-030	110-88-648-41-530000
M83734/15-010	223-33-964-41-101000
M83734/15-011	223-83-964-41-101000
M83734/15-012	223-88-964-41-101000
M83734/15-028	110-33-964-41-530000
M83734/15-029	110-83-964-41-530000

MIL SPEC #	MILL-MAX #
M83734/15-030	110-88-964-41-530000
M83734/15-031	210-33-964-41-101000
M83734/15-032	210-83-964-41-101000
M83734/15-033	210-88-964-41-101000
M83734/17-001	221-33-632-41-101000
M83734/17-002	221-83-632-41-101000
M83734/17-003	221-88-632-41-101000
M83734/17-004	222-33-632-41-101000
M83734/17-005	222-83-632-41-101000
M83734/17-006	222-88-632-41-101000
M83734/17-007	223-33-632-41-101000
M83734/17-008	223-83-632-41-101000
M83734/17-009	223-88-632-41-101000
M83734/17-013	210-33-632-41-101000
M83734/17-014	210-83-632-41-101000
M83734/17-015	210-88-632-41-101000

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

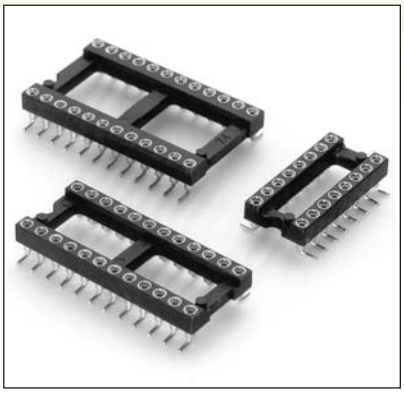
DUAL-IN-LINE SOCKETS

SERIES 110...105 • SURFACE MOUNT, GULL WING • OPEN FRAME



See page 130 for Insulator Details

- Socket pins feature closed end construction eliminating any solder wicking problems
- Gull wing terminals provide maximum strength and permit easy visual inspection of solder joints. Series 110 uses Mill-Max #1005 pins. See page 166 for details
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins	A	B	C	Quantity per tube	ORDERING INFORMATION
10	0.5	0.2	0.3	40	110-XX-210-41-105000
4	0.2	0.3	0.4	102	110-XX-304-41-105000
6	0.3	0.3	0.4	67	110-XX-306-41-105000
8	0.4	0.3	0.4	50	110-XX-308-41-105000
10	0.5	0.3	0.4	40	110-XX-310-41-105000
14	0.7	0.3	0.4	28	110-XX-314-41-105000
16	0.8	0.3	0.4	25	110-XX-316-41-105000
18	0.9	0.3	0.4	22	110-XX-318-41-105000
20	1.0	0.3	0.4	20	110-XX-320-41-105000
22	1.1	0.3	0.4	18	110-XX-322-41-105000
24	1.2	0.3	0.4	16	110-XX-324-41-105000
28	1.4	0.3	0.4	14	110-XX-328-41-105000
20	1.0	0.4	0.5	20	110-XX-420-41-105000
22	1.1	0.4	0.5	18	110-XX-422-41-105000
24	1.2	0.4	0.5	16	110-XX-424-41-105000
28	1.4	0.4	0.5	14	110-XX-428-41-105000
32	1.6	0.4	0.5	12	110-XX-432-41-105000
24	1.2	0.6	0.7	32	110-XX-624-41-105000
28	1.4	0.6	0.7	28	110-XX-628-41-105000
32	1.6	0.6	0.7	24	110-XX-632-41-105000
36	1.8	0.6	0.7	22	110-XX-636-41-105000
40	2.0	0.6	0.7	20	110-XX-640-41-105000
42	2.1	0.6	0.7	18	110-XX-642-41-105000
48	2.4	0.6	0.7	16	110-XX-648-41-105000
50	2.5	0.6	0.7	16	110-XX-650-41-105000
52	2.6	0.6	0.7	14	110-XX-652-41-105000
50	2.5	0.9	1.0	16	110-XX-950-41-105000
52	2.6	0.9	1.0	14	110-XX-952-41-105000
64	3.2	0.9	1.0	12	110-XX-964-41-105000

XX=Plating Code See Below

RoHS-2 2011/65/EU

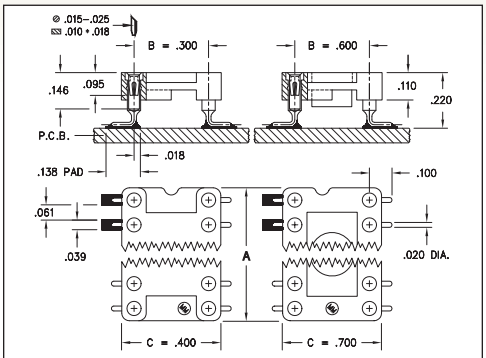
See page 264 for coplanarity information

SPECIFY PLATING CODE XX=		91	93			43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb			200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au			30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

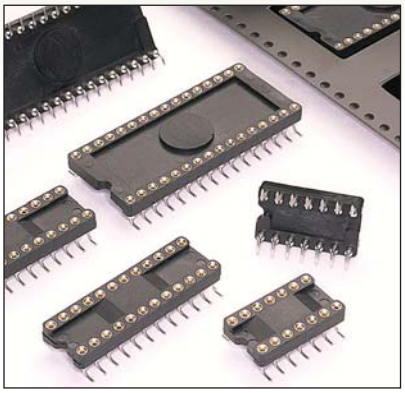
DUAL-IN-LINE SOCKETS

SERIES 210...105 • SMT, AUTO PLACEMENT, GULL WING • CLOSED FRAME



See page 131 for Insulator Details

- Closed frame insulator is vision system compatible
- Gull wing terminals provide maximum strength and permit easy visual inspection of solder joints. Series 210 uses Mill-Max #1005 pins. See page 166 for details
- Available packaged in tubes or on tape & reel per EIA-481
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- High-temp Nylon 46 insulator is suitable for all forms of reflow soldering
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Tube Packaging	Tape & Reel Packaging	Tape Width (mm)	QTY per Reel
					VACUUM PAD TOP SURFACE ONLY			
6	0.3	0.3	0.4	67	210-XX-306-41-105000	210-XX-306-41-105799	16	400
8	0.4	0.3	0.4	50	210-XX-308-41-105000	210-XX-308-41-105799	24	400
14	0.7	0.3	0.4	28	210-XX-314-41-105000	210-XX-314-41-105799	32	400
16	0.8	0.3	0.4	25	210-XX-316-41-105000	210-XX-316-41-105799	32	400
18	0.9	0.3	0.4	22	210-XX-318-41-105000	210-XX-318-41-105799	44	400
20	1.0	0.3	0.4	20	210-XX-320-41-105000	210-XX-320-41-105799	44	400
24	1.2	0.3	0.4	16	210-XX-324-41-105000	210-XX-324-41-105799	44	400
					VACUUM PAD TOP AND BOTTOM			
24	1.2	0.6	0.7	16	210-XX-624-41-105000	210-XX-624-41-105799	44	300
28	1.4	0.6	0.7	14	210-XX-628-41-105000	210-XX-628-41-105799	56	300
32	1.6	0.6	0.7	12	210-XX-632-41-105000	210-XX-632-41-105799	56	300
40	2.0	0.6	0.7	10	210-XX-640-41-105000	NOT AVAILABLE		

XX=Plating Code See Below

RoHS-2 2011/65/EU

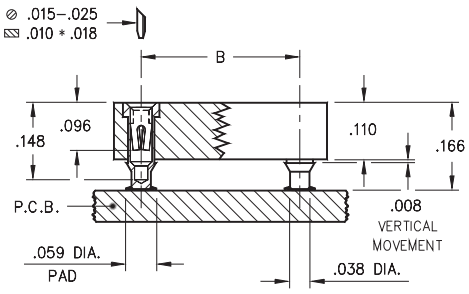
See page 264 for coplanarity information

SPECIFY PLATING CODE XX=			93			43 ◆	
Sleeve (Pin)			200 µ" Sn/Pb			200 µ" Sn	
Contact (Clip)			30 µ" Au			30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

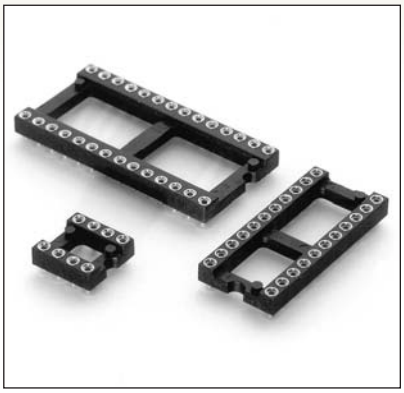
DUAL-IN-LINE SOCKETS

SERIES 114 • SURFACE MOUNT, STUB TAIL • OPEN FRAME



See page 130 for Insulator Details

- Unique floating contacts compensate for the effects of unevenly dispensed solder paste
- Socket pins feature closed end construction eliminating any solder/flux wicking problems
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 114 uses MM #1434 pins. See page 162 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data see page 264 for details



Total number of pins	A	B	C	Quantity per tube	ORDERING INFORMATION
10	0.5	0.2	0.3	41	114-XX-210-41-117000
4	0.2	0.3	0.4	100	114-XX-304-41-117000
6	0.3	0.3	0.4	67	114-XX-306-41-117000
8	0.4	0.3	0.4	50	114-XX-308-41-117000
10	0.5	0.3	0.4	40	114-XX-310-41-117000
14	0.7	0.3	0.4	28	114-XX-314-41-117000
16	0.8	0.3	0.4	25	114-XX-316-41-117000
18	0.9	0.3	0.4	22	114-XX-318-41-117000
20	1.0	0.3	0.4	20	114-XX-320-41-117000
22	1.1	0.3	0.4	18	114-XX-322-41-117000
24	1.2	0.3	0.4	16	114-XX-324-41-117000
28	1.4	0.3	0.4	14	114-XX-328-41-117000
20	1.0	0.4	0.5	20	114-XX-420-41-117000
22	1.1	0.4	0.5	18	114-XX-422-41-117000
24	1.2	0.4	0.5	16	114-XX-424-41-117000
28	1.4	0.4	0.5	14	114-XX-428-41-117000
32	1.6	0.4	0.5	12	114-XX-432-41-117000
24	1.2	0.6	0.7	16	114-XX-624-41-117000
28	1.4	0.6	0.7	14	114-XX-628-41-117000
32	1.6	0.6	0.7	12	114-XX-632-41-117000
36	1.8	0.6	0.7	11	114-XX-636-41-117000
40	2.0	0.6	0.7	10	114-XX-640-41-117000
42	2.1	0.6	0.7	9	114-XX-642-41-117000
48	2.4	0.6	0.7	8	114-XX-648-41-117000
50	2.5	0.6	0.7	8	114-XX-650-41-117000
52	2.6	0.6	0.7	7	114-XX-652-41-117000
50	2.5	0.9	1.0	8	114-XX-950-41-117000
52	2.6	0.9	1.0	7	114-XX-952-41-117000
64	3.2	0.9	1.0	6	114-XX-964-41-117000

XX=Plating Code See Below

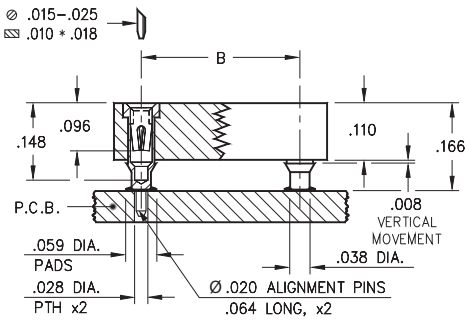
RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

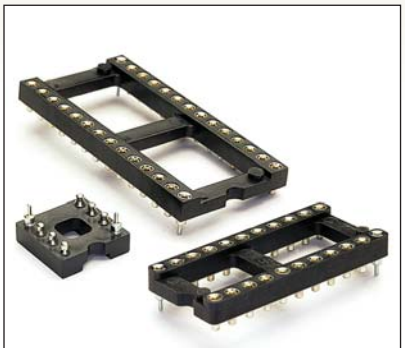
DUAL-IN-LINE SOCKETS

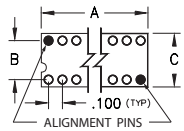
SERIES 113 • SURFACE MOUNT, STUB TAIL W/ ALIGNMENT PINS • OPEN FRAME



See page 130 for Insulator Details

- Unique floating contacts compensate for the effects of unevenly dispensed solder paste
- Two corner alignment pins (power & ground positions) permit manual placement
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 113 uses MM #1334 and #1434 pins. See pages 162 and 171
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details





Total number of pins	A	B	C	Quantity per tube	ORDERING INFORMATION
10	0.5	0.2	0.3	41	113-XX-210-41-117000
4	0.2	0.3	0.4	100	113-XX-304-41-117000
6	0.3	0.3	0.4	67	113-XX-306-41-117000
8	0.4	0.3	0.4	50	113-XX-308-41-117000
10	0.5	0.3	0.4	40	113-XX-310-41-117000
14	0.7	0.3	0.4	28	113-XX-314-41-117000
16	0.8	0.3	0.4	25	113-XX-316-41-117000
18	0.9	0.3	0.4	22	113-XX-318-41-117000
20	1.0	0.3	0.4	20	113-XX-320-41-117000
22	1.1	0.3	0.4	18	113-XX-322-41-117000
24	1.2	0.3	0.4	16	113-XX-324-41-117000
28	1.4	0.3	0.4	14	113-XX-328-41-117000
20	1.0	0.4	0.5	20	113-XX-420-41-117000
22	1.1	0.4	0.5	18	113-XX-422-41-117000
24	1.2	0.4	0.5	16	113-XX-424-41-117000
28	1.4	0.4	0.5	14	113-XX-428-41-117000
32	1.6	0.4	0.5	12	113-XX-432-41-117000
24	1.2	0.6	0.7	16	113-XX-624-41-117000
28	1.4	0.6	0.7	14	113-XX-628-41-117000
32	1.6	0.6	0.7	12	113-XX-632-41-117000
36	1.8	0.6	0.7	11	113-XX-636-41-117000
40	2.0	0.6	0.7	10	113-XX-640-41-117000
42	2.1	0.6	0.7	9	113-XX-642-41-117000
48	2.4	0.6	0.7	8	113-XX-648-41-117000
50	2.5	0.6	0.7	8	113-XX-650-41-117000
52	2.6	0.6	0.7	7	113-XX-652-41-117000
50	2.5	0.9	1.0	8	113-XX-950-41-117000
52	2.6	0.9	1.0	7	113-XX-952-41-117000
64	3.2	0.9	1.0	6	113-XX-964-41-117000

XX=Plating Code See Below

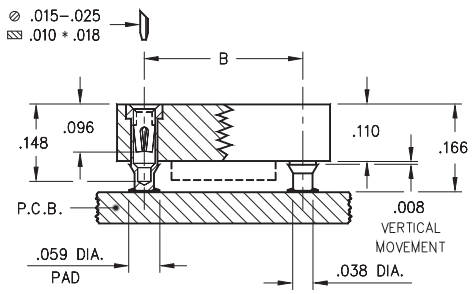
RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =			93			43 ◆	
Sleeve (Pin)			200 µ" Sn/Pb			200 µ" Sn	
Contact (Clip)			30 µ" Au			30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

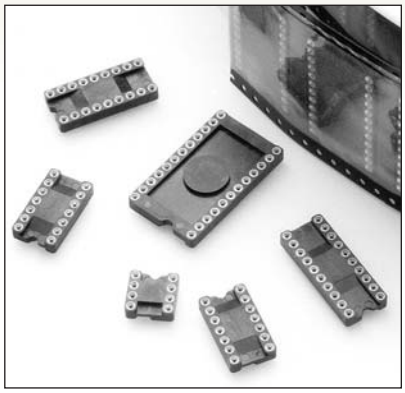
DUAL-IN-LINE SOCKETS

SERIES 214 • SURFACE MOUNT, AUTO PLACEMENT, STUB TAIL • CLOSED FRAME



See page 131 for Insulator Details

- Unique floating contacts compensate for the effects of unevenly screened solder paste
- Available packaged in tubes or on tape & reel per EIA-481
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 214 uses MM #1434 pins. See page 162 for details
- High temp. Nylon 46 insulator is suitable for all surface mount soldering processes. Closed frame insulator is vision system compatible
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Tube Packaging	Tape & Reel Packaging	Tape Width (mm)	QTY per Reel
					VACUUM PAD TOP SURFACE ONLY			
6	0.3	0.3	0.4	67	214-XX-306-01-670800	214-XX-306-01-670799	16	750
8	0.4	0.3	0.4	50	214-XX-308-01-670800	214-XX-308-01-670799	16	1000
14	0.7	0.3	0.4	28	214-XX-314-01-670800	214-XX-314-01-670799	32	750
16	0.8	0.3	0.4	25	214-XX-316-01-670800	214-XX-316-01-670799	32	750
18	0.9	0.3	0.4	22	214-XX-318-01-670800	214-XX-318-01-670799	44	750
20	1.0	0.3	0.4	20	214-XX-320-01-670800	214-XX-320-01-670799	44	750
					VACUUM PAD TOP AND BOTTOM			
24	1.2	0.6	0.7	16	214-XX-624-01-670800	214-XX-624-01-670799	44	400
28	1.4	0.6	0.7	14	214-XX-628-01-670800	214-XX-628-01-670799	56	400
32	1.6	0.6	0.7	12	214-XX-632-01-670800	214-XX-632-01-670799	56	400
40	2.0	0.6	0.7	10	214-XX-640-01-670800	NOT AVAILABLE		

XX=Plating Code See Below

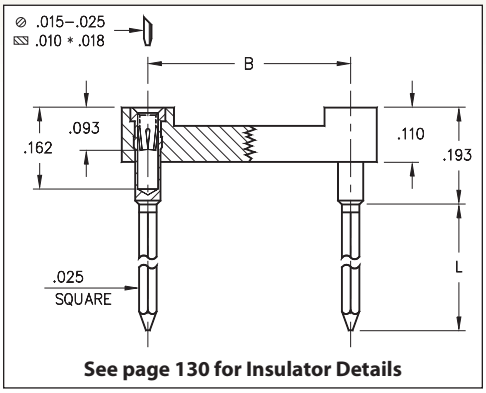
RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =				99			44 ◆
Sleeve (Pin)				200 µ" Sn/Pb			200 µ" Sn
Contact (Clip)				100 µ" Sn/Pb			100 µ" Sn

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

DUAL-IN-LINE SOCKETS

SERIES 121, 122, 123, 124 • 1 - 4 LEVEL WRAPOST • OPEN FRAME



See page 130 for Insulator Details

- Solderless wrapost terminals are firmly locked in the insulator body to withstand torque of a wrapping tool
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 121, 122, 123 and 124 use MM #0040, #0086, #0088 and #0089 pins. See page 198 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

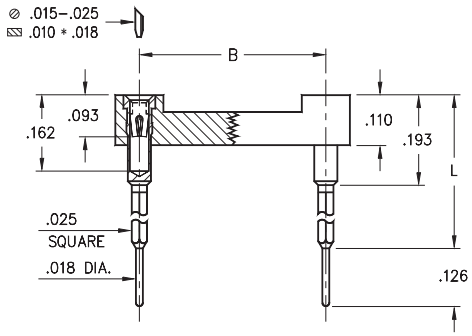
Total number of pins	A	B	C	Quantity per tube	L = .260 (1 Level Wrapost)	L = .370 (2 Level Wrapost)	L = .510 (3 Level Wrapost)	L = .630 (4 Level Wrapost)
10	0.5	0.2	0.3	40	121-XX-210-41-001000	122-XX-210-41-001000	123-XX-210-41-001000	124-XX-210-41-002000
								43 or 93 Plating Code ONLY
4	0.2	0.3	0.4	102	121-XX-304-41-001000	122-XX-304-41-001000	123-XX-304-41-001000	124-XX-304-41-002000
6	0.3	0.3	0.4	67	121-XX-306-41-001000	122-XX-306-41-001000	123-XX-306-41-001000	124-XX-306-41-002000
8	0.4	0.3	0.4	50	121-XX-308-41-001000	122-XX-308-41-001000	123-XX-308-41-001000	124-XX-308-41-002000
10	0.5	0.3	0.4	40	121-XX-310-41-001000	122-XX-310-41-001000	123-XX-310-41-001000	124-XX-310-41-002000
14	0.7	0.3	0.4	28	121-XX-314-41-001000	122-XX-314-41-001000	123-XX-314-41-001000	124-XX-314-41-002000
16	0.8	0.3	0.4	25	121-XX-316-41-001000	122-XX-316-41-001000	123-XX-316-41-001000	124-XX-316-41-002000
18	0.9	0.3	0.4	22	121-XX-318-41-001000	122-XX-318-41-001000	123-XX-318-41-001000	124-XX-318-41-002000
20	1.0	0.3	0.4	20	121-XX-320-41-001000	122-XX-320-41-001000	123-XX-320-41-001000	124-XX-320-41-002000
22	1.1	0.3	0.4	18	121-XX-322-41-001000	122-XX-322-41-001000	123-XX-322-41-001000	124-XX-322-41-002000
24	1.2	0.3	0.4	16	121-XX-324-41-001000	122-XX-324-41-001000	123-XX-324-41-001000	124-XX-324-41-002000
28	1.4	0.3	0.4	14	121-XX-328-41-001000	122-XX-328-41-001000	123-XX-328-41-001000	124-XX-328-41-002000
								43 or 93 Plating Code ONLY
20	1.0	0.4	0.5	20	121-XX-420-41-001000	122-XX-420-41-001000	123-XX-420-41-001000	124-XX-420-41-002000
22	1.1	0.4	0.5	18	121-XX-422-41-001000	122-XX-422-41-001000	123-XX-422-41-001000	124-XX-422-41-002000
24	1.2	0.4	0.5	16	121-XX-424-41-001000	122-XX-424-41-001000	123-XX-424-41-001000	124-XX-424-41-002000
28	1.4	0.4	0.5	14	121-XX-428-41-001000	122-XX-428-41-001000	123-XX-428-41-001000	124-XX-428-41-002000
32	1.6	0.4	0.5	12	121-XX-432-41-001000	122-XX-432-41-001000	123-XX-432-41-001000	124-XX-432-41-002000
								43 or 93 Plating Code ONLY
24	1.2	0.6	0.7	16	121-XX-624-41-001000	122-XX-624-41-001000	123-XX-624-41-001000	124-XX-624-41-002000
28	1.4	0.6	0.7	14	121-XX-628-41-001000	122-XX-628-41-001000	123-XX-628-41-001000	124-XX-628-41-002000
32	1.6	0.6	0.7	12	121-XX-632-41-001000	122-XX-632-41-001000	123-XX-632-41-001000	124-XX-632-41-002000
36	1.8	0.6	0.7	11	121-XX-636-41-001000	122-XX-636-41-001000	123-XX-636-41-001000	124-XX-636-41-002000
40	2.0	0.6	0.7	10	121-XX-640-41-001000	122-XX-640-41-001000	123-XX-640-41-001000	124-XX-640-41-002000
42	2.1	0.6	0.7	9	121-XX-642-41-001000	122-XX-642-41-001000	123-XX-642-41-001000	124-XX-642-41-002000
48	2.4	0.6	0.7	8	121-XX-648-41-001000	122-XX-648-41-001000	123-XX-648-41-001000	124-XX-648-41-002000
50	2.5	0.6	0.7	8	121-XX-650-41-001000	122-XX-650-41-001000	123-XX-650-41-001000	124-XX-650-41-002000
52	2.6	0.6	0.7	7	121-XX-652-41-001000	122-XX-652-41-001000	123-XX-652-41-001000	124-XX-652-41-002000
								43 or 93 Plating Code ONLY
50	2.5	0.9	1.0	8	121-XX-950-41-001000	122-XX-950-41-001000	123-XX-950-41-001000	124-XX-950-41-002000
52	2.6	0.9	1.0	7	121-XX-952-41-001000	122-XX-952-41-001000	123-XX-952-41-001000	124-XX-952-41-002000
64	3.2	0.9	1.0	6	121-XX-964-41-001000	122-XX-964-41-001000	123-XX-964-41-001000	124-XX-964-41-002000

SPECIFY PLATING CODE XX =	13 ◆	91	93	41 ◆	43 ◆	XX=Plating Code See to Left
Sleeve (Pin)	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	
Contact (Clip)	30 µ" Au	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

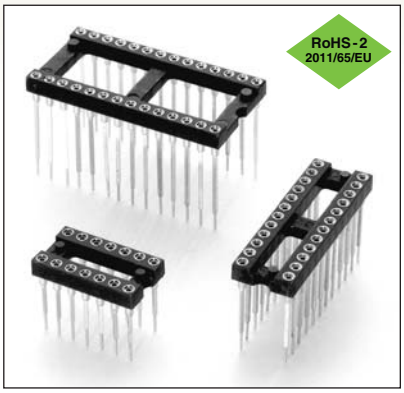
DUAL-IN-LINE SOCKETS

SERIES 126 • PLUGGABLE WRAPOST • OPEN FRAME



See page 130 for Insulator Details

- Combines one through three level wrapost with pluggable solder tails
- Suitable for use as an interconnect socket with intermediate wire wrapped connections
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 126 uses MM #2601, #2602 and #2603 pins. See page 199 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	L = .425 (1 Level Wrapost = .232)	L = .543 (2 Level Wrapost = .350)	L = .661 (3 Level Wrapost = .469)
10	0.5	0.2	0.3	40	126-XX-210-41-001000	126-XX-210-41-002000	126-XX-210-41-003000
4	0.2	0.3	0.4	102	126-XX-304-41-001000	126-XX-304-41-002000	126-XX-304-41-003000
6	0.3	0.3	0.4	67	126-XX-306-41-001000	126-XX-306-41-002000	126-XX-306-41-003000
8	0.4	0.3	0.4	50	126-XX-308-41-001000	126-XX-308-41-002000	126-XX-308-41-003000
10	0.5	0.3	0.4	40	126-XX-310-41-001000	126-XX-310-41-002000	126-XX-310-41-003000
14	0.7	0.3	0.4	28	126-XX-314-41-001000	126-XX-314-41-002000	126-XX-314-41-003000
16	0.8	0.3	0.4	25	126-XX-316-41-001000	126-XX-316-41-002000	126-XX-316-41-003000
18	0.9	0.3	0.4	22	126-XX-318-41-001000	126-XX-318-41-002000	126-XX-318-41-003000
20	1.0	0.3	0.4	20	126-XX-320-41-001000	126-XX-320-41-002000	126-XX-320-41-003000
22	1.1	0.3	0.4	18	126-XX-322-41-001000	126-XX-322-41-002000	126-XX-322-41-003000
24	1.2	0.3	0.4	16	126-XX-324-41-001000	126-XX-324-41-002000	126-XX-324-41-003000
28	1.4	0.3	0.4	14	126-XX-328-41-001000	126-XX-328-41-002000	126-XX-328-41-003000
20	1.0	0.4	0.5	20	126-XX-420-41-001000	126-XX-420-41-002000	126-XX-420-41-003000
22	1.1	0.4	0.5	18	126-XX-422-41-001000	126-XX-422-41-002000	126-XX-422-41-003000
24	1.2	0.4	0.5	16	126-XX-424-41-001000	126-XX-424-41-002000	126-XX-424-41-003000
28	1.4	0.4	0.5	14	126-XX-428-41-001000	126-XX-428-41-002000	126-XX-428-41-003000
32	1.6	0.4	0.5	12	126-XX-432-41-001000	126-XX-432-41-002000	126-XX-432-41-003000
24	1.2	0.6	0.7	16	126-XX-624-41-001000	126-XX-624-41-002000	126-XX-624-41-003000
28	1.4	0.6	0.7	14	126-XX-628-41-001000	126-XX-628-41-002000	126-XX-628-41-003000
32	1.6	0.6	0.7	12	126-XX-632-41-001000	126-XX-632-41-002000	126-XX-632-41-003000
36	1.8	0.6	0.7	11	126-XX-636-41-001000	126-XX-636-41-002000	126-XX-636-41-003000
40	2.0	0.6	0.7	10	126-XX-640-41-001000	126-XX-640-41-002000	126-XX-640-41-003000
42	2.1	0.6	0.7	9	126-XX-642-41-001000	126-XX-642-41-002000	126-XX-642-41-003000
48	2.4	0.6	0.7	8	126-XX-648-41-001000	126-XX-648-41-002000	126-XX-648-41-003000
50	2.5	0.6	0.7	8	126-XX-650-41-001000	126-XX-650-41-002000	126-XX-650-41-003000
52	2.6	0.6	0.7	7	126-XX-652-41-001000	126-XX-652-41-002000	126-XX-652-41-003000
50	2.5	0.9	1.0	8	126-XX-950-41-001000	126-XX-950-41-002000	126-XX-950-41-003000
52	2.6	0.9	1.0	7	126-XX-952-41-001000	126-XX-952-41-002000	126-XX-952-41-003000
64	3.2	0.9	1.0	6	126-XX-964-41-001000	126-XX-964-41-002000	126-XX-964-41-003000

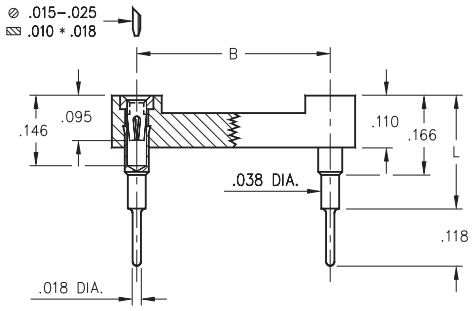
SPECIFY PLATING CODE XX =	91	93	41 ◆	43 ◆
Sleeve (Pin)	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au

XX=Plating Code See to Left

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

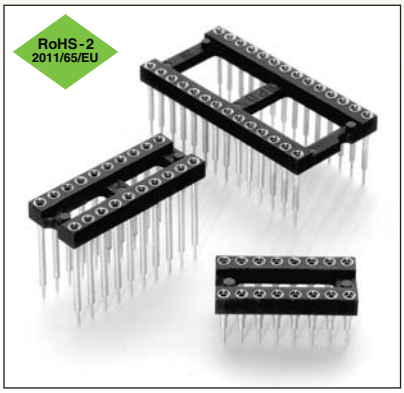
DUAL-IN-LINE SOCKETS

SERIES 116 • ELEVATED • OPEN FRAME



See page 130 for Insulator Details

- Ideal for raised component requirements and stacking of PCBs
- Sockets are XY stackable
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 116 uses MM #0153-X pins. See page 167 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

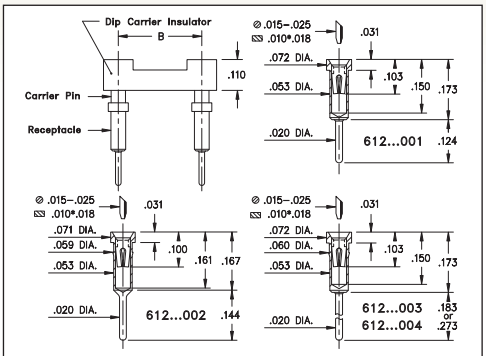
Total number of pins	A	B	C	Quantity per tube	L = .236 (#0153-1 pin)	L = .315 (#0153-2 pin)	L = .402 (#0153-3 pin)	L = .472 (#0153-4 pin)	L = .594 (#0153-5 pin)
10	0.5	0.2	0.3	40	116-XX-210-41-006000	116-XX-210-41-003000	116-XX-210-41-007000	116-XX-210-41-008000	116-XX-210-41-001000
4	0.2	0.3	0.4	102	116-XX-304-41-006000	116-XX-304-41-003000	116-XX-304-41-007000	116-XX-304-41-008000	116-XX-304-41-001000
6	0.3	0.3	0.4	67	116-XX-306-41-006000	116-XX-306-41-003000	116-XX-306-41-007000	116-XX-306-41-008000	116-XX-306-41-001000
8	0.4	0.3	0.4	50	116-XX-308-41-006000	116-XX-308-41-003000	116-XX-308-41-007000	116-XX-308-41-008000	116-XX-308-41-001000
10	0.5	0.3	0.4	40	116-XX-310-41-006000	116-XX-310-41-003000	116-XX-310-41-007000	116-XX-310-41-008000	116-XX-310-41-001000
14	0.7	0.3	0.4	28	116-XX-314-41-006000	116-XX-314-41-003000	116-XX-314-41-007000	116-XX-314-41-008000	116-XX-314-41-001000
16	0.8	0.3	0.4	25	116-XX-316-41-006000	116-XX-316-41-003000	116-XX-316-41-007000	116-XX-316-41-008000	116-XX-316-41-001000
18	0.9	0.3	0.4	22	116-XX-318-41-006000	116-XX-318-41-003000	116-XX-318-41-007000	116-XX-318-41-008000	116-XX-318-41-001000
20	1.0	0.3	0.4	20	116-XX-320-41-006000	116-XX-320-41-003000	116-XX-320-41-007000	116-XX-320-41-008000	116-XX-320-41-001000
22	1.1	0.3	0.4	18	116-XX-322-41-006000	116-XX-322-41-003000	116-XX-322-41-007000	116-XX-322-41-008000	116-XX-322-41-001000
24	1.2	0.3	0.4	16	116-XX-324-41-006000	116-XX-324-41-003000	116-XX-324-41-007000	116-XX-324-41-008000	116-XX-324-41-001000
28	1.4	0.3	0.4	14	116-XX-328-41-006000	116-XX-328-41-003000	116-XX-328-41-007000	116-XX-328-41-008000	116-XX-328-41-001000
20	1.0	0.4	0.5	20	116-XX-420-41-006000	116-XX-420-41-003000	116-XX-420-41-007000	116-XX-420-41-008000	116-XX-420-41-001000
22	1.1	0.4	0.5	18	116-XX-422-41-006000	116-XX-422-41-003000	116-XX-422-41-007000	116-XX-422-41-008000	116-XX-422-41-001000
24	1.2	0.4	0.5	16	116-XX-424-41-006000	116-XX-424-41-003000	116-XX-424-41-007000	116-XX-424-41-008000	116-XX-424-41-001000
28	1.4	0.4	0.5	14	116-XX-428-41-006000	116-XX-428-41-003000	116-XX-428-41-007000	116-XX-428-41-008000	116-XX-428-41-001000
32	1.6	0.4	0.5	12	116-XX-432-41-006000	116-XX-432-41-003000	116-XX-432-41-007000	116-XX-432-41-008000	116-XX-432-41-001000
24	1.2	0.6	0.7	16	116-XX-624-41-006000	116-XX-624-41-003000	116-XX-624-41-007000	116-XX-624-41-008000	116-XX-624-41-001000
28	1.4	0.6	0.7	14	116-XX-628-41-006000	116-XX-628-41-003000	116-XX-628-41-007000	116-XX-628-41-008000	116-XX-628-41-001000
32	1.6	0.6	0.7	12	116-XX-632-41-006000	116-XX-632-41-003000	116-XX-632-41-007000	116-XX-632-41-008000	116-XX-632-41-001000
36	1.8	0.6	0.7	11	116-XX-636-41-006000	116-XX-636-41-003000	116-XX-636-41-007000	116-XX-636-41-008000	116-XX-636-41-001000
40	2.0	0.6	0.7	10	116-XX-640-41-006000	116-XX-640-41-003000	116-XX-640-41-007000	116-XX-640-41-008000	116-XX-640-41-001000
42	2.1	0.6	0.7	9	116-XX-642-41-006000	116-XX-642-41-003000	116-XX-642-41-007000	116-XX-642-41-008000	116-XX-642-41-001000
48	2.4	0.6	0.7	8	116-XX-648-41-006000	116-XX-648-41-003000	116-XX-648-41-007000	116-XX-648-41-008000	116-XX-648-41-001000
50	2.5	0.6	0.7	8	116-XX-650-41-006000	116-XX-650-41-003000	116-XX-650-41-007000	116-XX-650-41-008000	116-XX-650-41-001000
52	2.6	0.6	0.7	7	116-XX-652-41-006000	116-XX-652-41-003000	116-XX-652-41-007000	116-XX-652-41-008000	116-XX-652-41-001000
50	2.5	0.9	1.0	8	116-XX-950-41-006000	116-XX-950-41-003000	116-XX-950-41-007000	116-XX-950-41-008000	116-XX-950-41-001000
52	2.6	0.9	1.0	7	116-XX-952-41-006000	116-XX-952-41-003000	116-XX-952-41-007000	116-XX-952-41-008000	116-XX-952-41-001000
64	3.2	0.9	1.0	6	116-XX-964-41-006000	116-XX-964-41-003000	116-XX-964-41-007000	116-XX-964-41-008000	116-XX-964-41-001000

SPECIFY PLATING CODE XX=		91	93	41 ◆	43 ◆	XX=Plating Code See to Left
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

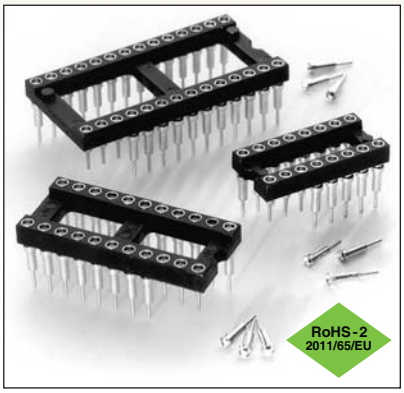
DUAL-IN-LINE SOCKETS

SERIES 612 • CARRIER TYPE, SOLDER TAIL • OPEN FRAME



See page 130 for Insulator Details

- Convenient way to load loose receptacles on a PC board
- Removable plastic carriers can be returned for reloading
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 612 uses MM #0255, #8855, #0135 or #0132 pins. See pages 165 and 171 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Tail Length = .124 (.022 Min. Mounting Hole)	Tail Length = .144 (.022 Min. Mounting Hole)	Tail Length = .183 (.022 Min. Mounting Hole)	Tail Length = .273 (.022 Min. Mounting Hole)
10	0.5	0.2	0.3	40	612-XX-210-41-001000	612-XX-210-41-002000	612-XX-210-41-003000	612-XX-210-41-004000
4	0.2	0.3	0.4	102	612-XX-304-41-001000	612-XX-304-41-002000	612-XX-304-41-003000	612-XX-304-41-004000
6	0.3	0.3	0.4	68	612-XX-306-41-001000	612-XX-306-41-002000	612-XX-306-41-003000	612-XX-306-41-004000
8	0.4	0.3	0.4	50	612-XX-308-41-001000	612-XX-308-41-002000	612-XX-308-41-003000	612-XX-308-41-004000
10	0.5	0.3	0.4	40	612-XX-310-41-001000	612-XX-310-41-002000	612-XX-310-41-003000	612-XX-310-41-004000
14	0.7	0.3	0.4	28	612-XX-314-41-001000	612-XX-314-41-002000	612-XX-314-41-003000	612-XX-314-41-004000
16	0.8	0.3	0.4	25	612-XX-316-41-001000	612-XX-316-41-002000	612-XX-316-41-003000	612-XX-316-41-004000
18	0.9	0.3	0.4	22	612-XX-318-41-001000	612-XX-318-41-002000	612-XX-318-41-003000	612-XX-318-41-004000
20	1.0	0.3	0.4	20	612-XX-320-41-001000	612-XX-320-41-002000	612-XX-320-41-003000	612-XX-320-41-004000
22	1.1	0.3	0.4	18	612-XX-322-41-001000	612-XX-322-41-002000	612-XX-322-41-003000	612-XX-322-41-004000
24	1.2	0.3	0.4	16	612-XX-324-41-001000	612-XX-324-41-002000	612-XX-324-41-003000	612-XX-324-41-004000
28	1.4	0.3	0.4	14	612-XX-328-41-001000	612-XX-328-41-002000	612-XX-328-41-003000	612-XX-328-41-004000
20	1.0	0.4	0.5	20	612-XX-420-41-001000	612-XX-420-41-002000	612-XX-420-41-003000	612-XX-420-41-004000
22	1.1	0.4	0.5	18	612-XX-422-41-001000	612-XX-422-41-002000	612-XX-422-41-003000	612-XX-422-41-004000
24	1.2	0.4	0.5	16	612-XX-424-41-001000	612-XX-424-41-002000	612-XX-424-41-003000	612-XX-424-41-004000
28	1.4	0.4	0.5	14	612-XX-428-41-001000	612-XX-428-41-002000	612-XX-428-41-003000	612-XX-428-41-004000
32	1.6	0.4	0.5	12	612-XX-432-41-001000	612-XX-432-41-002000	612-XX-432-41-003000	612-XX-432-41-004000
24	1.2	0.6	0.7	16	612-XX-624-41-001000	612-XX-624-41-002000	612-XX-624-41-003000	612-XX-624-41-004000
28	1.4	0.6	0.7	14	612-XX-628-41-001000	612-XX-628-41-002000	612-XX-628-41-003000	612-XX-628-41-004000
32	1.6	0.6	0.7	12	612-XX-632-41-001000	612-XX-632-41-002000	612-XX-632-41-003000	612-XX-632-41-004000
36	1.8	0.6	0.7	11	612-XX-636-41-001000	612-XX-636-41-002000	612-XX-636-41-003000	612-XX-636-41-004000
40	2.0	0.6	0.7	10	612-XX-640-41-001000	612-XX-640-41-002000	612-XX-640-41-003000	612-XX-640-41-004000
42	2.1	0.6	0.7	9	612-XX-642-41-001000	612-XX-642-41-002000	612-XX-642-41-003000	612-XX-642-41-004000
48	2.4	0.6	0.7	8	612-XX-648-41-001000	612-XX-648-41-002000	612-XX-648-41-003000	612-XX-648-41-004000
50	2.5	0.6	0.7	8	612-XX-650-41-001000	612-XX-650-41-002000	612-XX-650-41-003000	612-XX-650-41-004000
52	2.6	0.6	0.7	7	612-XX-652-41-001000	612-XX-652-41-002000	612-XX-652-41-003000	612-XX-652-41-004000
50	2.5	0.9	1.0	8	612-XX-950-41-001000	612-XX-950-41-002000	612-XX-950-41-003000	612-XX-950-41-004000
52	2.6	0.9	1.0	7	612-XX-952-41-001000	612-XX-952-41-002000	612-XX-952-41-003000	612-XX-952-41-004000
64	3.2	0.9	1.0	6	612-XX-964-41-001000	612-XX-964-41-002000	612-XX-964-41-003000	612-XX-964-41-004000

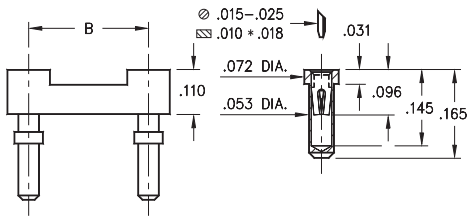
SPECIFY PLATING CODE XX =	13 ◆	91	93	41 ◆	43 ◆
Sleeve (Pin)	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn
Contact (Clip)	30 µ" Au	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au

XX=Plating Code See to Left

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

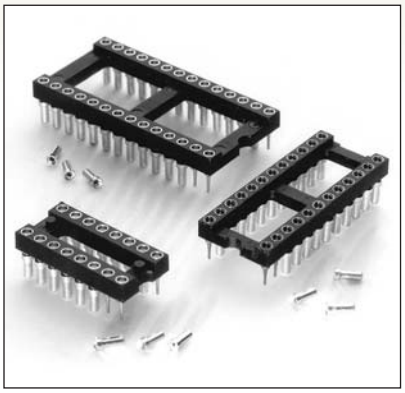
DUAL-IN-LINE SOCKETS

SERIES 614...001 • CARRIER TYPE, LOW PROFILE • OPEN FRAME



See page 130 for Insulator Details

- Convenient way to load loose receptacles on a PC board
- Removable plastic carriers can be returned for reloading
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 614 uses MM #1401 pins. See page 170 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Ordering Information
10	0.5	0.2	0.3	40	614-XX-210-41-001000
4	0.2	0.3	0.4	102	614-XX-304-41-001000
6	0.3	0.3	0.4	67	614-XX-306-41-001000
8	0.4	0.3	0.4	50	614-XX-308-41-001000
10	0.5	0.3	0.4	40	614-XX-310-41-001000
14	0.7	0.3	0.4	28	614-XX-314-41-001000
16	0.8	0.3	0.4	25	614-XX-316-41-001000
18	0.9	0.3	0.4	22	614-XX-318-41-001000
20	1.0	0.3	0.4	20	614-XX-320-41-001000
22	1.1	0.3	0.4	18	614-XX-322-41-001000
24	1.2	0.3	0.4	16	614-XX-324-41-001000
28	1.4	0.3	0.4	14	614-XX-328-41-001000
20	1.0	0.4	0.5	20	614-XX-420-41-001000
22	1.1	0.4	0.5	18	614-XX-422-41-001000
24	1.2	0.4	0.5	16	614-XX-424-41-001000
28	1.4	0.4	0.5	14	614-XX-428-41-001000
32	1.6	0.4	0.5	12	614-XX-432-41-001000
24	1.2	0.6	0.7	16	614-XX-624-41-001000
28	1.4	0.6	0.7	14	614-XX-628-41-001000
32	1.6	0.6	0.7	12	614-XX-632-41-001000
36	1.8	0.6	0.7	11	614-XX-636-41-001000
40	2.0	0.6	0.7	10	614-XX-640-41-001000
42	2.1	0.6	0.7	9	614-XX-642-41-001000
48	2.4	0.6	0.7	8	614-XX-648-41-001000
50	2.5	0.6	0.7	8	614-XX-650-41-001000
52	2.6	0.6	0.7	7	614-XX-652-41-001000
50	2.5	0.9	1.0	8	614-XX-950-41-001000
52	2.6	0.9	1.0	7	614-XX-952-41-001000
64	3.2	0.9	1.0	6	614-XX-964-41-001000

XX=Plating Code See Below

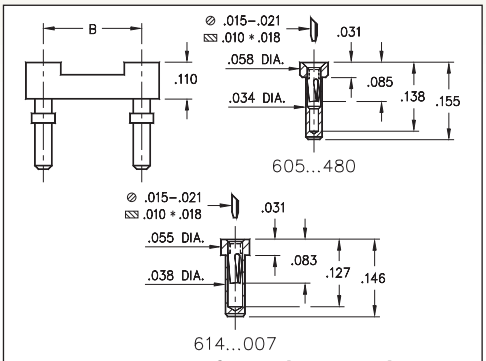
RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =	91	93	41 ◆	43 ◆
Sleeve (Pin)	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

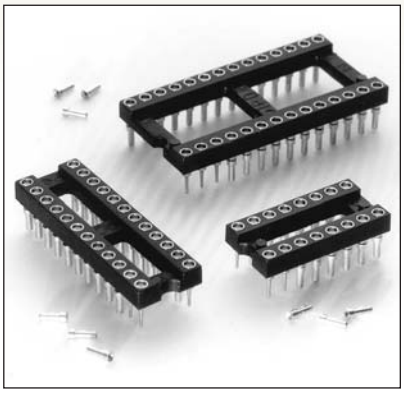
DUAL-IN-LINE SOCKETS

SERIES 605, 614 • CARRIER TYPE, LOW PROFILE • OPEN FRAME



See page 130 for Insulator Details

- Low profile receptacles sit only .031" high above the board
- Removable plastic carriers can be returned for reloading
- Hi-Rel, 3-finger BeCu #11 contact is rated at 3 amps. See page 251 for details
- Series 605 and 614 use MM #1407 & #0548 pins. See page 157 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Length = .146 (.039 Min. Mounting Hole)	Length = .155 (.035 Min. Mounting Hole)
10	0.5	0.2	0.3	40	614-XX-210-31-007000	605-XX-210-11-480000
4	0.2	0.3	0.4	102	614-XX-304-31-007000	605-XX-304-11-480000
6	0.3	0.3	0.4	68	614-XX-306-31-007000	605-XX-306-11-480000
8	0.4	0.3	0.4	50	614-XX-308-31-007000	605-XX-308-11-480000
10	0.5	0.3	0.4	40	614-XX-310-31-007000	605-XX-310-11-480000
14	0.7	0.3	0.4	28	614-XX-314-31-007000	605-XX-314-11-480000
16	0.8	0.3	0.4	25	614-XX-316-31-007000	605-XX-316-11-480000
18	0.9	0.3	0.4	22	614-XX-318-31-007000	605-XX-318-11-480000
20	1.0	0.3	0.4	20	614-XX-320-31-007000	605-XX-320-11-480000
22	1.1	0.3	0.4	18	614-XX-322-31-007000	605-XX-322-11-480000
24	1.2	0.3	0.4	16	614-XX-324-31-007000	605-XX-324-11-480000
28	1.4	0.3	0.4	14	614-XX-328-31-007000	605-XX-328-11-480000
20	1.0	0.4	0.5	20	614-XX-420-31-007000	605-XX-420-11-480000
22	1.1	0.4	0.5	18	614-XX-422-31-007000	605-XX-422-11-480000
24	1.2	0.4	0.5	16	614-XX-424-31-007000	605-XX-424-11-480000
28	1.4	0.4	0.5	14	614-XX-428-31-007000	605-XX-428-11-480000
32	1.6	0.4	0.5	12	614-XX-432-31-007000	605-XX-432-11-480000
24	1.2	0.6	0.7	16	614-XX-624-31-007000	605-XX-624-11-480000
28	1.4	0.6	0.7	14	614-XX-628-31-007000	605-XX-628-11-480000
32	1.6	0.6	0.7	12	614-XX-632-31-007000	605-XX-632-11-480000
36	1.8	0.6	0.7	11	614-XX-636-31-007000	605-XX-636-11-480000
40	2.0	0.6	0.7	10	614-XX-640-31-007000	605-XX-640-11-480000
42	2.1	0.6	0.7	9	614-XX-642-31-007000	605-XX-642-11-480000
48	2.4	0.6	0.7	8	614-XX-648-31-007000	605-XX-648-11-480000
50	2.5	0.6	0.7	8	614-XX-650-31-007000	605-XX-650-11-480000
52	2.6	0.6	0.7	7	614-XX-652-31-007000	605-XX-652-11-480000
50	2.5	0.9	1.0	8	614-XX-950-31-007000	605-XX-950-11-480000
52	2.6	0.9	1.0	7	614-XX-952-31-007000	605-XX-952-11-480000
64	3.2	0.9	1.0	6	614-XX-964-31-007000	605-XX-964-11-480000

RoHS-2 2011/65/EU

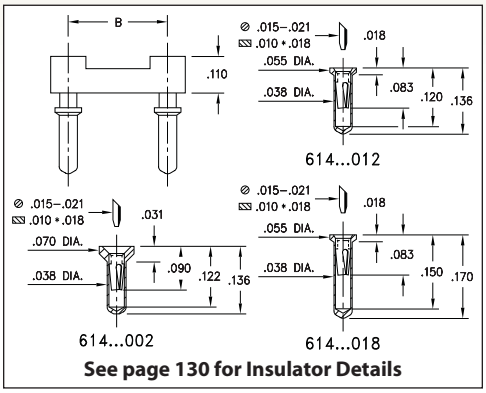
XX=Plating Code See Below

SPECIFY PLATING CODE XX =		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au	30 µ" Au		10 µ" Au	30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

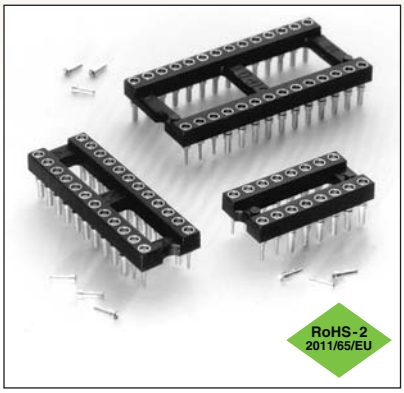
DUAL-IN-LINE SOCKETS

SERIES 614 • CARRIER TYPE, ULTRA LOW PROFILE • OPEN FRAME



See page 130 for Insulator Details

- Ultra low profile receptacles sit only .018" to .031" high above the board
- Removable plastic carriers can be returned for reloading
- Hi-Rel, 3-finger BeCu #11 contact is rated at 3 amps. See page 251 for details
- Series 614 uses MM #0552-1, #0442-0, #0552-2 pins. See pages 157 and 158 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Length = .136 (.039 Min. Mounting Hole)	Length = .136 (.039 Min. Mounting Hole)	Length = .170 (.039 Min. Mounting Hole)
10	0.5	0.2	0.3	40	614-XX-210-31-012000	614-XX-210-31-002000	614-XX-210-31-018000
4	0.2	0.3	0.4	102	614-XX-304-31-012000	614-XX-304-31-002000	614-XX-304-31-018000
6	0.3	0.3	0.4	67	614-XX-306-31-012000	614-XX-306-31-002000	614-XX-306-31-018000
8	0.4	0.3	0.4	50	614-XX-308-31-012000	614-XX-308-31-002000	614-XX-308-31-018000
10	0.5	0.3	0.4	40	614-XX-310-31-012000	614-XX-310-31-002000	614-XX-310-31-018000
14	0.7	0.3	0.4	28	614-XX-314-31-012000	614-XX-314-31-002000	614-XX-314-31-018000
16	0.8	0.3	0.4	25	614-XX-316-31-012000	614-XX-316-31-002000	614-XX-316-31-018000
18	0.9	0.3	0.4	22	614-XX-318-31-012000	614-XX-318-31-002000	614-XX-318-31-018000
20	1.0	0.3	0.4	20	614-XX-320-31-012000	614-XX-320-31-002000	614-XX-320-31-018000
22	1.1	0.3	0.4	18	614-XX-322-31-012000	614-XX-322-31-002000	614-XX-322-31-018000
24	1.2	0.3	0.4	16	614-XX-324-31-012000	614-XX-324-31-002000	614-XX-324-31-018000
28	1.4	0.3	0.4	14	614-XX-328-31-012000	614-XX-328-31-002000	614-XX-328-31-018000
20	1.0	0.4	0.5	20	614-XX-420-31-012000	614-XX-420-31-002000	614-XX-420-31-018000
22	1.1	0.4	0.5	18	614-XX-422-31-012000	614-XX-422-31-002000	614-XX-422-31-018000
24	1.2	0.4	0.5	16	614-XX-424-31-012000	614-XX-424-31-002000	614-XX-424-31-018000
28	1.4	0.4	0.5	14	614-XX-428-31-012000	614-XX-428-31-002000	614-XX-428-31-018000
32	1.6	0.4	0.5	12	614-XX-432-31-012000	614-XX-432-31-002000	614-XX-432-31-018000
24	1.2	0.6	0.7	16	614-XX-624-31-012000	614-XX-624-31-002000	614-XX-624-31-018000
28	1.4	0.6	0.7	14	614-XX-628-31-012000	614-XX-628-31-002000	614-XX-628-31-018000
32	1.6	0.6	0.7	12	614-XX-632-31-012000	614-XX-632-31-002000	614-XX-632-31-018000
36	1.8	0.6	0.7	11	614-XX-636-31-012000	614-XX-636-31-002000	614-XX-636-31-018000
40	2.0	0.6	0.7	10	614-XX-640-31-012000	614-XX-640-31-002000	614-XX-640-31-018000
42	2.1	0.6	0.7	9	614-XX-642-31-012000	614-XX-642-31-002000	614-XX-642-31-018000
48	2.4	0.6	0.7	8	614-XX-648-31-012000	614-XX-648-31-002000	614-XX-648-31-018000
50	2.5	0.6	0.7	8	614-XX-650-31-012000	614-XX-650-31-002000	614-XX-650-31-018000
52	2.6	0.6	0.7	7	614-XX-652-31-012000	614-XX-652-31-002000	614-XX-652-31-018000
50	2.5	0.9	1.0	8	614-XX-950-31-012000	614-XX-950-31-002000	614-XX-950-31-018000
52	2.6	0.9	1.0	7	614-XX-952-31-012000	614-XX-952-31-002000	614-XX-952-31-018000
64	3.2	0.9	1.0	6	614-XX-964-31-012000	614-XX-964-31-002000	614-XX-964-31-018000

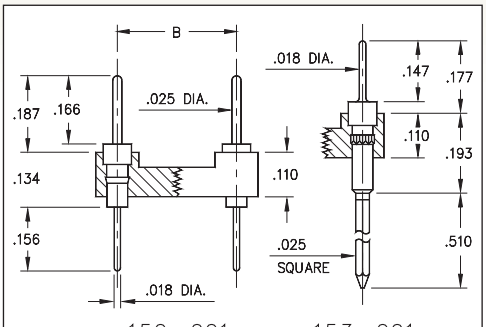
SPECIFY PLATING CODE XX =	91	93	41 ◆	43 ◆
Sleeve (Pin)	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au

XX=Plating Code See to Left

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

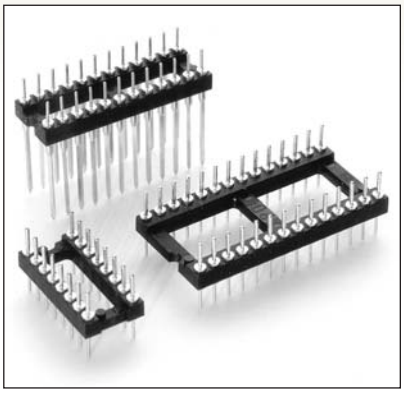
DUAL-IN-LINE HEADERS

SERIES 150, 153 • SOLDER TAIL AND WRAPOST • OPEN FRAME



See page 130 for Insulator Details

- Series 150 DIL Headers are equipped with .025" dia. pins MM #0290. See page 215 for details
- Series 153 DIL Headers have 3-level wraposts MM #5301. See page 227 for details
- Both series have .018" dia. solder tails which are pluggable into standard contacts
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Solder Tail	3 Level Wrapost
10	0.5	0.2	0.3	40	150-XX-210-00-001000	153-XX-210-00-001000
4	0.2	0.3	0.4	102	150-XX-304-00-001000	153-XX-304-00-001000
6	0.3	0.3	0.4	67	150-XX-306-00-001000	153-XX-306-00-001000
8	0.4	0.3	0.4	50	150-XX-308-00-001000	153-XX-308-00-001000
10	0.5	0.3	0.4	40	150-XX-310-00-001000	153-XX-310-00-001000
14	0.7	0.3	0.4	29	150-XX-314-00-001000	153-XX-314-00-001000
16	0.8	0.3	0.4	25	150-XX-316-00-001000	153-XX-316-00-001000
18	0.9	0.3	0.4	22	150-XX-318-00-001000	153-XX-318-00-001000
20	1.0	0.3	0.4	20	150-XX-320-00-001000	153-XX-320-00-001000
22	1.1	0.3	0.4	18	150-XX-322-00-001000	153-XX-322-00-001000
24	1.2	0.3	0.4	16	150-XX-324-00-001000	153-XX-324-00-001000
28	1.4	0.3	0.4	14	150-XX-328-00-001000	153-XX-328-00-001000
20	1.0	0.4	0.5	20	150-XX-420-00-001000	153-XX-420-00-001000
22	1.1	0.4	0.5	18	150-XX-422-00-001000	153-XX-422-00-001000
24	1.2	0.4	0.5	16	150-XX-424-00-001000	153-XX-424-00-001000
28	1.4	0.4	0.5	14	150-XX-428-00-001000	153-XX-428-00-001000
32	1.6	0.4	0.5	12	150-XX-432-00-001000	153-XX-432-00-001000
24	1.2	0.6	0.7	16	150-XX-624-00-001000	153-XX-624-00-001000
28	1.4	0.6	0.7	14	150-XX-628-00-001000	153-XX-628-00-001000
32	1.6	0.6	0.7	12	150-XX-632-00-001000	153-XX-632-00-001000
36	1.8	0.6	0.7	11	150-XX-636-00-001000	153-XX-636-00-001000
40	2.0	0.6	0.7	10	150-XX-640-00-001000	153-XX-640-00-001000
42	2.1	0.6	0.7	9	150-XX-642-00-001000	153-XX-642-00-001000
48	2.4	0.6	0.7	8	150-XX-648-00-001000	153-XX-648-00-001000
50	2.5	0.6	0.7	8	150-XX-650-00-001000	153-XX-650-00-001000
52	2.6	0.6	0.7	7	150-XX-652-00-001000	153-XX-652-00-001000
50	2.5	0.9	1.0	8	150-XX-950-00-001000	153-XX-950-00-001000
52	2.6	0.9	1.0	7	150-XX-952-00-001000	153-XX-952-00-001000
64	3.2	0.9	1.0	6	150-XX-964-00-001000	153-XX-964-00-001000

RoHS-2 2011/65/EU

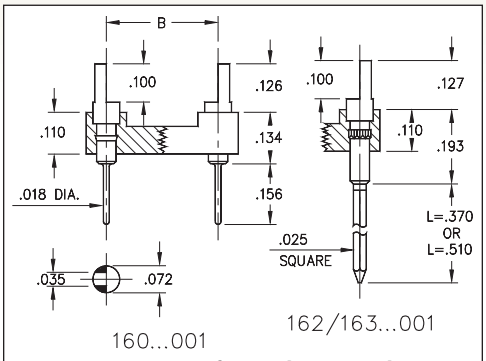
XX=Plating Code See Below

SPECIFY PLATING CODE XX =	10 ◆	90	40 ◆
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

DUAL-IN-LINE HEADERS

SERIES 160, 162, 163 • SLOTTED, SOLDER TAIL & WRAPOST • OPEN FRAME



See page 130 for Insulator Details

- Series 160, 162, and 163 DIL Headers are equipped with slotted heads to accept wires or component leads
- Series 160 terminations are pluggable .018" dia. solder tails MM #0282, See page 216 for details. Series 162 and 163 terminations are two or three level wraposts MM #1106. See page 228 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Solder Tail	L = .370 (2 Level Wrapost)	L = .510 (3 Level Wrapost)
10	0.5	0.2	0.3	41	160-XX-210-00-001000	162-XX-210-00-001000	163-XX-210-00-001000
4	0.2	0.3	0.4	102	160-XX-304-00-001000	162-XX-304-00-001000	163-XX-304-00-001000
6	0.3	0.3	0.4	67	160-XX-306-00-001000	162-XX-306-00-001000	163-XX-306-00-001000
8	0.4	0.3	0.4	50	160-XX-308-00-001000	162-XX-308-00-001000	163-XX-308-00-001000
10	0.5	0.3	0.4	40	160-XX-310-00-001000	162-XX-310-00-001000	163-XX-310-00-001000
14	0.7	0.3	0.4	28	160-XX-314-00-001000	162-XX-314-00-001000	163-XX-314-00-001000
16	0.8	0.3	0.4	25	160-XX-316-00-001000	162-XX-316-00-001000	163-XX-316-00-001000
18	0.9	0.3	0.4	22	160-XX-318-00-001000	162-XX-318-00-001000	163-XX-318-00-001000
20	1.0	0.3	0.4	20	160-XX-320-00-001000	162-XX-320-00-001000	163-XX-320-00-001000
22	1.1	0.3	0.4	18	160-XX-322-00-001000	162-XX-322-00-001000	163-XX-322-00-001000
24	1.2	0.3	0.4	16	160-XX-324-00-001000	162-XX-324-00-001000	163-XX-324-00-001000
28	1.4	0.3	0.4	14	160-XX-328-00-001000	162-XX-328-00-001000	163-XX-328-00-001000
20	1.0	0.4	0.5	20	160-XX-420-00-001000	162-XX-420-00-001000	163-XX-420-00-001000
22	1.1	0.4	0.5	18	160-XX-422-00-001000	162-XX-422-00-001000	163-XX-422-00-001000
24	1.2	0.4	0.5	16	160-XX-424-00-001000	162-XX-424-00-001000	163-XX-424-00-001000
28	1.4	0.4	0.5	14	160-XX-428-00-001000	162-XX-428-00-001000	163-XX-428-00-001000
32	1.6	0.4	0.5	12	160-XX-432-00-001000	162-XX-432-00-001000	163-XX-432-00-001000
24	1.2	0.6	0.7	16	160-XX-624-00-001000	162-XX-624-00-001000	163-XX-624-00-001000
28	1.4	0.6	0.7	14	160-XX-628-00-001000	162-XX-628-00-001000	163-XX-628-00-001000
32	1.6	0.6	0.7	12	160-XX-632-00-001000	162-XX-632-00-001000	163-XX-632-00-001000
36	1.8	0.6	0.7	11	160-XX-636-00-001000	162-XX-636-00-001000	163-XX-636-00-001000
40	2.0	0.6	0.7	10	160-XX-640-00-001000	162-XX-640-00-001000	163-XX-640-00-001000
42	2.1	0.6	0.7	9	160-XX-642-00-001000	162-XX-642-00-001000	163-XX-642-00-001000
48	2.4	0.6	0.7	8	160-XX-648-00-001000	162-XX-648-00-001000	163-XX-648-00-001000
50	2.5	0.6	0.7	8	160-XX-650-00-001000	162-XX-650-00-001000	163-XX-650-00-001000
52	2.6	0.6	0.7	7	160-XX-652-00-001000	162-XX-652-00-001000	163-XX-652-00-001000
50	2.5	0.9	1.0	8	160-XX-950-00-001000	162-XX-950-00-001000	163-XX-950-00-001000
52	2.6	0.9	1.0	7	160-XX-952-00-001000	162-XX-952-00-001000	163-XX-952-00-001000
64	3.2	0.9	1.0	6	160-XX-964-00-001000	162-XX-964-00-001000	163-XX-964-00-001000

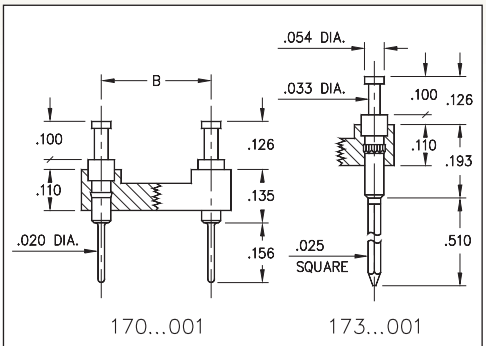
XX=Plating Code See to Right

SPECIFY PLATING CODE XX =	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

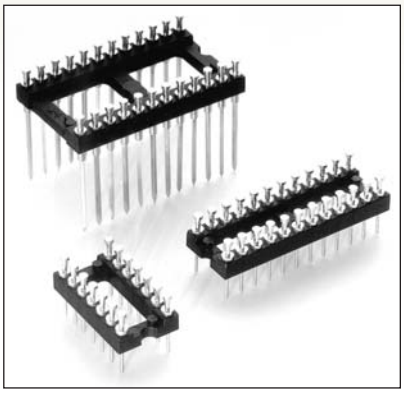
DUAL-IN-LINE HEADERS

SERIES 170, 173 • TURRET, SOLDER TAIL & WRAPOST • OPEN FRAME



See page 130 for Insulator Details

- Series 170 &173 DIL headers are equipped with turret heads for wiring applications
- Series 170 terminations are pluggable .020" dia. solder tails MM #0700, See page 216 for details. Series 173 terminations are three level wraposts MM #0730. See page 228 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Solder Tail	3 Level Wrapost
10	0.5	0.2	0.3	41	170-XX-210-00-001000	173-XX-210-00-001000
4	0.2	0.3	0.4	102	170-XX-304-00-001000	173-XX-304-00-001000
6	0.3	0.3	0.4	67	170-XX-306-00-001000	173-XX-306-00-001000
8	0.4	0.3	0.4	50	170-XX-308-00-001000	173-XX-308-00-001000
10	0.5	0.3	0.4	40	170-XX-310-00-001000	173-XX-310-00-001000
14	0.7	0.3	0.4	28	170-XX-314-00-001000	173-XX-314-00-001000
16	0.8	0.3	0.4	25	170-XX-316-00-001000	173-XX-316-00-001000
18	0.9	0.3	0.4	22	170-XX-318-00-001000	173-XX-318-00-001000
20	1.0	0.3	0.4	20	170-XX-320-00-001000	173-XX-320-00-001000
22	1.1	0.3	0.4	18	170-XX-322-00-001000	173-XX-322-00-001000
24	1.2	0.3	0.4	16	170-XX-324-00-001000	173-XX-324-00-001000
28	1.4	0.3	0.4	14	170-XX-328-00-001000	173-XX-328-00-001000
20	1.0	0.4	0.5	20	170-XX-420-00-001000	173-XX-420-00-001000
22	1.1	0.4	0.5	18	170-XX-422-00-001000	173-XX-422-00-001000
24	1.2	0.4	0.5	16	170-XX-424-00-001000	173-XX-424-00-001000
28	1.4	0.4	0.5	14	170-XX-428-00-001000	173-XX-428-00-001000
32	1.6	0.4	0.5	12	170-XX-432-00-001000	173-XX-432-00-001000
24	1.2	0.6	0.7	16	170-XX-624-00-001000	173-XX-624-00-001000
28	1.4	0.6	0.7	14	170-XX-628-00-001000	173-XX-628-00-001000
32	1.6	0.6	0.7	12	170-XX-632-00-001000	173-XX-632-00-001000
36	1.8	0.6	0.7	11	170-XX-636-00-001000	173-XX-636-00-001000
40	2.0	0.6	0.7	10	170-XX-640-00-001000	173-XX-640-00-001000
42	2.1	0.6	0.7	9	170-XX-642-00-001000	173-XX-642-00-001000
48	2.4	0.6	0.7	8	170-XX-648-00-001000	173-XX-648-00-001000
50	2.5	0.6	0.7	8	170-XX-650-00-001000	173-XX-650-00-001000
52	2.6	0.6	0.7	7	170-XX-652-00-001000	173-XX-652-00-001000
50	2.5	0.9	1.0	8	170-XX-950-00-001000	173-XX-950-00-001000
52	2.6	0.9	1.0	7	170-XX-952-00-001000	173-XX-952-00-001000
64	3.2	0.9	1.0	6	170-XX-964-00-001000	173-XX-964-00-001000

RoHS-2 2011/65/EU

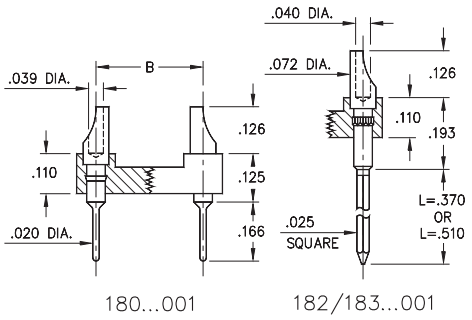
XX=Plating Code See Below

SPECIFY PLATING CODE XX =	10 ◆	90	40 ◆
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

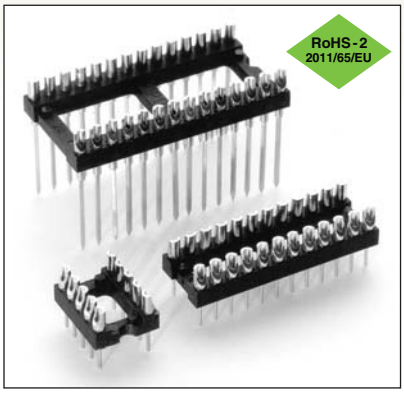
DUAL-IN-LINE HEADERS

SERIES 180, 182, 183 • SOLDER CUP, SOLDER TAIL & WRAPOST • OPEN FRAME



See page 130 for Insulator Details

- Series 180, 182, and 183 DIL Headers are equipped with solder cups for wiring applications
- Series 180 terminations are pluggable .020" dia. solder tails MM #8000, See page 216 for details. Series 182 and 183 terminations are two or three level wraposts MM #8301. See page 227 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Solder Tail	L = .370 (2 Level Wrapost)	L = .510 (3 Level Wrapost)
10	0.5	0.2	0.3	41	180-10-210-00-001000	182-10-210-00-001000	183-10-210-00-001000
4	0.2	0.3	0.4	102	180-10-304-00-001000	182-10-304-00-001000	183-10-304-00-001000
6	0.3	0.3	0.4	67	180-10-306-00-001000	182-10-306-00-001000	183-10-306-00-001000
8	0.4	0.3	0.4	50	180-10-308-00-001000	182-10-308-00-001000	183-10-308-00-001000
10	0.5	0.3	0.4	40	180-10-310-00-001000	182-10-310-00-001000	183-10-310-00-001000
14	0.7	0.3	0.4	28	180-10-314-00-001000	182-10-314-00-001000	183-10-314-00-001000
16	0.8	0.3	0.4	25	180-10-316-00-001000	182-10-316-00-001000	183-10-316-00-001000
18	0.9	0.3	0.4	22	180-10-318-00-001000	182-10-318-00-001000	183-10-318-00-001000
20	1.0	0.3	0.4	20	180-10-320-00-001000	182-10-320-00-001000	183-10-320-00-001000
22	1.1	0.3	0.4	18	180-10-322-00-001000	182-10-322-00-001000	183-10-322-00-001000
24	1.2	0.3	0.4	16	180-10-324-00-001000	182-10-324-00-001000	183-10-324-00-001000
28	1.4	0.3	0.4	14	180-10-328-00-001000	182-10-328-00-001000	183-10-328-00-001000
20	1.0	0.4	0.5	20	180-10-420-00-001000	182-10-420-00-001000	183-10-420-00-001000
22	1.1	0.4	0.5	18	180-10-422-00-001000	182-10-422-00-001000	183-10-422-00-001000
24	1.2	0.4	0.5	16	180-10-424-00-001000	182-10-424-00-001000	183-10-424-00-001000
28	1.4	0.4	0.5	14	180-10-428-00-001000	182-10-428-00-001000	183-10-428-00-001000
32	1.6	0.4	0.5	12	180-10-432-00-001000	182-10-432-00-001000	183-10-432-00-001000
24	1.2	0.6	0.7	16	180-10-624-00-001000	182-10-624-00-001000	183-10-624-00-001000
28	1.4	0.6	0.7	14	180-10-628-00-001000	182-10-628-00-001000	183-10-628-00-001000
32	1.6	0.6	0.7	12	180-10-632-00-001000	182-10-632-00-001000	183-10-632-00-001000
36	1.8	0.6	0.7	11	180-10-636-00-001000	182-10-636-00-001000	183-10-636-00-001000
40	2.0	0.6	0.7	10	180-10-640-00-001000	182-10-640-00-001000	183-10-640-00-001000
42	2.1	0.6	0.7	9	180-10-642-00-001000	182-10-642-00-001000	183-10-642-00-001000
48	2.4	0.6	0.7	8	180-10-648-00-001000	182-10-648-00-001000	183-10-648-00-001000
50	2.5	0.6	0.7	8	180-10-650-00-001000	182-10-650-00-001000	183-10-650-00-001000
52	2.6	0.6	0.7	7	180-10-652-00-001000	182-10-652-00-001000	183-10-652-00-001000
50	2.5	0.9	1.0	8	180-10-950-00-001000	182-10-950-00-001000	183-10-950-00-001000
52	2.6	0.9	1.0	7	180-10-952-00-001000	182-10-952-00-001000	183-10-952-00-001000
64	3.2	0.9	1.0	6	180-10-964-00-001000	182-10-964-00-001000	183-10-964-00-001000

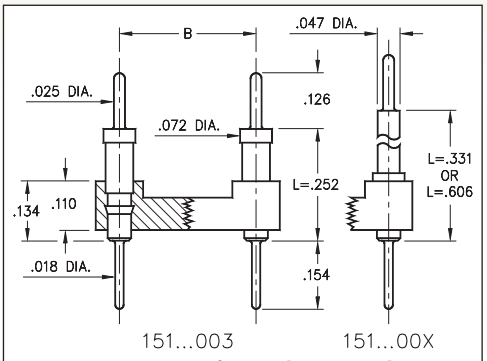
XX=Plating Code See to Right

SPECIFY PLATING CODE XX =	10 ◆			
Pin Plating	10 µ" Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

DUAL-IN-LINE HEADERS

SERIES 151...003, 004, 005 • INTERCONNECT • OPEN FRAME



See page 130 for Insulator Details

- Series 151 DIL Headers combine .025" dia. tails with pluggable .018" dia. solder tails
- Series:
  151...003 uses MM #5503 pins
  151...004 uses MM #5504 pins
  151...005 uses MM #5505 pins
  See page 214 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	L = .252	L = .331	L = .606
10	0.5	0.2	0.3	41	151-10-210-00-003000	151-10-210-00-004000	151-10-210-00-005000
4	0.2	0.3	0.4	102	151-10-304-00-003000	151-10-304-00-004000	151-10-304-00-005000
6	0.3	0.3	0.4	67	151-10-306-00-003000	151-10-306-00-004000	151-10-306-00-005000
8	0.4	0.3	0.4	50	151-10-308-00-003000	151-10-308-00-004000	151-10-308-00-005000
10	0.5	0.3	0.4	40	151-10-310-00-003000	151-10-310-00-004000	151-10-310-00-005000
14	0.7	0.3	0.4	28	151-10-314-00-003000	151-10-314-00-004000	151-10-314-00-005000
16	0.8	0.3	0.4	25	151-10-316-00-003000	151-10-316-00-004000	151-10-316-00-005000
18	0.9	0.3	0.4	22	151-10-318-00-003000	151-10-318-00-004000	151-10-318-00-005000
20	1.0	0.3	0.4	20	151-10-320-00-003000	151-10-320-00-004000	151-10-320-00-005000
22	1.1	0.3	0.4	18	151-10-322-00-003000	151-10-322-00-004000	151-10-322-00-005000
24	1.2	0.3	0.4	16	151-10-324-00-003000	151-10-324-00-004000	151-10-324-00-005000
28	1.4	0.3	0.4	14	151-10-328-00-003000	151-10-328-00-004000	151-10-328-00-005000
20	1.0	0.4	0.5	20	151-10-420-00-003000	151-10-420-00-004000	151-10-420-00-005000
22	1.1	0.4	0.5	18	151-10-422-00-003000	151-10-422-00-004000	151-10-422-00-005000
24	1.2	0.4	0.5	16	151-10-424-00-003000	151-10-424-00-004000	151-10-424-00-005000
28	1.4	0.4	0.5	14	151-10-428-00-003000	151-10-428-00-004000	151-10-428-00-005000
32	1.6	0.4	0.5	12	151-10-432-00-003000	151-10-432-00-004000	151-10-432-00-005000
24	1.2	0.6	0.7	16	151-10-624-00-003000	151-10-624-00-004000	151-10-624-00-005000
28	1.4	0.6	0.7	14	151-10-628-00-003000	151-10-628-00-004000	151-10-628-00-005000
32	1.6	0.6	0.7	12	151-10-632-00-003000	151-10-632-00-004000	151-10-632-00-005000
36	1.8	0.6	0.7	11	151-10-636-00-003000	151-10-636-00-004000	151-10-636-00-005000
40	2.0	0.6	0.7	10	151-10-640-00-003000	151-10-640-00-004000	151-10-640-00-005000
42	2.1	0.6	0.7	9	151-10-642-00-003000	151-10-642-00-004000	151-10-642-00-005000
48	2.4	0.6	0.7	8	151-10-648-00-003000	151-10-648-00-004000	151-10-648-00-005000
50	2.5	0.6	0.7	8	151-10-650-00-003000	151-10-650-00-004000	151-10-650-00-005000
52	2.6	0.6	0.7	7	151-10-652-00-003000	151-10-652-00-004000	151-10-652-00-005000
50	2.5	0.9	1.0	8	151-10-950-00-003000	151-10-950-00-004000	151-10-950-00-005000
52	2.6	0.9	1.0	7	151-10-952-00-003000	151-10-952-00-004000	151-10-952-00-005000
64	3.2	0.9	1.0	6	151-10-964-00-003000	151-10-964-00-004000	151-10-964-00-005000

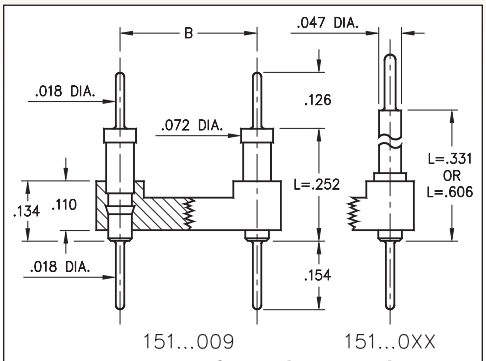
XX=Plating Code See to Right

SPECIFY PLATING CODE XX =	10 ◆			
Pin Plating	10 µ" Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

DUAL-IN-LINE HEADERS

SERIES 151...009, 010, 011 • INTERCONNECT • OPEN FRAME



See page 130 for Insulator Details

- Series 151 DIL Headers feature .018" dia. solder tails at both ends making these headers entirely pluggable
- Series:
  151...009 uses MM #5509 pins
  151...010 uses MM #5510 pins
  151...011 uses MM #5511 pins
  See pages 212 and 214 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	L = .252	L = .331	L = .606
10	0.5	0.2	0.3	41	151-10-210-00-009000	151-10-210-00-010000	151-10-210-00-011000
4	0.2	0.3	0.4	102	151-10-304-00-009000	151-10-304-00-010000	151-10-304-00-011000
6	0.3	0.3	0.4	67	151-10-306-00-009000	151-10-306-00-010000	151-10-306-00-011000
8	0.4	0.3	0.4	50	151-10-308-00-009000	151-10-308-00-010000	151-10-308-00-011000
10	0.5	0.3	0.4	40	151-10-310-00-009000	151-10-310-00-010000	151-10-310-00-011000
14	0.7	0.3	0.4	28	151-10-314-00-009000	151-10-314-00-010000	151-10-314-00-011000
16	0.8	0.3	0.4	25	151-10-316-00-009000	151-10-316-00-010000	151-10-316-00-011000
18	0.9	0.3	0.4	22	151-10-318-00-009000	151-10-318-00-010000	151-10-318-00-011000
20	1.0	0.3	0.4	20	151-10-320-00-009000	151-10-320-00-010000	151-10-320-00-011000
22	1.1	0.3	0.4	18	151-10-322-00-009000	151-10-322-00-010000	151-10-322-00-011000
24	1.2	0.3	0.4	16	151-10-324-00-009000	151-10-324-00-010000	151-10-324-00-011000
28	1.4	0.3	0.4	14	151-10-328-00-009000	151-10-328-00-010000	151-10-328-00-011000
20	1.0	0.4	0.5	20	151-10-420-00-009000	151-10-420-00-010000	151-10-420-00-011000
22	1.1	0.4	0.5	18	151-10-422-00-009000	151-10-422-00-010000	151-10-422-00-011000
24	1.2	0.4	0.5	16	151-10-424-00-009000	151-10-424-00-010000	151-10-424-00-011000
28	1.4	0.4	0.5	14	151-10-428-00-009000	151-10-428-00-010000	151-10-428-00-011000
32	1.6	0.4	0.5	12	151-10-432-00-009000	151-10-432-00-010000	151-10-432-00-011000
24	1.2	0.6	0.7	16	151-10-624-00-009000	151-10-624-00-010000	151-10-624-00-011000
28	1.4	0.6	0.7	14	151-10-628-00-009000	151-10-628-00-010000	151-10-628-00-011000
32	1.6	0.6	0.7	12	151-10-632-00-009000	151-10-632-00-010000	151-10-632-00-011000
36	1.8	0.6	0.7	11	151-10-636-00-009000	151-10-636-00-010000	151-10-636-00-011000
40	2.0	0.6	0.7	10	151-10-640-00-009000	151-10-640-00-010000	151-10-640-00-011000
42	2.1	0.6	0.7	9	151-10-642-00-009000	151-10-642-00-010000	151-10-642-00-011000
48	2.4	0.6	0.7	8	151-10-648-00-009000	151-10-648-00-010000	151-10-648-00-011000
50	2.5	0.6	0.7	8	151-10-650-00-009000	151-10-650-00-010000	151-10-650-00-011000
52	2.6	0.6	0.7	7	151-10-652-00-009000	151-10-652-00-010000	151-10-652-00-011000
50	2.5	0.9	1.0	8	151-10-950-00-009000	151-10-950-00-010000	151-10-950-00-011000
52	2.6	0.9	1.0	7	151-10-952-00-009000	151-10-952-00-010000	151-10-952-00-011000
64	3.2	0.9	1.0	6	151-10-964-00-009000	151-10-964-00-010000	151-10-964-00-011000

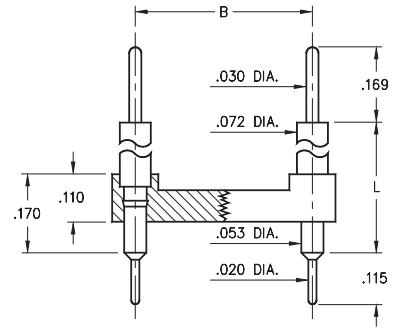
XX=Plating Code See to Right

SPECIFY PLATING CODE XX =	10 ◆			
Pin Plating	10 µ" Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

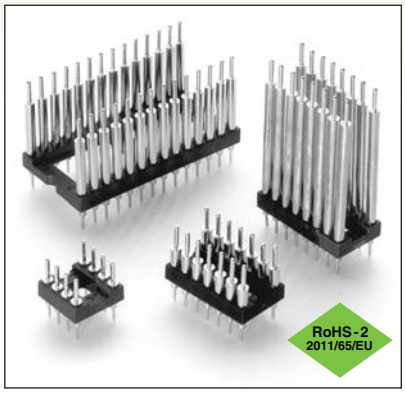
DUAL-IN-LINE HEADERS

SERIES 134 • INTERCONNECT • OPEN FRAME



See page 130 for Insulator Details

- Series 134 DIL Headers combine .030" diameter pins with pluggable .020" diameter solder tails
- Series:
  134...020 uses MM #3402 pins
  134...010 uses MM #3401 pins
  134...050 uses MM #3405 pins
  134...000 uses MM #3400 pins
  134...100 uses MM #3410 pins
  See page 215 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	L = .190	L = .236	L = .315	L = .605	L = 1.070
10	0.5	0.2	0.3	41	134-10-210-00-020000	134-10-210-00-010000	134-10-210-00-050000	134-10-210-00-000000	134-10-210-00-100000
4	0.2	0.3	0.4	102	134-10-304-00-020000	134-10-304-00-010000	134-10-304-00-050000	134-10-304-00-000000	134-10-304-00-100000
6	0.3	0.3	0.4	67	134-10-306-00-020000	134-10-306-00-010000	134-10-306-00-050000	134-10-306-00-000000	134-10-306-00-100000
8	0.4	0.3	0.4	50	134-10-308-00-020000	134-10-308-00-010000	134-10-308-00-050000	134-10-308-00-000000	134-10-308-00-100000
10	0.5	0.3	0.4	40	134-10-310-00-020000	134-10-310-00-010000	134-10-310-00-050000	134-10-310-00-000000	134-10-310-00-100000
14	0.7	0.3	0.4	28	134-10-314-00-020000	134-10-314-00-010000	134-10-314-00-050000	134-10-314-00-000000	134-10-314-00-100000
16	0.8	0.3	0.4	25	134-10-316-00-020000	134-10-316-00-010000	134-10-316-00-050000	134-10-316-00-000000	134-10-316-00-100000
18	0.9	0.3	0.4	22	134-10-318-00-020000	134-10-318-00-010000	134-10-318-00-050000	134-10-318-00-000000	134-10-318-00-100000
20	1.0	0.3	0.4	20	134-10-320-00-020000	134-10-320-00-010000	134-10-320-00-050000	134-10-320-00-000000	134-10-320-00-100000
22	1.1	0.3	0.4	18	134-10-322-00-020000	134-10-322-00-010000	134-10-322-00-050000	134-10-322-00-000000	134-10-322-00-100000
24	1.2	0.3	0.4	16	134-10-324-00-020000	134-10-324-00-010000	134-10-324-00-050000	134-10-324-00-000000	134-10-324-00-100000
28	1.4	0.3	0.4	14	134-10-328-00-020000	134-10-328-00-010000	134-10-328-00-050000	134-10-328-00-000000	134-10-328-00-100000
20	1.0	0.4	0.5	20	134-10-420-00-020000	134-10-420-00-010000	134-10-420-00-050000	134-10-420-00-000000	134-10-420-00-100000
22	1.1	0.4	0.5	18	134-10-422-00-020000	134-10-422-00-010000	134-10-422-00-050000	134-10-422-00-000000	134-10-422-00-100000
24	1.2	0.4	0.5	16	134-10-424-00-020000	134-10-424-00-010000	134-10-424-00-050000	134-10-424-00-000000	134-10-424-00-100000
28	1.4	0.4	0.5	14	134-10-428-00-020000	134-10-428-00-010000	134-10-428-00-050000	134-10-428-00-000000	134-10-428-00-100000
32	1.6	0.4	0.5	12	134-10-432-00-020000	134-10-432-00-010000	134-10-432-00-050000	134-10-432-00-000000	134-10-432-00-100000
24	1.2	0.6	0.7	16	134-10-624-00-020000	134-10-624-00-010000	134-10-624-00-050000	134-10-624-00-000000	134-10-624-00-100000
28	1.4	0.6	0.7	14	134-10-628-00-020000	134-10-628-00-010000	134-10-628-00-050000	134-10-628-00-000000	134-10-628-00-100000
32	1.6	0.6	0.7	12	134-10-632-00-020000	134-10-632-00-010000	134-10-632-00-050000	134-10-632-00-000000	134-10-632-00-100000
36	1.8	0.6	0.7	11	134-10-636-00-020000	134-10-636-00-010000	134-10-636-00-050000	134-10-636-00-000000	134-10-636-00-100000
40	2.0	0.6	0.7	10	134-10-640-00-020000	134-10-640-00-010000	134-10-640-00-050000	134-10-640-00-000000	134-10-640-00-100000
42	2.1	0.6	0.7	9	134-10-642-00-020000	134-10-642-00-010000	134-10-642-00-050000	134-10-642-00-000000	134-10-642-00-100000
48	2.4	0.6	0.7	8	134-10-648-00-020000	134-10-648-00-010000	134-10-648-00-050000	134-10-648-00-000000	134-10-648-00-100000
50	2.5	0.6	0.7	8	134-10-650-00-020000	134-10-650-00-010000	134-10-650-00-050000	134-10-650-00-000000	134-10-650-00-100000
52	2.6	0.6	0.7	7	134-10-652-00-020000	134-10-652-00-010000	134-10-652-00-050000	134-10-652-00-000000	134-10-652-00-100000
50	2.5	0.9	1.0	8	134-10-950-00-020000	134-10-950-00-010000	134-10-950-00-050000	134-10-950-00-000000	134-10-950-00-100000
52	2.6	0.9	1.0	7	134-10-952-00-020000	134-10-952-00-010000	134-10-952-00-050000	134-10-952-00-000000	134-10-952-00-100000
64	3.2	0.9	1.0	6	134-10-964-00-020000	134-10-964-00-010000	134-10-964-00-050000	134-10-964-00-000000	134-10-964-00-100000

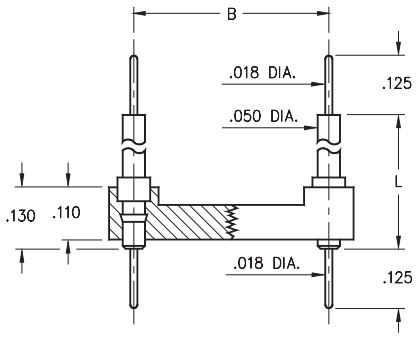
XX=Plating Code See to Right

SPECIFY PLATING CODE XX =	10 ◆			
Pin Plating	10 µ" Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

DUAL-IN-LINE HEADERS

SERIES 142 • INTERCONNECT • OPEN FRAME



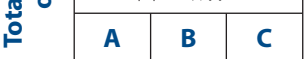
See page 130 for Insulator Details

- Series 142 DIL Headers have double-ended .018" diameter pluggable solder tails
- Used to interconnect PC Boards with spacings of .210", .335", .585" or .835". Series 142 uses MM #4259-1, -2, -3 or -4 pins. See page 212 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	L = .210	L = .335	L = .585	L = .835
6	0.3	0.3	0.4	67	142-XX-306-00-591000	142-XX-306-00-592000	142-XX-306-00-593000	142-XX-306-00-594000
8	0.4	0.3	0.4	50	142-XX-308-00-591000	142-XX-308-00-592000	142-XX-308-00-593000	142-XX-308-00-594000
14	0.7	0.3	0.4	29	142-XX-314-00-591000	142-XX-314-00-592000	142-XX-314-00-593000	142-XX-314-00-594000
16	0.8	0.3	0.4	25	142-XX-316-00-591000	142-XX-316-00-592000	142-XX-316-00-593000	142-XX-316-00-594000
18	0.9	0.3	0.4	22	142-XX-318-00-591000	142-XX-318-00-592000	142-XX-318-00-593000	142-XX-318-00-594000
20	1.0	0.3	0.4	40	142-XX-320-00-591000	142-XX-320-00-592000	142-XX-320-00-593000	142-XX-320-00-594000
24	1.2	0.3	0.4	17	142-XX-324-00-591000	142-XX-324-00-592000	142-XX-324-00-593000	142-XX-324-00-594000
22	1.1	0.4	0.5	14	142-XX-422-00-591000	142-XX-422-00-592000	142-XX-422-00-593000	142-XX-422-00-594000
24	1.2	0.6	0.7	16	142-XX-624-00-591000	142-XX-624-00-592000	142-XX-624-00-593000	142-XX-624-00-594000
28	1.4	0.6	0.7	14	142-XX-628-00-591000	142-XX-628-00-592000	142-XX-628-00-593000	142-XX-628-00-594000
32	1.6	0.6	0.7	12	142-XX-632-00-591000	142-XX-632-00-592000	142-XX-632-00-593000	142-XX-632-00-594000
40	2.0	0.6	0.7	10	142-XX-640-00-591000	142-XX-640-00-592000	142-XX-640-00-593000	142-XX-640-00-594000



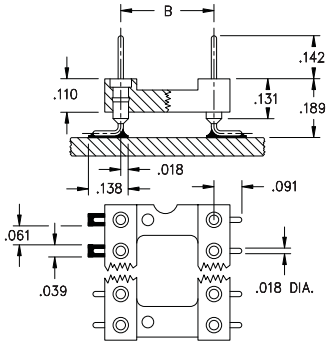
XX=Plating Code See to Right

SPECIFY PLATING CODE XX =	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

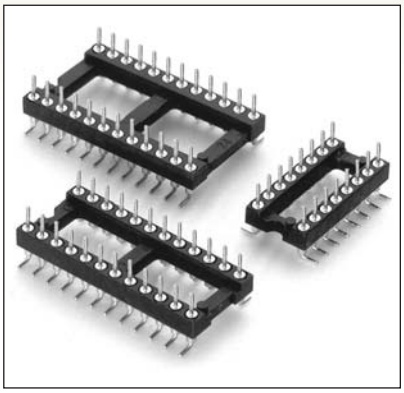
DUAL-IN-LINE HEADERS

SERIES 150 • SURFACE MOUNT, GULL WING • OPEN FRAME



See page 130 for Insulator Details

- Surface mount Gull Wing DIP headers for adapters and board stacking on .100" lead spacing
- Gull wing terminals provide maximum strength and permit easy visual inspection of solder joints
- Series 150 uses MM #3404 pins. See page 212 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins	A	B	C	Quantity per tube	ORDERING INFORMATION
10	0.5	0.2	0.3	40	150-10-210-00-106000
4	0.2	0.3	0.4	102	150-10-304-00-106000
6	0.3	0.3	0.4	67	150-10-306-00-106000
8	0.4	0.3	0.4	50	150-10-308-00-106000
10	0.5	0.3	0.4	40	150-10-310-00-106000
14	0.7	0.3	0.4	29	150-10-314-00-106000
16	0.8	0.3	0.4	25	150-10-316-00-106000
18	0.9	0.3	0.4	22	150-10-318-00-106000
20	1.0	0.3	0.4	20	150-10-320-00-106000
22	1.1	0.3	0.4	18	150-10-322-00-106000
24	1.2	0.3	0.4	16	150-10-324-00-106000
28	1.4	0.3	0.4	14	150-10-328-00-106000
20	1.0	0.4	0.5	20	150-10-420-00-106000
22	1.1	0.4	0.5	18	150-10-422-00-106000
24	1.2	0.4	0.5	16	150-10-424-00-106000
28	1.4	0.4	0.5	14	150-10-428-00-106000
32	1.6	0.4	0.5	12	150-10-432-00-106000
24	1.2	0.6	0.7	16	150-10-624-00-106000
28	1.4	0.6	0.7	14	150-10-628-00-106000
32	1.6	0.6	0.7	12	150-10-632-00-106000
36	1.8	0.6	0.7	11	150-10-636-00-106000
40	2.0	0.6	0.7	10	150-10-640-00-106000
42	2.1	0.6	0.7	9	150-10-642-00-106000
48	2.4	0.6	0.7	8	150-10-648-00-106000
50	2.5	0.6	0.7	8	150-10-650-00-106000
52	2.6	0.6	0.7	7	150-10-652-00-106000
50	2.5	0.9	1.0	8	150-10-950-00-106000
52	2.6	0.9	1.0	7	150-10-952-00-106000
64	3.2	0.9	1.0	6	150-10-964-00-106000



RoHS-2 2011/65/EU

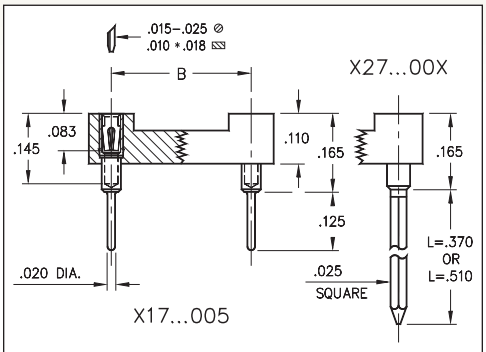
See page 264 for coplanarity information

SPECIFY PLATING CODE XX =	10 ◆			
Pin Plating	10 µ" Au			

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

DUAL-IN-LINE SOCKETS

SERIES 117, 127, 217, 227, 317, 327 • SHRINK DIP, SOLDER TAIL & WRAPOST



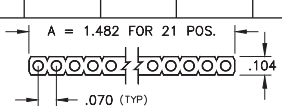
See page 132 for Insulator Details

- High density DIP sockets and strips for devices featuring .070" lead spacing
- Solder tails use MM #1802 receptacles, See page 169 for details. Wraposts use MM #1702-2 or 1703-3 receptacles, See page 198 for details
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Solder Tail	L = .370 (2 Level Wrapost)	L = .510 (3 Level Wrapost)
					OPEN FRAME DIP SOCKET		
16	0.572	0.3	0.39	35	117-XX-316-41-005000	127-XX-316-41-002000	127-XX-316-41-003000
28	0.992	0.4	0.49	20	117-XX-428-41-005000	127-XX-428-41-002000	127-XX-428-41-003000
30	1.062	0.4	0.49	18	117-XX-430-41-005000	127-XX-430-41-002000	127-XX-430-41-003000
48	1.692	0.4	0.49	12	117-XX-448-41-005000	127-XX-448-41-002000	127-XX-448-41-003000
20	0.712	0.6	0.69	28	117-XX-620-41-005000	127-XX-620-41-002000	127-XX-620-41-003000
28	0.992	0.6	0.69	20	117-XX-628-41-005000	127-XX-628-41-002000	127-XX-628-41-003000
40	1.412	0.6	0.69	14	117-XX-640-41-005000	127-XX-640-41-002000	127-XX-640-41-003000
42	1.482	0.6	0.69	13	117-XX-642-41-005000	127-XX-642-41-002000	127-XX-642-41-003000
48	1.692	0.6	0.69	11	117-XX-648-41-005000	127-XX-648-41-002000	127-XX-648-41-003000
52	1.832	0.6	0.69	11	117-XX-652-41-005000	127-XX-652-41-002000	127-XX-652-41-003000
56	1.972	0.6	0.69	10	117-XX-656-41-005000	127-XX-656-41-002000	127-XX-656-41-003000
64	2.252	0.6	0.69	8	117-XX-664-41-005000	127-XX-664-41-002000	127-XX-664-41-003000
68	2.392	0.6	0.69	8	117-XX-668-41-005000	127-XX-668-41-002000	127-XX-668-41-003000
64	2.252	0.75	0.84	8	117-XX-764-41-005000	127-XX-764-41-002000	127-XX-764-41-003000
					CLOSED FRAME DIP SOCKET		
64	2.252	0.75	0.84	8	217-XX-764-41-005000	227-XX-764-41-002000	227-XX-764-41-003000
					SINGLE ROW STRIP SOCKET If desired, we will supply any length up to 21 pins.		
21	1.482	---	.104	-	317-XX-121-41-005000	327-XX-121-41-002000	327-XX-121-41-003000



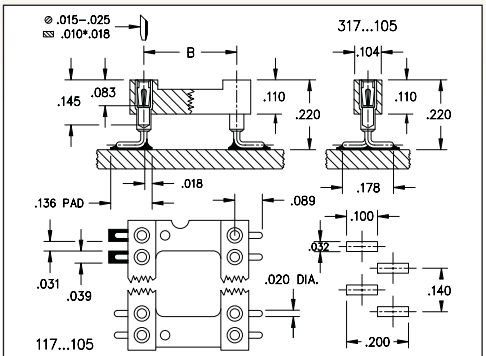
XX=Plating Code See to Right

SPECIFY PLATING CODE XX=	91	93	41 ◆	43 ◆
Sleeve (Pin)	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn	200 µ" Sn
Contact (Clip)	10 µ" Au	30 µ" Au	10 µ" Au	30 µ" Au

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

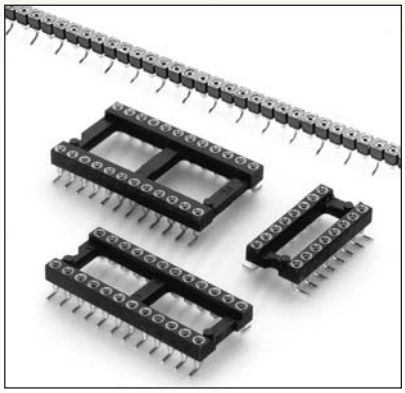
DUAL-IN-LINE SOCKETS

SERIES 117, 317 • GULL WING SHRINK DIP SOCKETS & STRIPS, SMT SOLDER TAIL



See page 132 for Insulator Details

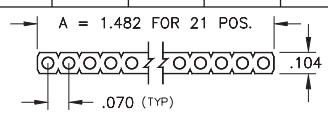
- Surface mount Gull Wing DIP & strip sockets for devices featuring .070" lead spacing
- Gull wing terminals provide maximum strength and permit easy visual inspection of solder joints
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Series 117 and 317 use MM #1802 pins. See page 169 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins	A	B	C	Quantity per tube	ORDERING INFORMATION
16	0.572	0.3	0.39	35	117-XX-316-41-105000
28	0.992	0.4	0.49	20	117-XX-428-41-105000
30	1.062	0.4	0.49	18	117-XX-430-41-105000
48	1.692	0.4	0.49	12	117-XX-448-41-105000
20	0.712	0.6	0.69	28	117-XX-620-41-105000
28	0.992	0.6	0.69	20	117-XX-628-41-105000
40	1.412	0.6	0.69	14	117-XX-640-41-105000
42	1.482	0.6	0.69	13	117-XX-642-41-105000
48	1.692	0.6	0.69	12	117-XX-648-41-105000
52	1.832	0.6	0.69	11	117-XX-652-41-105000
56	1.972	0.6	0.69	10	117-XX-656-41-105000
64	2.252	0.6	0.69	9	117-XX-664-41-105000
68	2.392	0.6	0.69	8	117-XX-668-41-105000
64	2.252	0.75	0.84	8	117-XX-764-41-105000

XX=Plating Code See Below

RoHS-2 2011/65/EU



SINGLE ROW STRIP SOCKET

If desired, we will supply any length up to 21 pins.

21	1.482	---	.104	-	317-XX-121-41-105000

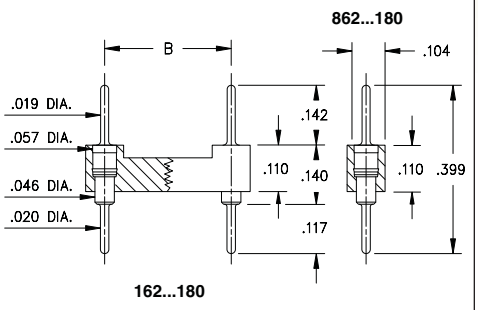
See page 264 for coplanarity information

SPECIFY PLATING CODE XX=		91			41 ◆	43 ◆	
Sleeve (Pin)		200 µ" Sn/Pb			200 µ" Sn	200 µ" Sn	
Contact (Clip)		10 µ" Au			10 µ" Au	30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

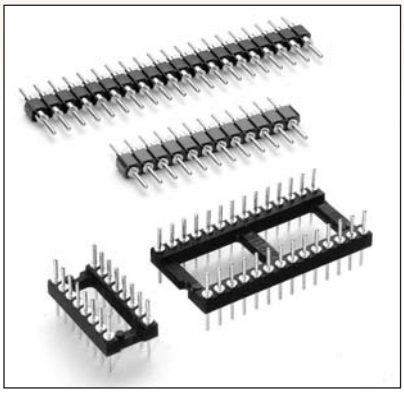
DUAL-IN-LINE HEADERS

SERIES 162, 862 • SHRINK DIP HEADER AND STRIPS, SOLDER TAIL



See page 132 for Insulator Details

- High density DIP headers & strips for adapters and board stacking applications with .070" lead spacing
- Series 162 DIP headers and Series 862 strip headers use MM #6218 pins. See page 208 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details

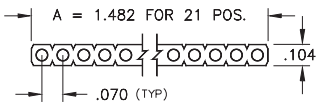


ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	Ordering Information
16	0.572	0.3	0.39	35	162-XX-316-00-180000
28	0.992	0.4	0.49	20	162-XX-428-00-180000
30	1.062	0.4	0.49	18	162-XX-430-00-180000
48	1.692	0.4	0.49	12	162-XX-448-00-180000
20	0.712	0.6	0.69	28	162-XX-620-00-180000
28	0.992	0.6	0.69	20	162-XX-628-00-180000
40	1.412	0.6	0.69	14	162-XX-640-00-180000
42	1.482	0.6	0.69	13	162-XX-642-00-180000
48	1.692	0.6	0.69	12	162-XX-648-00-180000
52	1.832	0.6	0.69	11	162-XX-652-00-180000
56	1.972	0.6	0.69	10	162-XX-656-00-180000
64	2.252	0.6	0.69	9	162-XX-664-00-180000
68	2.392	0.6	0.69	8	162-XX-668-00-180000
64	2.252	0.75	0.84	8	162-XX-764-00-180000

XX=Plating Code See Below

RoHS-2 2011/65/EU



SINGLE ROW STRIP HEADER

If desired, we will supply any length up to 21 pins.

21	1.482	---	.104	---

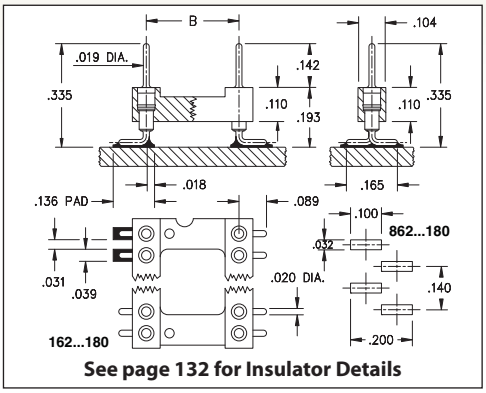
862-XX-121-00-180000

SPECIFY PLATING CODE XX =	10 ◆	90	40 ◆
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

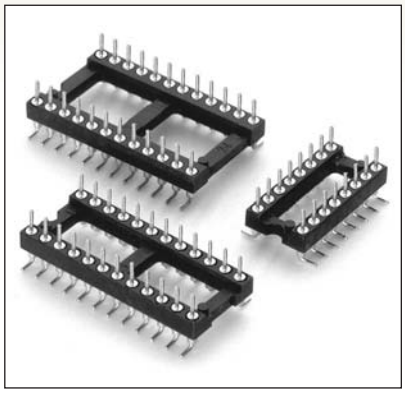
DUAL-IN-LINE HEADERS

SERIES 162, 862 • GULL WING SHRINK DIP HEADERS & STRIPS, SMT SOLDER TAIL



See page 132 for Insulator Details

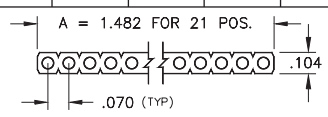
- Surface mount Gull Wing DIP headers & strips for adapters and board stacking applications with .070" lead spacing
- Gull wing terminals provide maximum strength and permit easy visual inspection of solder joints
- Series 162 and Series 862 use MM #6218 pins. See page 208 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Total number of pins	A	B	C	Quantity per tube	ORDERING INFORMATION
16	0.572	0.3	0.39	35	162-10-316-30-180000
28	0.992	0.4	0.49	20	162-10-428-30-180000
30	1.062	0.4	0.49	18	162-10-430-30-180000
48	1.692	0.4	0.49	12	162-10-448-30-180000
20	0.712	0.6	0.69	28	162-10-620-30-180000
28	0.992	0.6	0.69	20	162-10-628-30-180000
40	1.412	0.6	0.69	14	162-10-640-30-180000
42	1.482	0.6	0.69	13	162-10-642-30-180000
48	1.692	0.6	0.69	12	162-10-648-30-180000
52	1.832	0.6	0.69	11	162-10-652-30-180000
56	1.972	0.6	0.69	10	162-10-656-30-180000
64	2.252	0.6	0.69	9	162-10-664-30-180000
68	2.392	0.6	0.69	8	162-10-668-30-180000
64	2.252	0.75	0.84	8	162-10-764-30-180000

XX=Plating Code See Below

RoHS-2 2011/65/EU



SINGLE ROW STRIP SOCKET

If desired, we will supply any length up to 21 pins.

21	1.482	---	.104	---	862-10-121-30-180000

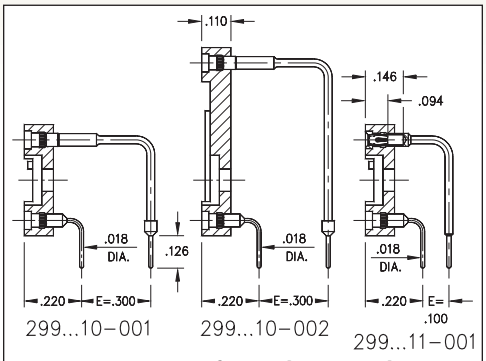
See page 264 for coplanarity information

SPECIFY PLATING CODE XX =	10 ◆			
Pin Plating	10 µ" Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

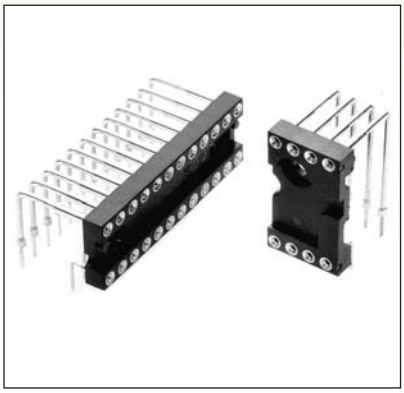
DUAL-IN-LINE SOCKETS

SERIES 299 • RIGHT ANGLE MOUNT • CLOSED FRAME



See page 131 for Insulator Details

- Ideal for mounting components, such as LED displays, where the face must be parallel to the PCB surface
- Sockets have solder tail termination and are available with either .300" (standard) or .100" row spacing
- Series 299 uses MM #1103/0903, #1103/1610 or #1103/0904 pins. See pages 166 & 167 for details
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Total number of pins	A	B	C	Quantity per tube	E = .300	E= .100
6	0.3	0.3	0.4		299-XX-306-10-001000	299-XX-306-11-001000
8	0.4	0.3	0.4		299-XX-308-10-001000	299-XX-308-11-001000
10	0.5	0.3	0.4		299-XX-310-10-001000	299-XX-310-11-001000
12	0.6	0.3	0.4	33	299-XX-312-10-001000	299-XX-312-11-001000
14	0.7	0.3	0.4	29	299-XX-314-10-001000	299-XX-314-11-001000
16	0.8	0.3	0.4	25	299-XX-316-10-001000	299-XX-316-11-001000
18	0.9	0.3	0.4	22	299-XX-318-10-001000	299-XX-318-11-001000
20	1.0	0.3	0.4	20	299-XX-320-10-001000	299-XX-320-11-001000
24	1.2	0.3	0.4	16	299-XX-324-10-001000	299-XX-324-11-001000
8	0.4	0.6	0.7	50	299-XX-608-10-002000	
10	0.5	0.6	0.7	40	299-XX-610-10-002000	
12	0.6	0.6	0.7	34	299-XX-612-10-002000	
14	0.7	0.6	0.7	28	299-XX-614-10-002000	
16	0.8	0.6	0.7	25	299-XX-616-10-002000	
18	0.9	0.6	0.7	22	299-XX-618-10-002000	
20	1.0	0.6	0.7	20	299-XX-620-10-002000	
22	1.1	0.6	0.7	18	299-XX-622-10-002000	
24	1.2	0.6	0.7	16	299-XX-624-10-002000	
26	1.3	0.6	0.7	15	299-XX-626-10-002000	
28	1.4	0.6	0.7	14	299-XX-628-10-002000	
30	1.5	0.6	0.7	13	299-XX-630-10-002000	
32	1.6	0.6	0.7	12	299-XX-632-10-002000	
36	1.8	0.6	0.7	11	299-XX-636-10-002000	
40	2.0	0.6	0.7	10	299-XX-640-10-002000	

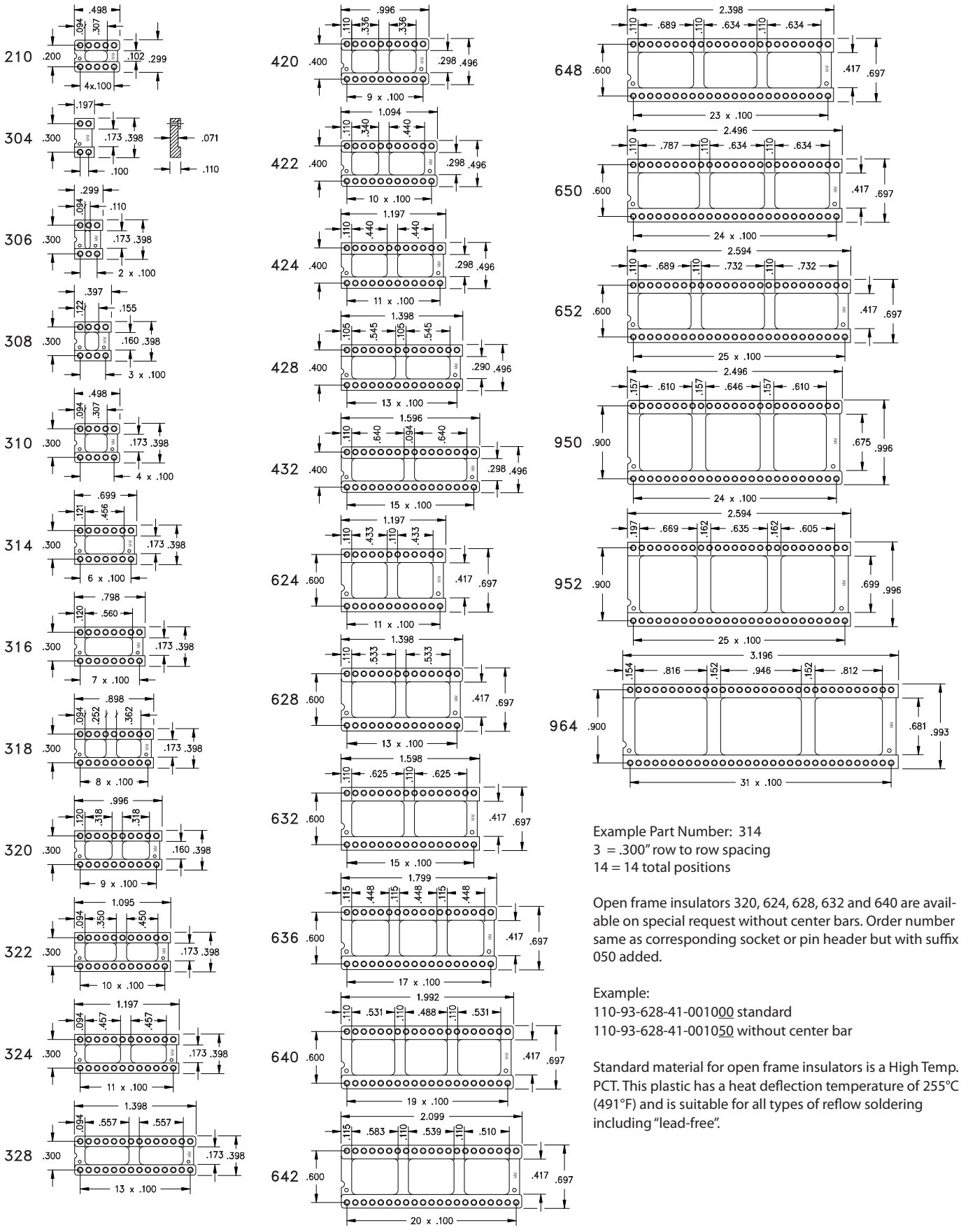
RoHS-2 2011/65/EU

XX=Plating Code See Below

SPECIFY PLATING CODE XX =			93			43 ◆	
Sleeve (Pin)			200 µ" Sn/Pb			200 µ" Sn	
Contact (Clip)			30 µ" Au			30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

DUAL-IN-LINE INSULATORS
STANDARD OPEN FRAME



Example Part Number: 314
3 = .300" row to row spacing
14 = 14 total positions

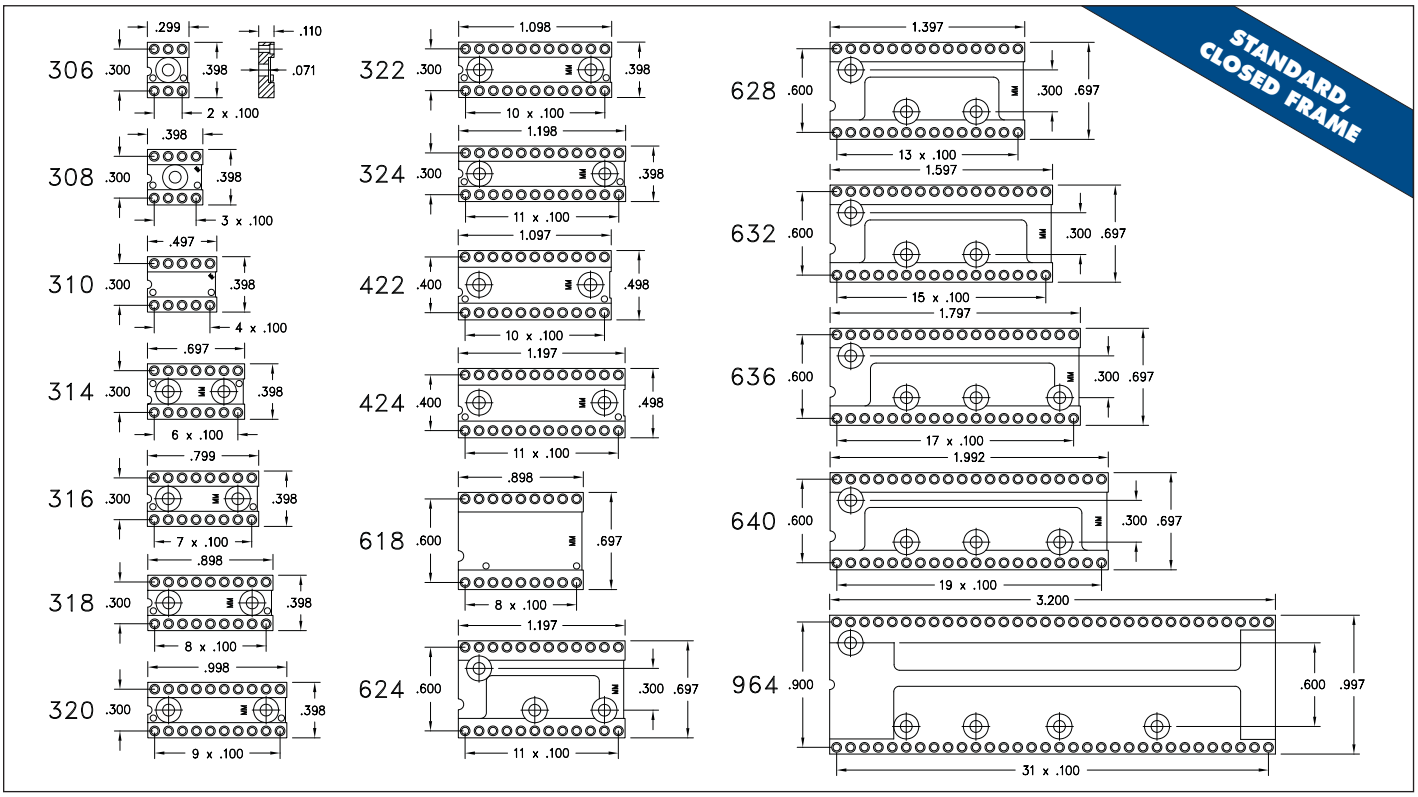
Open frame insulators 320, 624, 628, 632 and 640 are available on special request without center bars. Order number same as corresponding socket or pin header but with suffix 050 added.

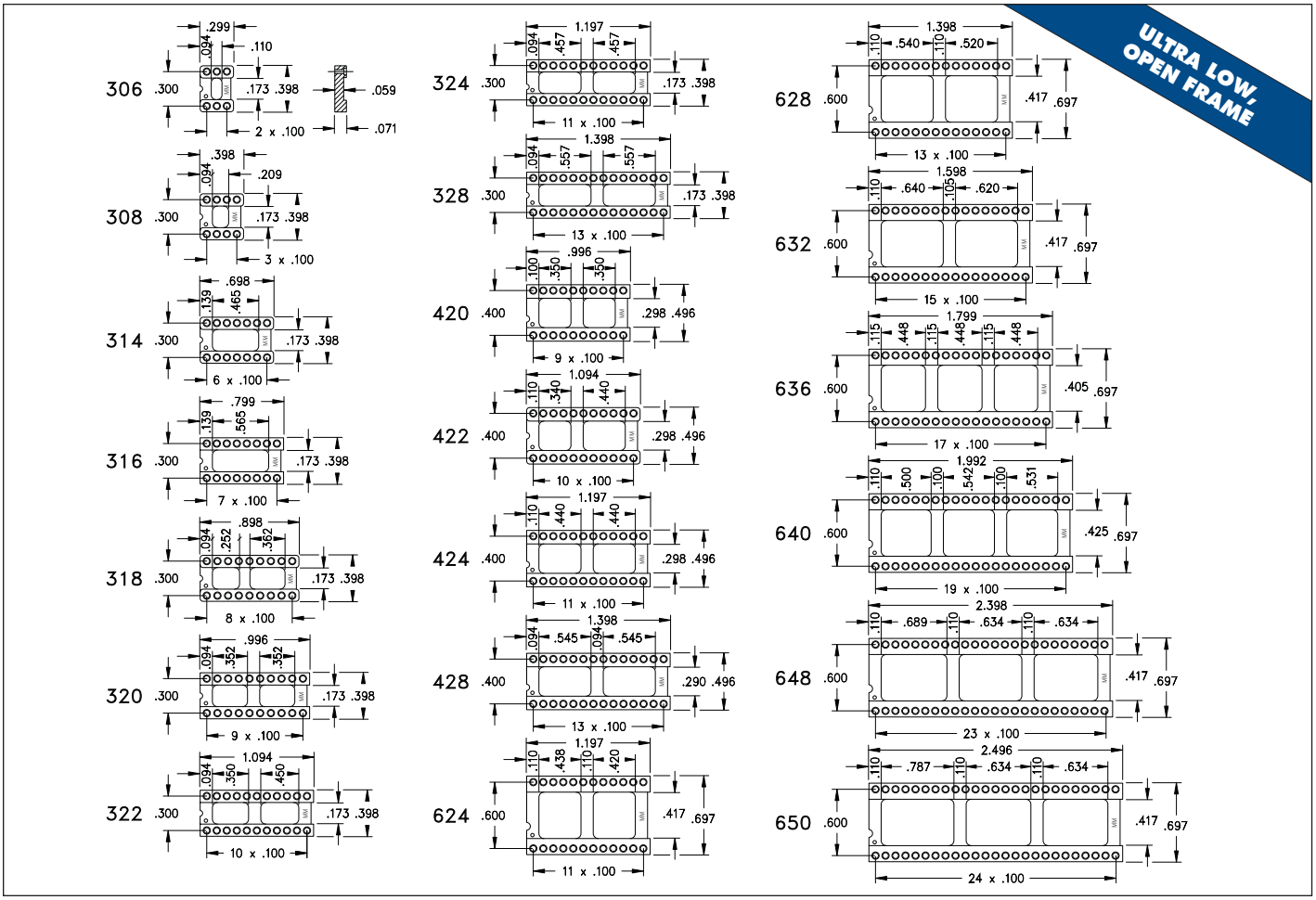
Example:
110-93-628-41-001000 standard
110-93-628-41-001050 without center bar

Standard material for open frame insulators is a High Temp. PCT. This plastic has a heat deflection temperature of 255°C (491°F) and is suitable for all types of reflow soldering including "lead-free".

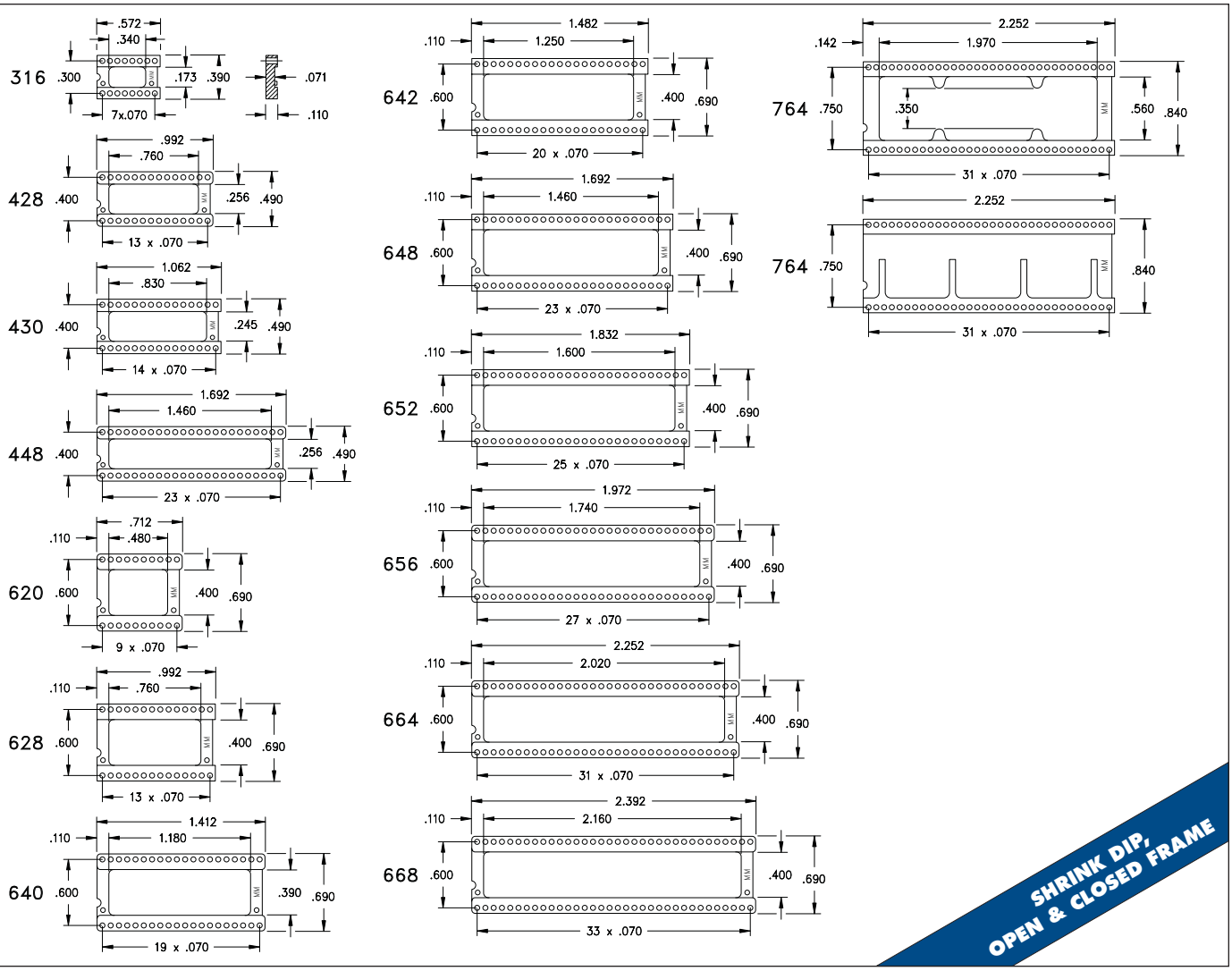
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

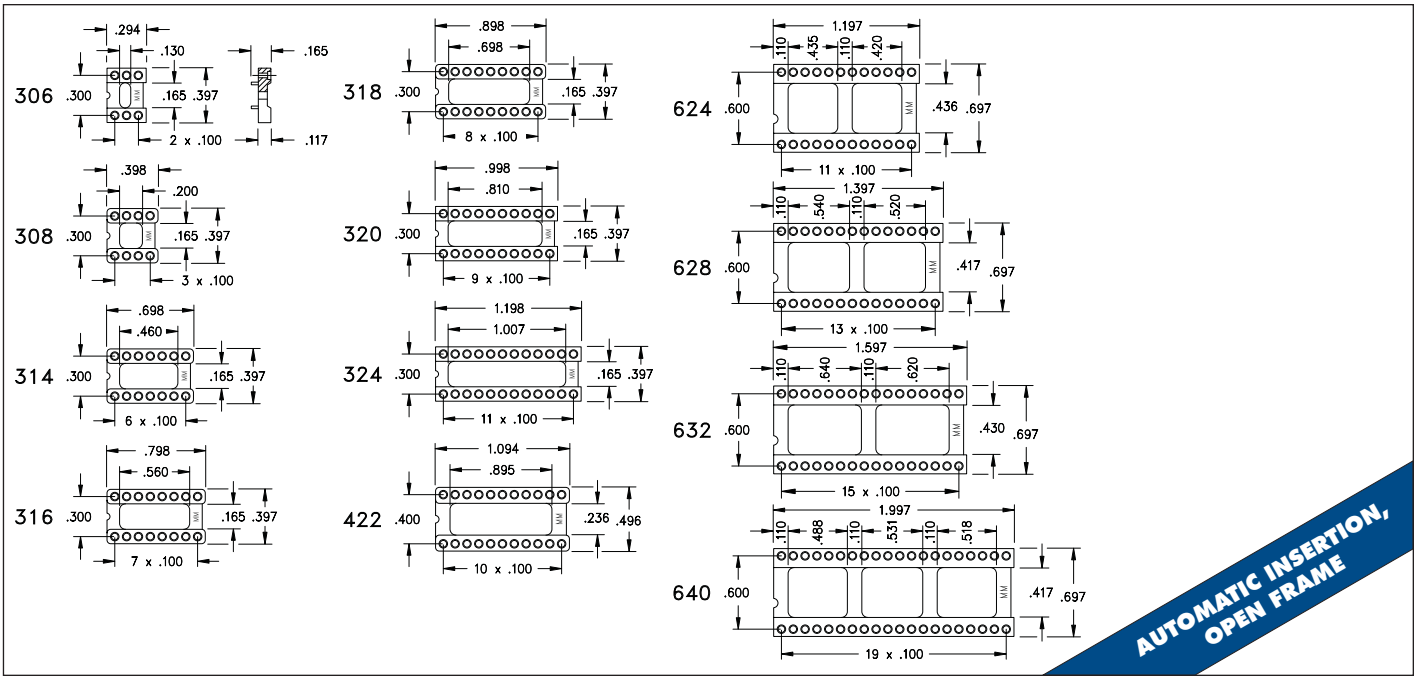
DUAL-IN-LINE INSULATORS
STANDARD, CLOSED FRAME • ULTRA LOW PROFILE, OPEN FRAME





DUAL-IN-LINE INSULATORS
SHRINK DIP, OPEN & CLOSED FRAME • AUTOMATIC INSERTION, OPEN FRAME





DUAL-IN-LINE SOCKETS

SERIES 296, 299, 594 • DISPLAY SOCKETS

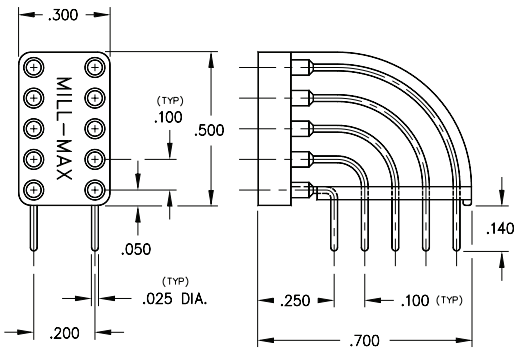
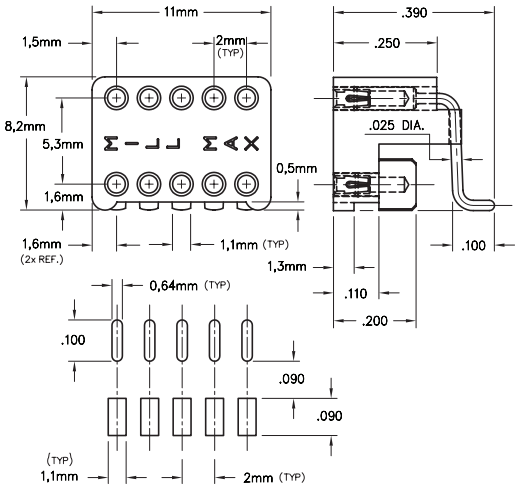


FIG. 1



FOOTPRINT

FIG. 2

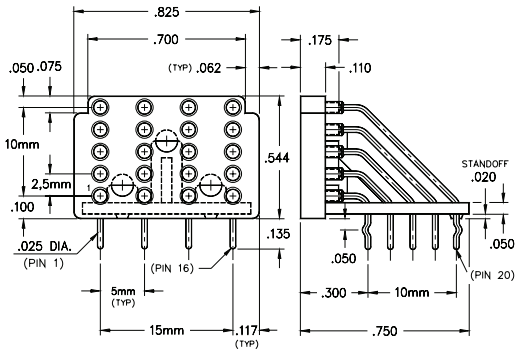
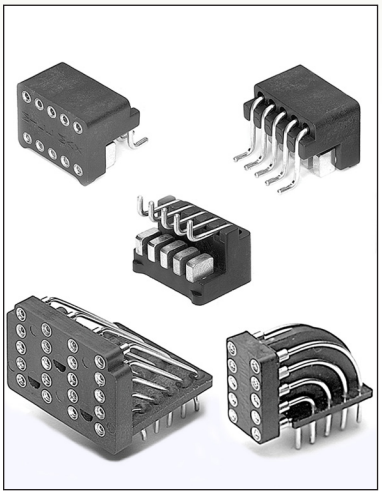


FIG. 3

- Series 296, 299 and 594 display sockets are used to mount dot matrix and 7-segment LED displays at the edge of and perpendicular to a printed circuit board. This positions the display directly behind the translucent front panel of the equipment
- Series 299 & 594 are through-hole mount and can be wave or intrusive reflow soldered
- Series 296 is surface mount and can be supplied on carrier tape for automated "pick 'n place" assembly
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- See also page 129 for Right Angle DIP Sockets
- Insulators are high temp. Nylon 46, suitable for all soldering processes including "lead-free"
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

FIG. 1	**Series 299...001**	**10 Pin Vertical Display Socket**
	Discrete Sockets	
	299-99-210-12-001800 ← **Plating Code**	
FIG. 2	**Series 296...691**	**10 Pin Horizontal Display Socket**
	Discrete Sockets	
	296-XX-010-30-691800 ← **Plating Code**	
	Series 296...692	**10 Pin Horizontal Display Socket**
	Supplied on 24mm wide carrier tape per EIA-481: 450 per 13" reel	
	296-XX-010-30-692800 ← **Plating Code**	
FIG. 3	**Series 594...007**	**20 Pin Vertical Display Socket**
	Discrete Sockets	
	594-XX-020-01-007032 ← **Plating Code**	

RoHS-2 2011/65/EU

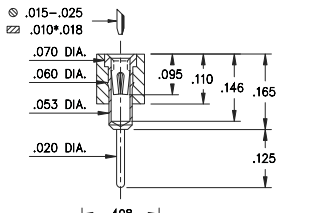
XX=Plating Code See Below

SPECIFY PLATING CODE XX=				99			44 ◆
Sleeve (Pin)				200 µ" Sn/Pb			200 µ" Sn
Contact (Clip)				200 µ" Sn/Pb			200 µ" Sn

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

DUAL-IN-LINE SOCKETS

SERIES 110, 410 • RELAY AND ZIG-ZAG SOCKETS



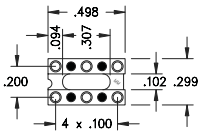


Fig. 1

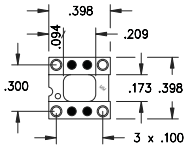


Fig. 2

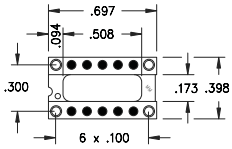


Fig. 3

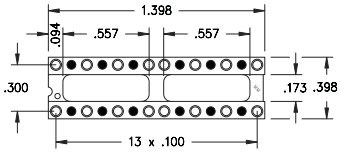
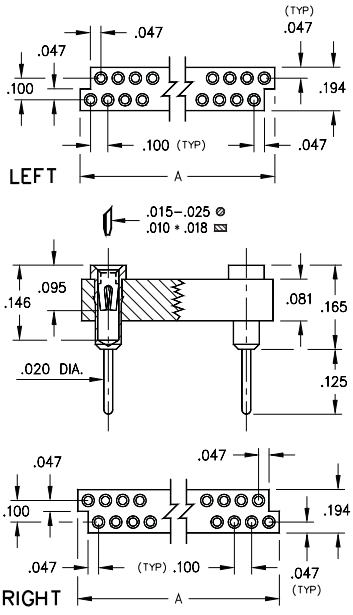
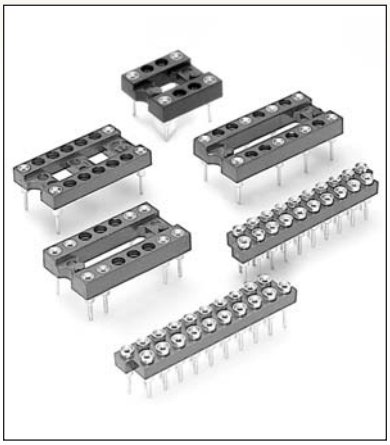


Fig. 4

○ = Loaded Position ● = Empty Position



- Relay sockets accept devices with I/O pins on .100" grid
- Additional Relay DIP socket patterns are available on Page 135
- Zig-Zag strip sockets are suitable for IC's and memory chips with staggered double row patterns
- Series 110 and 410 use MM #1001 receptacles. See page 165 for details
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Selectively Loaded Sockets For Dual-In-Line Relays

	Number of Pins	Ordering Information
FIG. 1	6	110-XX-210-10-001000
FIG. 2	4	110-XX-308-10-001000
FIG. 3	4	110-XX-314-10-001000
FIG. 4	16	110-XX-328-10-001000

Staggered (Zig-Zag) Strip Sockets

Dim 'A'	Number of Pins	Insulator Body	Ordering Information
0.747	14	Left, Stackable	410-XX-214-10-001000
0.747	14	Right, Stackable	410-XX-214-10-002000
0.847	16	Left, Stackable	410-XX-216-10-001000
0.847	16	Right, Stackable	410-XX-216-10-002000
1.047	20	Left, Stackable	410-XX-220-10-001000
1.047	20	Right, Stackable	410-XX-220-10-002000
1.247	24	Left, Stackable	410-XX-224-10-001000
1.247	24	Right, Stackable	410-XX-224-10-002000
1.447	28	Left, Stackable	410-XX-228-10-001000
1.447	28	Right, Stackable	410-XX-228-10-002000

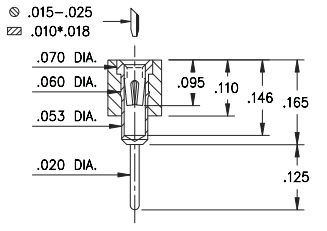
XX=Plating Code See Below

RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX=	13 ◆		93			43 ◆	
Sleeve (Pin)	10 µ" Au		200 µ" Sn/Pb			200 µ" Sn	
Contact (Clip)	30 µ" Au		30 µ" Au			30 µ" Au	

DUAL-IN-LINE SOCKETS

SERIES 110 • SELECTIVELY LOADED RELAY DIP SOCKET, SOLDER TAIL



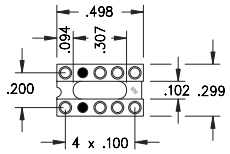


Fig. 1

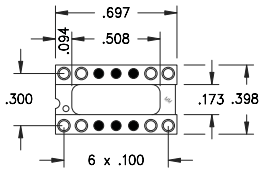


Fig. 2

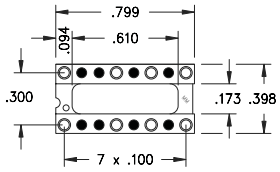


Fig. 3

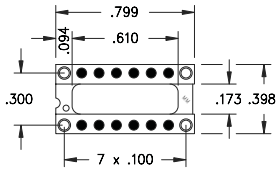


Fig. 4

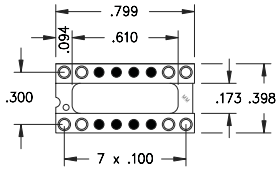


Fig. 5

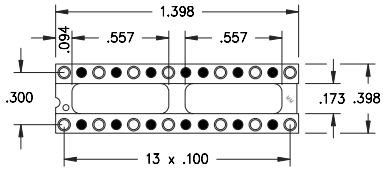


Fig. 6

○ = Loaded Position ● = Empty Position

- Relay sockets accept devices with I/O pins on .100" grid
- Additional Relay DIP socket patterns are available on Page 134
- Series 110 use MM #1001 receptacles. See page 165 for details
- Hi-Rel, 4-finger BeCu #30 contact is rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

FIG. 1	**Series 110...002**	**8 Position Relay Socket**
	110-XX-210-10-002000	
FIG. 2	**Series 110...002**	**8 Position Relay Socket**
	110-XX-314-10-002000	
FIG. 3	**Series 110...003**	**8 Position Relay Socket**
	110-XX-316-10-003000	
FIG. 4	**Series 110...004**	**4 Position Relay Socket**
	110-XX-316-10-004000	
FIG. 5	**Series 110...005**	**8 Position Relay Socket**
	110-XX-316-10-005000	
FIG. 6	**Series 110...002**	**14 Position Relay Socket**
	110-XX-328-10-002000	

XX=Plating Code See Below

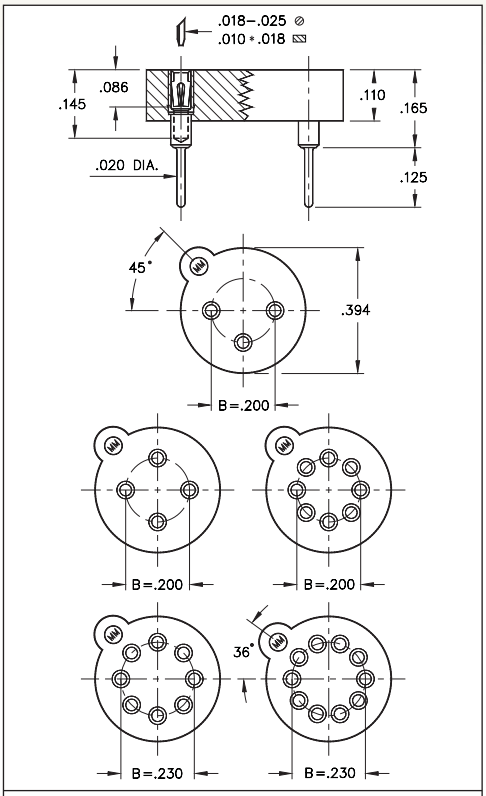
RoHS-2 2011/65/EU

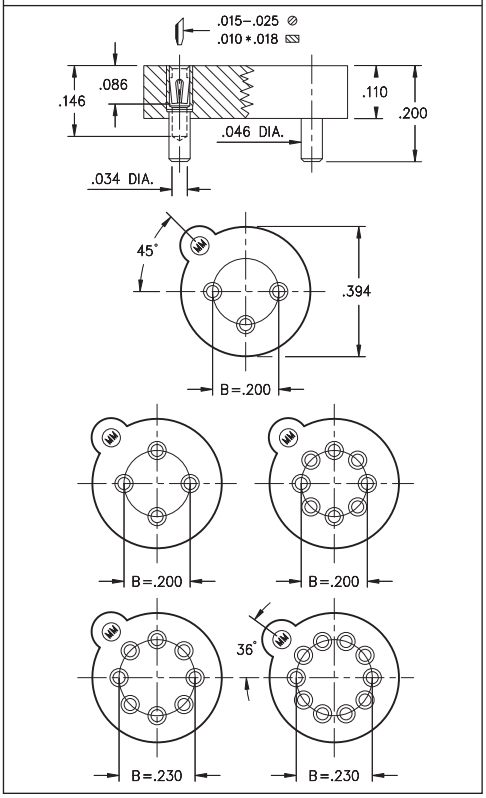
SPECIFY PLATING CODE XX=	13 ◆		93			43 ◆	
Sleeve (Pin)	10 µ" Au		200 µ" Sn/Pb			200 µ" Sn	
Contact (Clip)	30 µ" Au		30 µ" Au			30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

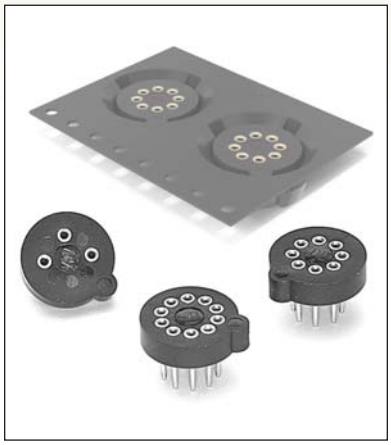
TRANSISTOR SOCKETS

SERIES 917 • SURFACE AND THROUGH-HOLE MOUNT





- Series 917 TO package sockets are available in 3, 4, 8 and 10 positions
- Two 8 pin versions feature pin centers on .200" or .230" circle
- Series 917...005 use MM #1705 and MM #1802 pins, see pages 168 and 169 for details. Receptacles use Hi-Rel, 4 finger #30 contact rated at 3 amps. See page 253 for details
- Series 917...001 uses MM #1701 pins. See page 171 for details. Receptacles use Hi-Rel, 4 finger #30 contact rated at 3 amps. See page 253 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations
- For Electrical, Mechanical and Environmental Data, see page 264 for details



ORDERING INFORMATION

Transistor Sockets (Through-Hole Mount)

Type	Circle Dia.	Number of Pins	Ordering Information
TO-5	0.200	3	917-XX-103-41-005000
TO-5	0.200	4	917-XX-104-41-005000
TO-5	0.200	8	917-XX-108-41-005000
TO-100	0.230	8	917-XX-208-41-005000
TO-100	0.230	10	917-XX-210-41-005000

Transistor Sockets (Surface Mount)

Type	Circle Dia.	Number of Pins	Ordering Information
TO-5	0.200	3	917-XX-103-41-001000
TO-5	0.200	4	917-XX-104-41-001000
TO-5	0.200	8	917-XX-108-41-001000
TO-100	0.230	8	917-XX-208-41-001000
TO-100	0.230	10	917-XX-210-41-001000

Tape and Reel Packaging: (Surface Mount ONLY)

Ordering Information: 917-XX-XXX-41-001799

Available on 24mm wide tape, 730 parts per 13" reel

XX=Plating Code See Below

RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX=		91	93		41 ◆	43 ◆	
Sleeve (Pin)		200 µ"Sn/Pb	200 µ"Sn/Pb		200 µ"Sn	200 µ"Sn	
Contact (Clip)		10 µ"Au	30 µ"Au		10 µ"Au	30 µ"Au	

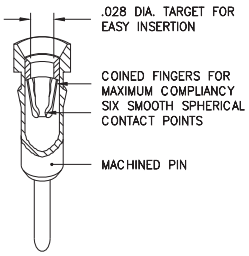
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

PIN GRID ARRAY SOCKETS

TECHNICAL SPECIFICATIONS

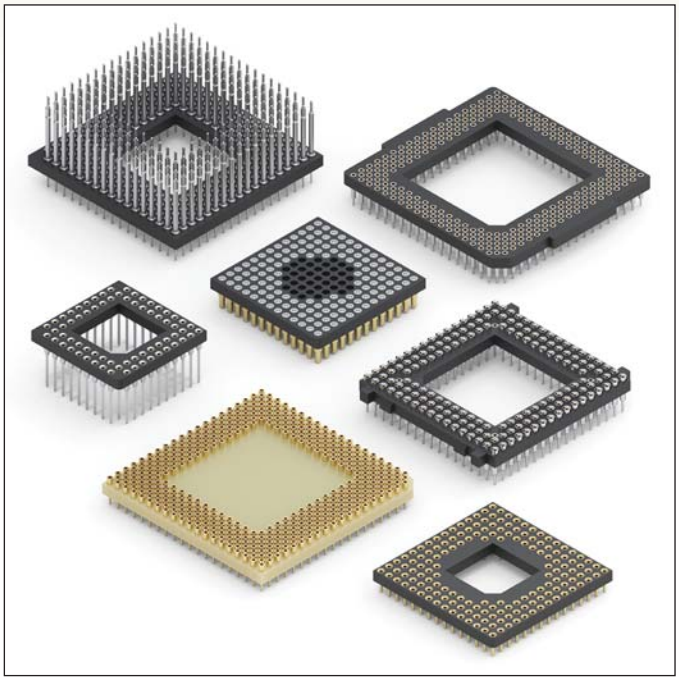
Pin grid array sockets are designed to accept high pin count IC's. They use low force 6-finger contacts to ease insertion / extraction of the device. Standard low force (MM #32) contact is used for pin counts up to 150, ultra-low force (MM #35) contact is recommended for 150 pins or more but less than 250 pins. The "ultra lite" (MM #43) is recommended for 250 pins or more.

CONTACT DETAIL



PGA sockets all have precision-machined pins. This offers the lowest possible profile. The closed bottom design also eliminates flux and solder contamination, and the pins are in-line with contact entry.

Insulator bodies are molded from high temperature PCT polyester suitable for all forms of soldering including wave, infra-red reflow and vapor phase.



TECHNICAL SPECIFICATIONS
Materials

Insulator body:
- High temperature glass-filled thermoplastic polyester (PCT)
- Heat deflection temperature (HDT @ 264 PSI) = 255°C (490°F)
- Self-extinguishing, rated UL94V-0

Receptacle (Sleeve):
- Screw machined brass (ASTM-B16-00), plated 10 μ" gold, 200 μ" tin or 200 μ" tin-lead (SnPb 90/10) over 100 μ" nickel.

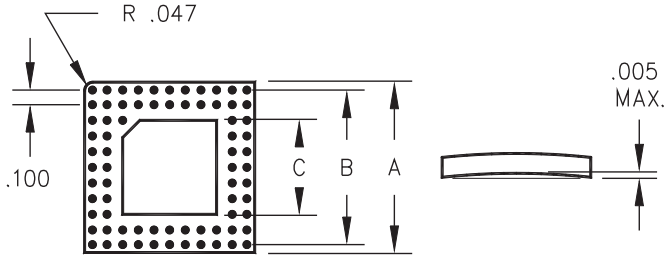
Pin:
- Screw machined brass (ASTM-B16-00), plated 10 μ" gold, 200 μ" tin or 200 μ" tin-lead (SnPb 90/10) over 100 μ" nickel.

Contact (clip):
- Stamped beryllium-copper (ASTM-B194-01), plated 10 μ" or 30 μ" gold over 50 μ" nickel.

Mechanical Data
- Insertion characteristics:
- Measured with a polished steel gauge .018" diameter
- Low force MM#32 (01 suffix) typical insertion force 50 grams
  typical extraction force 30 grams
- Ultra-low force MM#35 (02 suffix) typical insertion force 25 grams
  typical extraction force 15 grams
- "Ultra lite" MM#43 (03 suffix) typical insertion force 12.5 grams
  typical extraction force 7.5 grams
- Mechanical life: 100 cycles min.

Electrical & Environmental Data
- See general specifications on page 264.

DIMENSIONS OF PGA SOCKET INSULATORS



DIMENSIONS **A, B,** and **C** can be calculated as follows:

N1 = GRID SIZE (# of pins per side, outer most row only for interstitial patterns)

N2 = WINDOW SIZE

A = N1 X .100"

B = (N1-1) X .100"

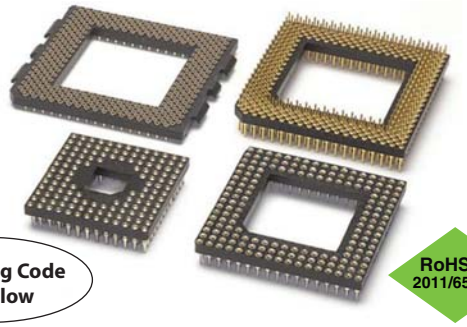
C = (N2 X .100") - .016"

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

PIN GRID ARRAY SOCKETS

SERIES 510,511,513,514,515,518,522,523 • .100" AND INTERSTITIAL GRID • SURFACE MOUNT, THROUGH-HOLE AND WIREWRAP

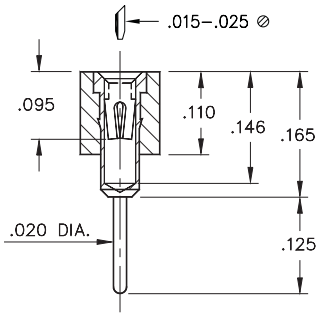
- Series 510, 511, 514, 515, 522 and 523 PGA sockets are available on .100" centers
- Series 513 and 518 PGA sockets are available for Interstitial patterns
- Choice of three low force clips to cover all applications
- High temperature PCT polyester insulator material suitable for all forms of soldering including lead-free
- For Electrical, Mechanical and Environmental Data, see page 137 for details



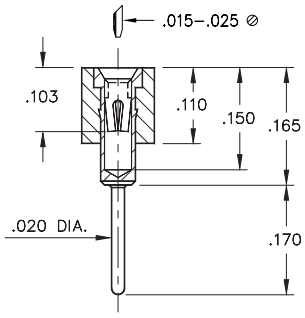
XX=Plating Code See Below

RoHS-2 2011/65/EU

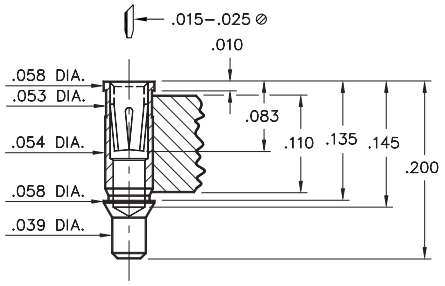
SERIES 510 (Standard Solder Tail)



SERIES 511 (Long Solder Tail)

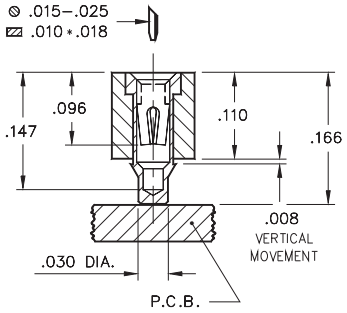


SERIES 513 (SMT Receptacle)

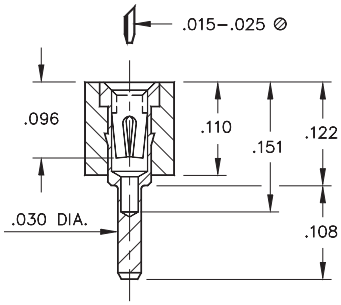


Interstitial Patterns Only

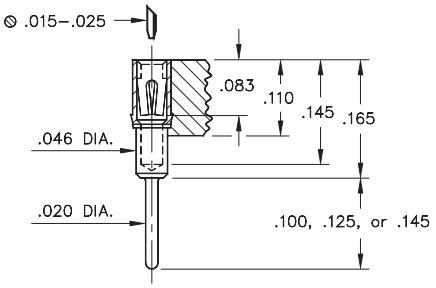
SERIES 514 (SMT Receptacle)



SERIES 515 (Low Profile Solder Tail)

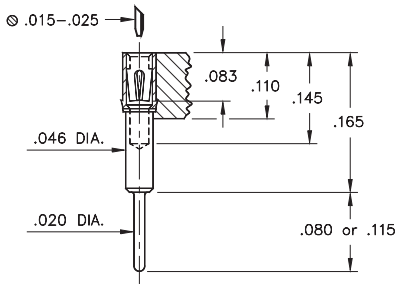


SERIES 518 (Solder Tail No, Heatsink Tabs)



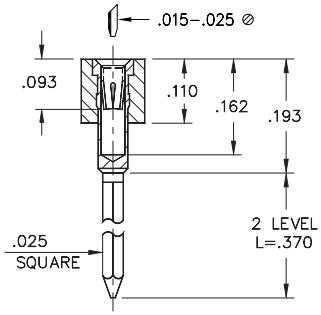
Interstitial Patterns Only

SERIES 518 (Solder Tail w/ Heatsink Tabs)

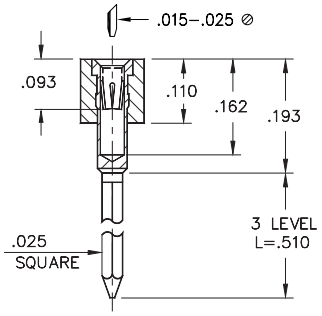


Interstitial Patterns Only

SERIES 522 (2 Level Wrapost)



SERIES 523 (3 Level Wrapost)



Visit www.mill-max.com/pga to configure a formal part number

SPECIFY PLATING CODE XX=	13 ◆	91	93	99		43 ◆	
Sleeve (Pin)	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn/Pb	200 µ" Sn/Pb		200 µ" Sn	
Contact (Clip)	30 µ" Au	10 µ" Au	30 µ" Au	100 µ" Sn/Pb		30 µ" Au	

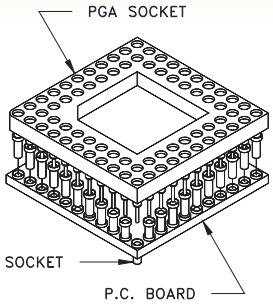
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

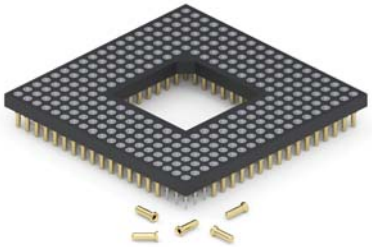
PIN GRID ARRAY SOCKETS

SERIES 605, 614 • .100" AND INTERSTITIAL GRID • CARRIER TYPE

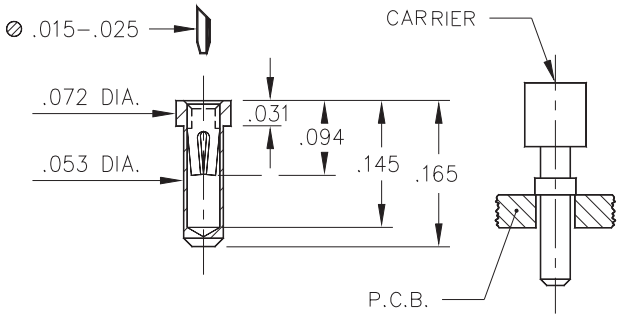
- Series 614 & 605 PGA carrier sockets offer 4 receptacle styles
- Many combinations of receptacles and clips to cover all applications
- Carrier sockets provide a convenient way of loading groups of receptacles onto a PC board
- Removeable insulator makes carriers ideal for low profile applications
- High temperature PCT polyester insulator material suitable for all forms of soldering including lead-free
- For Electrical, Mechanical and Environmental Data, see page 137 for details

APPLICATION OF PGA SOCKET CARRIERS



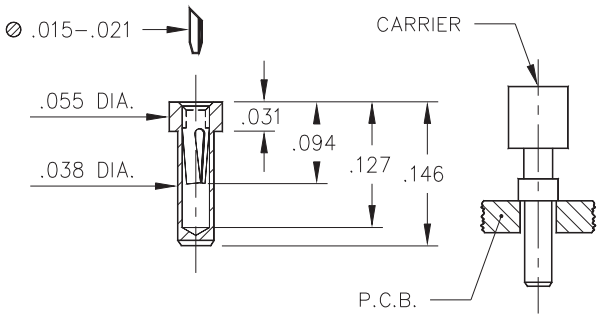


SERIES 614...001, 002, 003
LOW PROFILE SOCKET

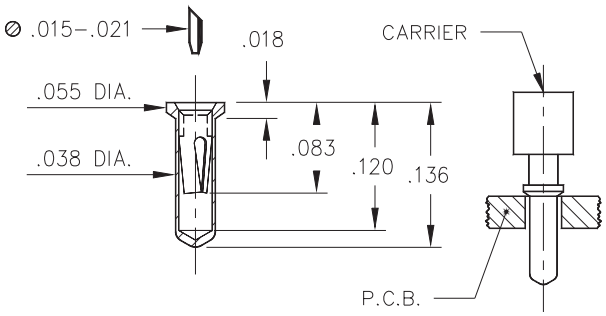


For .100" Grid Only

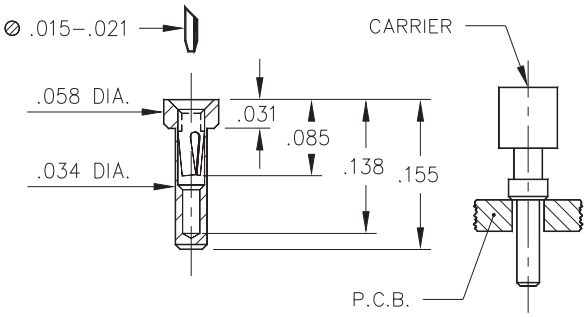
SERIES 614...007
MINIATURE SOCKET



SERIES 614...012
LOWEST PROFILE SOCKET



SERIES 605...048
REDUCED BARREL SOCKET



XX=Plating Code See Below

RoHS-2 2011/65/EU

Visit www.mill-max.com/pga to configure a formal part number

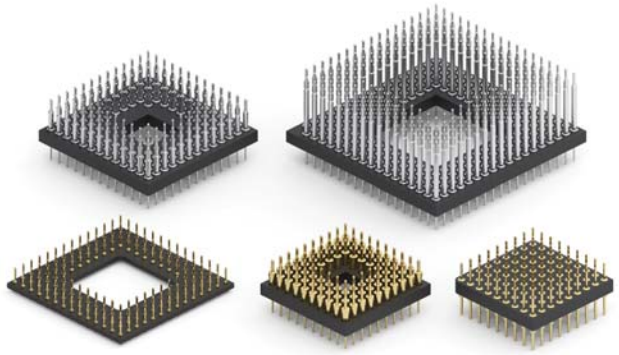
SPECIFY PLATING CODE XX=	13 ◆		93			43 ◆	
Sleeve (Pin)	10 µ" Au		200 µ" Sn/Pb			200 µ" Sn	
Contact (Clip)	30 µ" Au		30 µ" Au			30 µ" Au	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

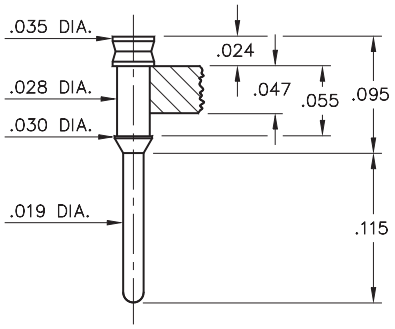
PIN GRID ARRAY HEADERS

SERIES 507, 550, 551, 599 • .100" AND INTERSTITIAL GRID • SURFACE MOUNT AND THROUGH-HOLE

- Series 551 and 599 headers are available on .100" centers
- Series 507 and 550 PGA headers are available for interstitial patterns and designed for SMT adapter applications
- Series 550 and 551 are through-hole mount for adapter & board stacking applications
- Series 550 and 551 use High temperature PCT polyester insulator material suitable for all forms of soldering
- Series 507 and 599 use FR-4 epoxy insulator material
- For Electrical, Mechanical and Environmental Data, see page 137 for details

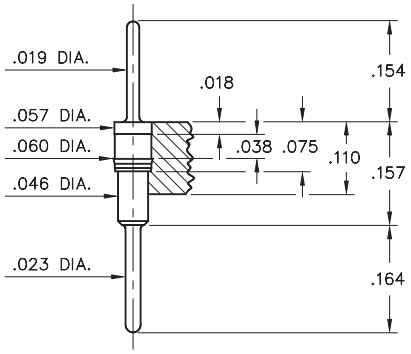


SERIES 507
SMT HEADER PIN TYPE #0737



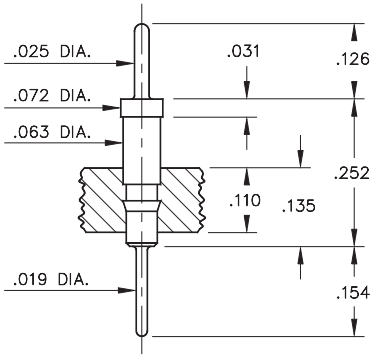
Interstitial Patterns Only

SERIES 550
HEADER PIN TYPE #5012

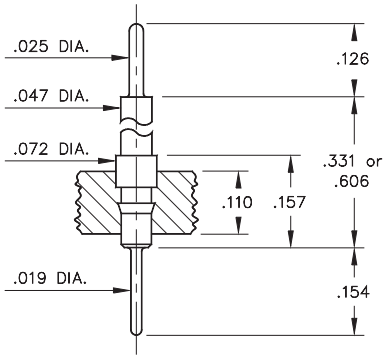


Interstitial Patterns Only

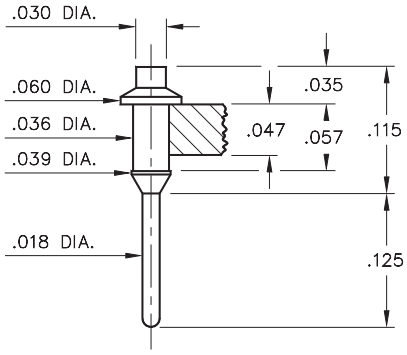
SERIES 551
HEADER PIN TYPE #5503



SERIES 551
HEADER PIN TYPE #5504 & #5505



SERIES 599
SMT HEADER PIN TYPE #9976



XX=Plating Code See Below

RoHS-2 2011/65/EU

Visit www.mill-max.com/pga to configure a formal part number

SPECIFY PLATING CODE XX =	10 ◆	90	40 ◆	
Pin Plating	10 µ" Au	200 µ" Sn/Pb	200 µ" Sn	

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

TECHNICAL SPECIFICATIONS FOR BGA ADAPTER SYSTEM

Materials:

- Socket contact: Three finger, stamped beryllium copper alloy 172, HT (Mill-Max type #04 or #05); plated 10 µ" gold over 50 µ" nickel.
- Socket shell and adapter pins: Precision machined brass alloy; plated 10 µ" gold over 100 µ" nickel.
- Insulator material: .047" or .062" thick glass-epoxy type FR-4, rated UL94V-0. TCE = 10-13ppm/°C, $\varepsilon_r = 5.0$

Mechanical:

- Insertion and withdrawal forces (using .010" dia. polished steel gage pin): Insertion: .36N typ. per pin
  Withdrawal: .20N typ. per pin
- Insertion force of an actual 225 pin device: 90N
- Durability: 100 cycles
- Coplanarity: less than or equal to .005"

Electrical:

- Current rating (per pin): 1A
- Working voltage: 100 VRMS/150 VDC max.
- Low level contact resistance: 10 mΩ max.
- Insulation resistance @ 500 VRMS: Initial value: 1,000,000 MΩ min.
  After climatic tests: 10,000 MΩ min.
- Dielectric withstanding voltage: 500 VRMS
- Capacitance between adjacent contacts: 1 pF max.
- Self inductance per pin: 2 nH max.
- Electrical length: 31 pS

Environmental:

- Operating temperature range: -55 °C to +125 °C
  BGA adapter/socket systems have withstood the following environmental tests without mechanical or electrical failure:
- Damp heat, steady state: 40 °C, 93% rH, 21 days
- Damp heat, cyclic: 25/55 °C, 6 days
- Dry heat: 100°C, 1,000 hours
- Thermal shock: -55 to +125 °C, 5 cycles
- Random vibration: 50 to 500 Hz, 8g, 20 min. per axis
- Shock: 50 g per axis
- Solderability: 235 °C, 2 seconds
- Resistance to soldering heat: 270 °C, 10 seconds
- Resistance to corrosion:
- Salt spray: 48 hours
- Sulphur dioxide: 96 hours @ 25 ppm SO_2, 25 °C, 75% rH
- Hydrogen sulphide: 96 hours @ 12 ppm H_2S, 25°C, 75% rH

TECHNICAL SPECIFICATIONS FOR 540 SERIES PLCC SOCKETS

Materials:

- Insulator: Glass filled thermoplastic, self-extinguishing rated, UL94V-0, color black.
- Contact: Plated copper alloy overall nickel underplating, tin finish.

Mechanical Data:

- Contact pressure (per contact): 150 grams min.
- Mechanical data (cycles): 50 cycles min.

Electrical Data:

- Rated current: SMD types: 1A
  Through-hole types: 2A
- Contact resistance: 20 mΩ max.
- Insulation resistance: 5,000 MΩ min.
- Dielectric strength: 600 VRMS
- Capacitance: 2pF max.

Environmental Data:

- Operating temperature: -55/+125 °C
- Vibration (No electrical discontinuity greater than 1µs): 10-2000 HZ, 15 g
- Climactic category (EIA): 365-17A

TECHNICAL SPECIFICATIONS FOR 940 SERIES PLCC SOCKETS

Materials:

- Insulator: PPS Polyphenylene Sulfide, Rated UL94V-0.
- Contact: Phosphor Bronze with a tin finish and nickel underplate.

Mechanical Data:

- Contact pressure (per contact): 150 grams min.
- Mechanical data (cycles): 25 cycles min.

Electrical Data:

- Rated current: SMD types: 1A
  Through-hole types: 1A
- Contact resistance: 30 mΩ max.
- Insulation resistance: 10,000 MΩ min.
- Dielectric strength: 600 VAC
- Capacitance: 1pF max.

Environmental Data:

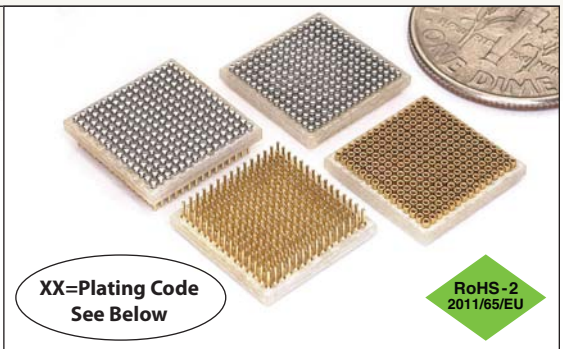
- Operating temperature: -55/+105 °C
- Vibration (No electrical discontinuity greater than 1µs): 10-2000 HZ, 15 g
- Climactic category (EIA): 365-17A

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

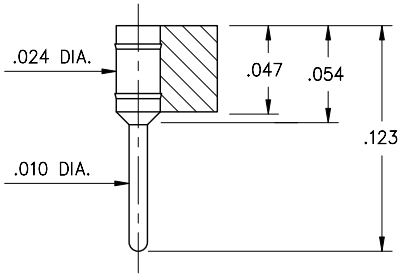
BALL GRID ARRAYS

SERIES 540,579,582,587,599 • FOR 0,8mm GRID, 1mm GRID & .050" GRID • MALE PIN ADAPTERS AND FEMALE SOCKETS

- BGA adapter/socket systems are a reliable way to make BGAs pluggable. They may also be used as a high density board-to-board interconnect
- The BGA device for a 0,8mm or 1mm grid is soldered to a 9929 adapter (or a 7929 adapter is soldered to a PCB), then either one can be plugged into a 9942 (0.8mm grid) or 9928 (1mm grid) surface mount socket
- The BGA device for a .050" grid is soldered to a 8737/4048 adapter (or a 4098/4054 adapter is soldered to a PCB), then either one can be plugged into a 8214 surface mount socket
- Both socket and adapter have the same footprint as the BGA device
- Insertion force is .4N per pin for standard pins 7929/9929, 8737/4098. Tapered EZ-IN pins 4048/4054 reduce insertion force to only .08N, and are recommended for pin counts greater than 500
- Insulator material is FR-4 epoxy having a TCE to match the BGA device and circuit board
- For Electrical, Mechanical and Environmental Data, see page 141 for details

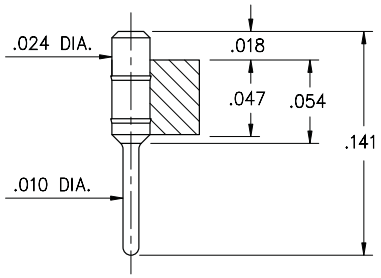


SERIES 599...429
BGA MOUNT TYPE #9929



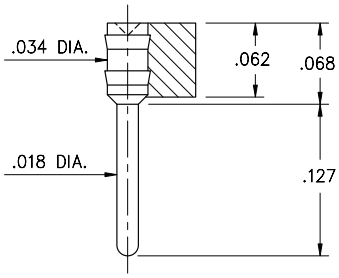
For 0,8mm & 1mm Grid Only

SERIES 579...429
PCB MOUNT TYPE #7929



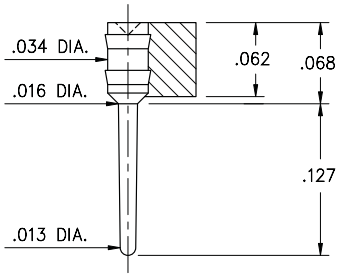
For 0,8mm & 1mm Grid Only

SERIES 587...437
BGA MOUNT TYPE #8737



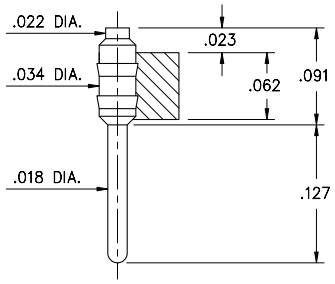
For .050" Grid Only

SERIES 540...448
EZ-IN BGA MOUNT TYPE #4048



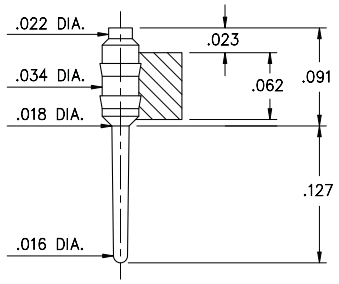
For .050" Grid Only

SERIES 540...498
STANDARD PCB MOUNT TYPE #4098



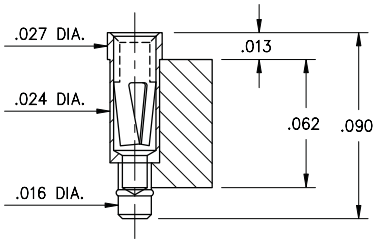
For .050" Grid Only

SERIES 540...454
EZ-IN PCB MOUNT TYPE #4054



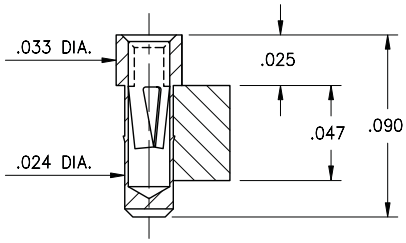
For .050" Grid Only

SERIES 599...442
SURFACE MOUNT TYPE #9942



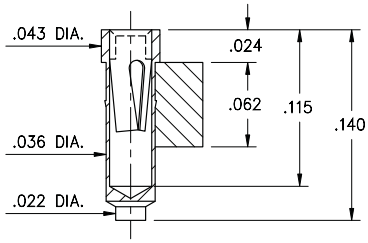
For 0,8mm Grid Only

SERIES 599...428
SURFACE MOUNT TYPE #9928



For 1mm Grid Only

SERIES 582...414
SURFACE MOUNT TYPE #8214



For .050" Grid Only

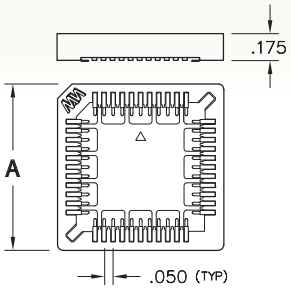
Visit www.mill-max.com/bga to configure a formal part number

SPECIFY PLATING CODE XX =	11 ◆	SPECIFY PLATING CODE XX =	10 ◆
Sleeve (Pin)	10 µ"Au	Pin Plating	10 µ"Au
Contact (Clip)	10 µ"Au		

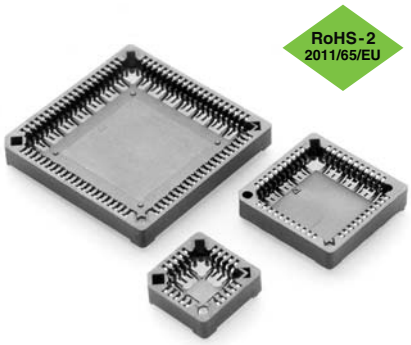
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

STANDARD PLCC SOCKETS

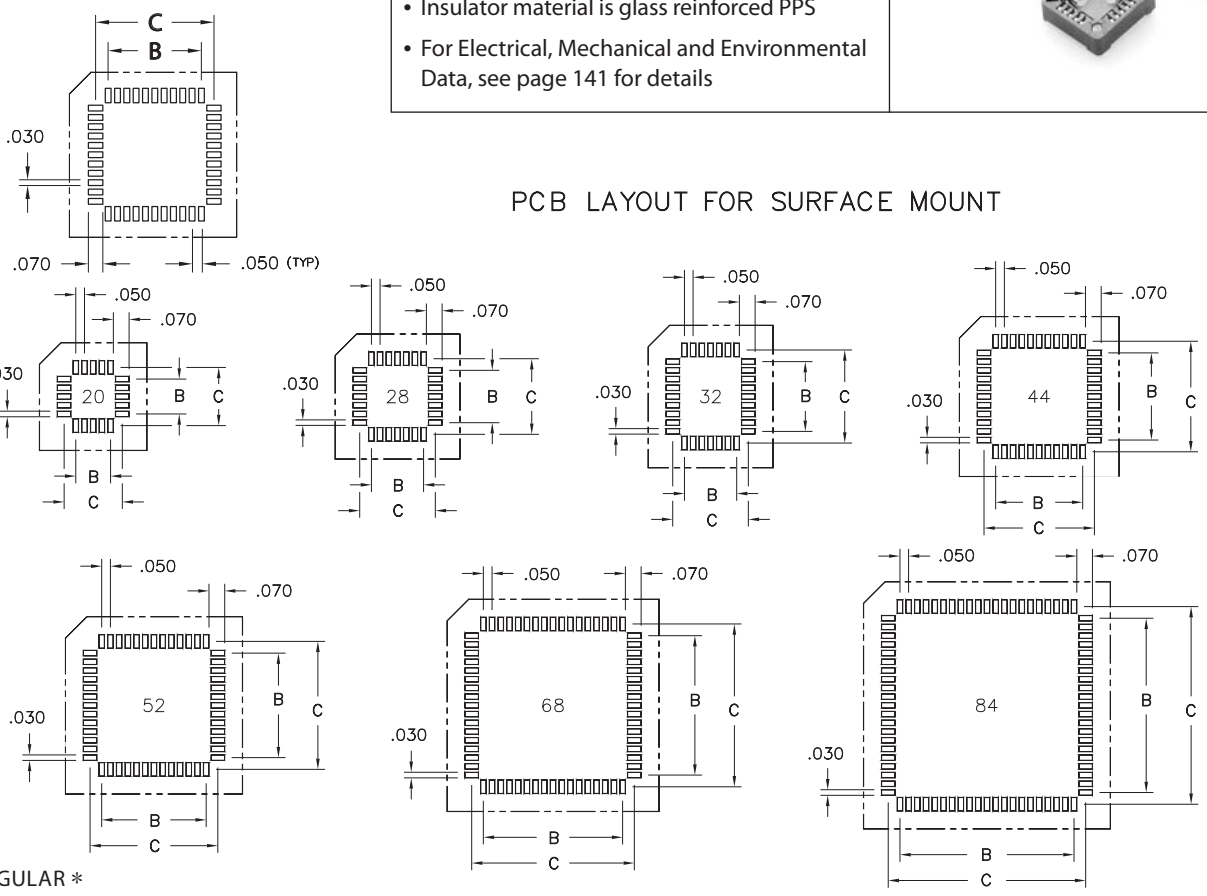
SERIES 940 • SURFACE MOUNT



- Note: Not end stackable
- Accepts JEDEC PLCCs MO-047 and MO-052
- Low profile for high density PC board stacking
- Standoffs provide clearance for heat dissipation and cleaning
- Contacts are plated with 150 µ" tin
- Insulator material is glass reinforced PPS
- For Electrical, Mechanical and Environmental Data, see page 141 for details



PCB LAYOUT FOR SURFACE MOUNT



RECTANGULAR *

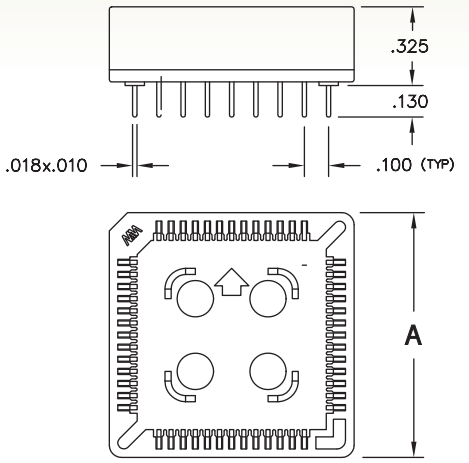
Number of Contacts	Ordering Information	- A -	- B -	- C -	Qty. per Tube	Qty. per Reel
20	940-44-020-17-40000X	0.613	0.200	0.334	32	470
28	940-44-028-17-40000X	0.713	0.300	0.434	27	390
32 *	940-44-032-17-40000X *	0.813 / .713	0.400 / .300	0.534 / .434	24	390
44	940-44-044-17-40000X	0.900	0.500	0.634	21	250
52	940-44-052-17-40000X	1.013	0.600	0.734	19	250
68	940-44-068-17-40000X	1.213	0.800	0.934	16	220
84	940-44-084-17-40000X	1.413	1.000	1.134	14	200

Packaging Codes: X = 0 (Tubes), X = 4 (Tape & Reel)

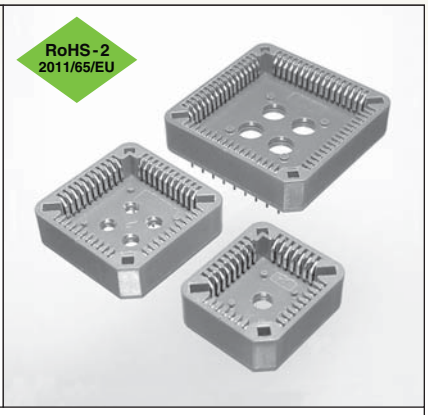
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

STANDARD PLCC SOCKETS

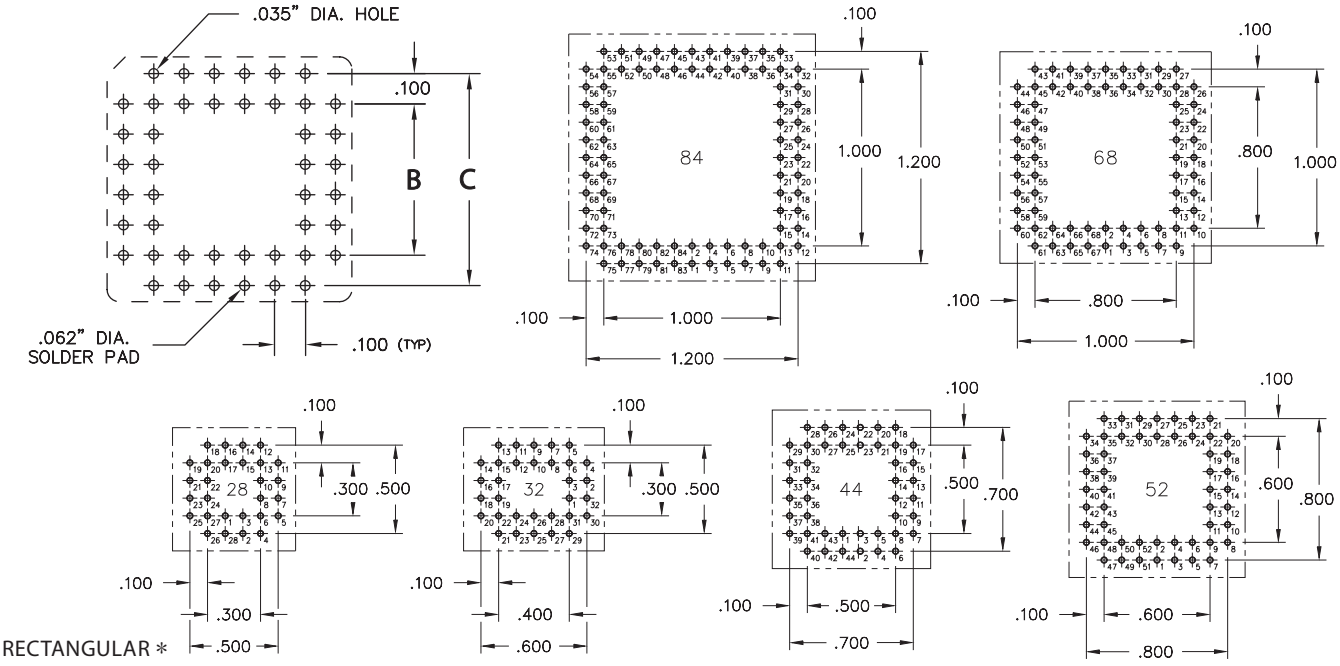
SERIES 940 • THROUGH-BOARD MOUNT



- Note: Not end stackable
- Accepts JEDEC PLCCs MS-016 & MS-018 leaded plastic substrates
- Internal standoffs insure proper positioning of chip carrier in socket
- Standoffs provide clearance for heat dissipation and cleaning
- Contacts are plated with 150 µ" tin
- Insulator material is glass reinforced PPS
- For Electrical, Mechanical and Environmental Data, see page 141 for details



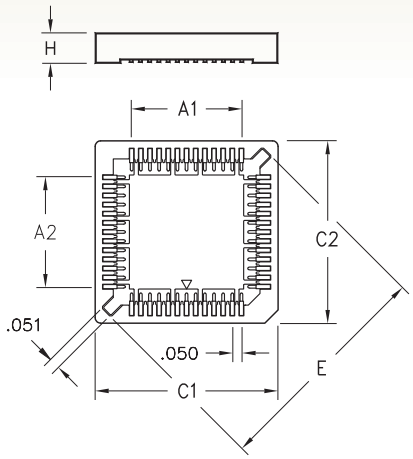
PRINTED CIRCUIT DRILLING PATTERNS
(TOP VIEW)
.035" dia. min. mounting holes



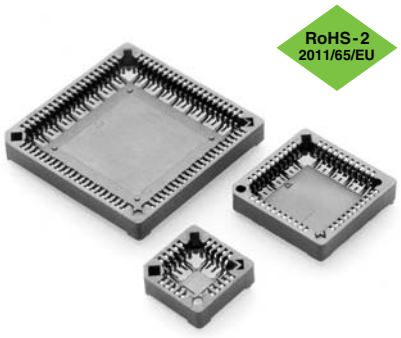
Number of Contacts	Ordering Information	- A -	- B -	- C -	Quantity per Tube
20	940-44-020-24-000000	0.613	0.200	0.400	38
28	940-44-028-24-000000	0.713	0.300	0.500	33
32 *	940-44-032-24-000000 *	0.813 / .713	0.400 / .300	0.600 / .500	29
44	940-44-044-24-000000	0.913	0.500	0.700	26
52	940-44-052-24-000000	1.013	0.600	0.800	23
68	940-44-068-24-000000	1.213	0.800	1.000	19
84	940-44-084-24-000000	1.413	1.000	1.200	16
100	940-44-100-24-000000	1.603	1.200	1.400	25
	Plating Code 44 ◆ = 150 µ" Sn				

COMPACT PLCC SOCKETS

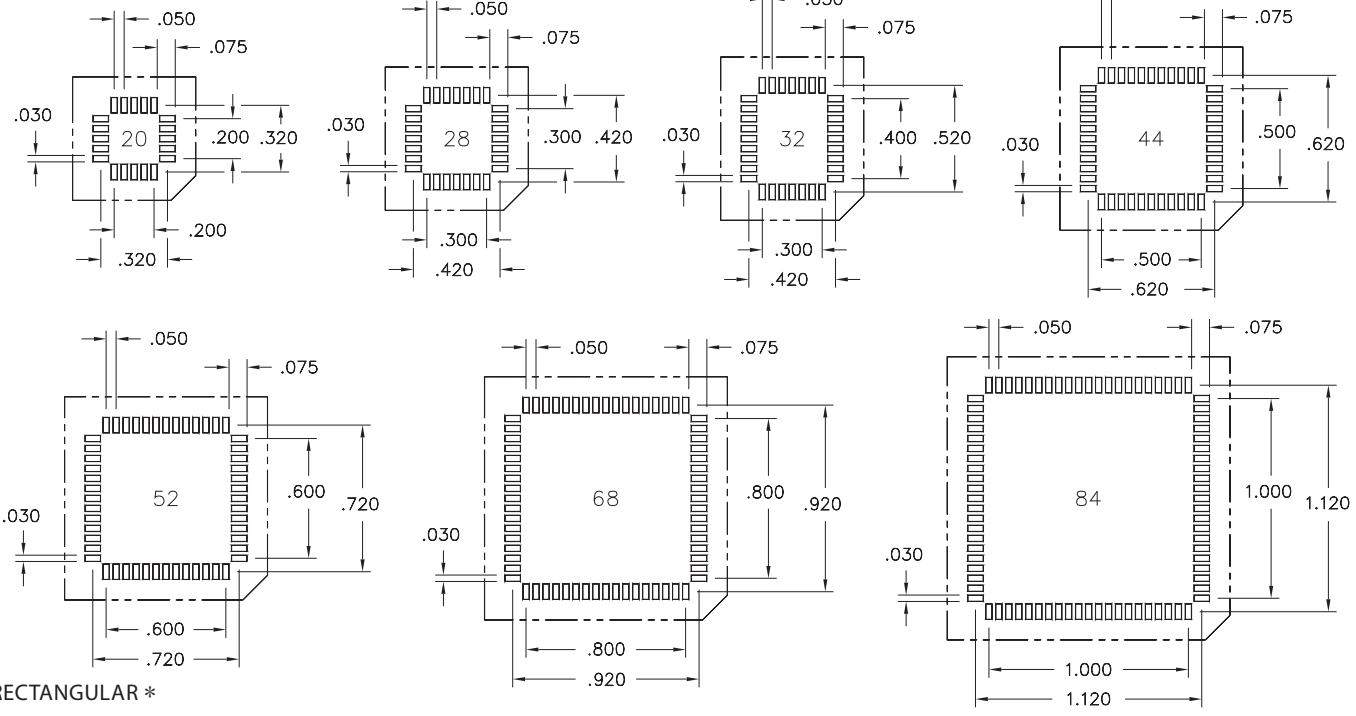
SERIES 540 • SURFACE MOUNT



- Note: Not end stackable
- Designed for JEDEC type devices
- Open frame design in solder area improves results of IR soldering and facilitates visual inspection of solder pads
- Contacts are plated with 150 µ" tin
- The insulator is molded PPS (Ryton R-4)
- For Electrical, Mechanical and Environmental Data, see page 141 for details



PCB LAYOUT FOR SURFACE MOUNT



RECTANGULAR *

Number of Contacts	Ordering Information	- A1 -	- A2 -	- C1 -	- C2 -	- E -	- H -	Qty. per Tube	Tape Width mm	Qty. per Reel
20	540-44-020-17-40000X	0.200	0.200	0.585	0.585	0.657	0.180	34	24	490
28	540-44-028-17-40000X	0.300	0.300	0.685	0.685	0.799	0.180	29	32	400
32 *	540-44-032-17-40000X *	0.300	0.400	0.670	0.770	0.885	0.148	26	32	400
44	540-44-044-17-40000X	0.500	0.500	0.885	0.885	1.082	0.180	22	44	250
52	540-44-052-17-40000X	0.600	0.600	1.000	1.000	1.224	0.180	20	44	250
68	540-44-068-17-40000X	0.800	0.800	1.202	1.202	1.507	0.180	16	44	220
84	540-44-084-17-40000X	1.000	1.000	1.400	1.400	1.791	0.180	14	56	200

Packaging Codes: X = 0 (Tubes), X = 4 (Tape & Reel)

WWW.MILL-MAX.COM

IO SOCKETS



SERIES 896, 897 • UNIVERSAL SERIAL BUS 3.0 • SOCKETS

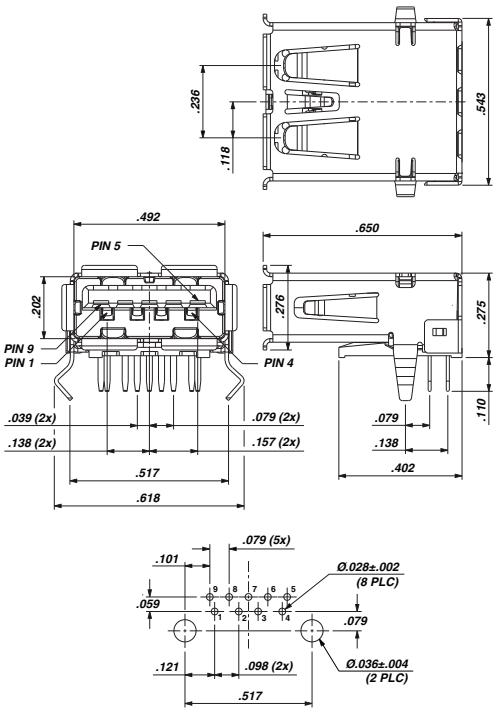


FIG. 1

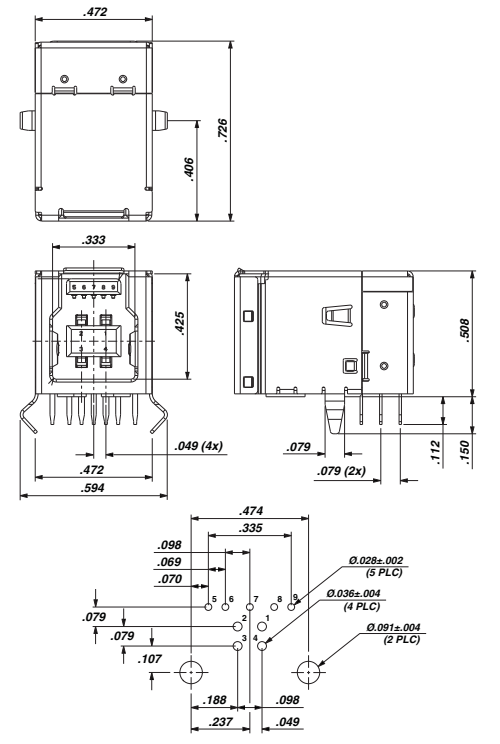


FIG. 2

- USB 3.0 receptacles for through-hole mount
- Plug retention tabs
- Kinked locating legs for secure PCB retention
- Fully shielded
- Fully backwards compatible with USB 2.0
- 10X faster than USB 2.0 and provides optimized power efficiency
- Packaged in trays:
  896-46-009-90-300000 - 100 pieces per tray
  897-46-009-90-300000 - 80 pieces per tray



ORDERING INFORMATION

FIG. 1	**USB 3.0 Type A Receptacle, Single, Through-Hole**
	896-46-009-90-300000
FIG. 2	**USB 3.0 Type B Receptacle, Single, Through-Hole**
	897-46-009-90-300000

Technical Specifications

RoHS-2 2011/65/EU

Materials:
Terminals: Copper Alloy, Tin-Plated
Contacts: Copper Alloy, Gold Flash over PdNi
Casing and Shield: Stainless Steel
Insulator material: High temperature thermoplastic rated UL94V-0

Ratings:
Voltage: 30VAC (rms)
All housing materials rated for "lead-free" soldering up to 260° C

Electrical:
Contact resistance: 30mΩ max. for power and ground pins
50mΩ max. for all others
Insulation resistance: 100MΩ min.
Dielectric withstanding voltage: 100VAC at sea level
Capacitance: 2pF max.

Mechanical:
Random vibration: No discontinuity >1μs per EIA 364-28, cond. VII, letter D
Physical shock: No discontinuity >1μs per EIA 364-27, condition H
Durability: 5000 cycles min. per EIA 364-09
Mating force: 35 Newtons max. per EIA 364-13
Unmating force: Initial - 10 Newtons min. per EIA 364-13
After test - 8 Newtons min. per EIA 364-13

Environmental:
Thermal shock per EIA 364-32, condition I
Humidity per EIA 364-31
Temperature life per EIA 364-17, method A
Solderability per EIA 364-52, category 2

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

IO SOCKETS

SERIES 896, 897 • UNIVERSAL SERIAL BUS • SOCKETS

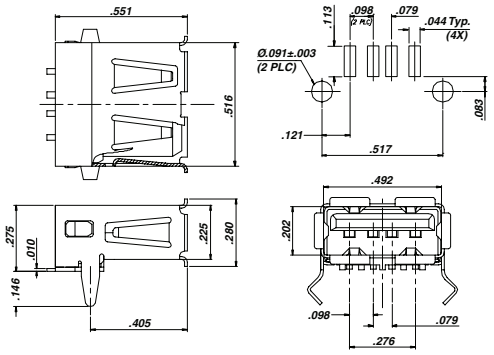


FIG. 1

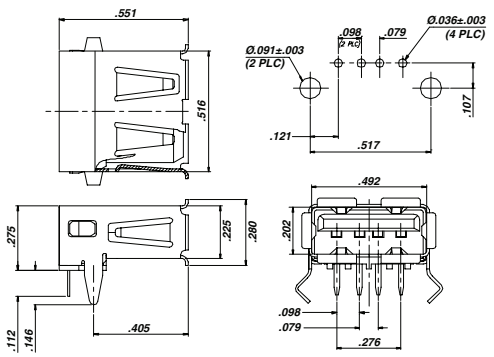


FIG. 2

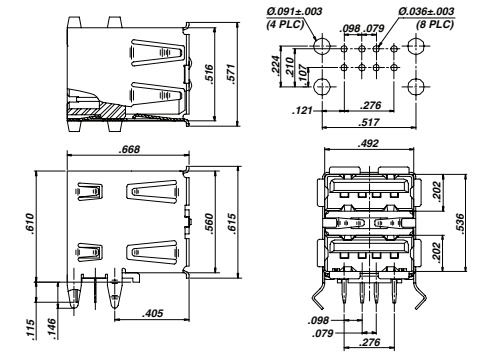


FIG. 3

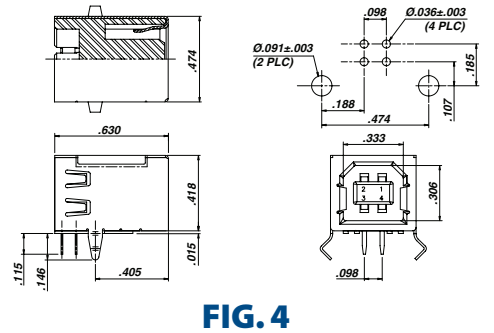
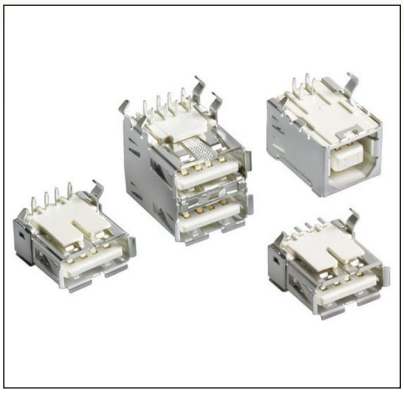


FIG. 4

- USB receptacles for through-hole and surface mount
- Plug retention tabs
- Kinked locating legs for secure PCB retention
- Fully shielded
- Fully compatible with USB 1.0 and 2.0 specifications
- Passes 16MHz signal attentuation per ASTM-D-4566
- Packaged in trays, 150 pieces per tray



ORDERING INFORMATION

FIG. 1	**Type A Receptacle, Single, Surface Mount**
	896-43-004-00-000000
FIG. 2	**Type A Receptacle, Single, Through-Hole**
	896-43-004-90-000000
FIG. 3	**Type A Receptacle, Double, Through-Hole**
	896-43-008-90-000000
FIG. 4	**Type B Receptacle, Single, Through-Hole**
	897-43-004-90-000000

Technical Specifications

RoHS-2 2011/65/EU

Materials:
Terminals: Copper Alloy, Tin-Plated
Casing and Shield: Stainless Steel
Insulator material: High temperature thermoplastic rated UL94V-0

Ratings:
Voltage: 30VAC (rms)
Current: 1A max. per contact for 30°C temperature rise
All housing materials rated for "lead-free" soldering up to 260° C

Electrical:
Contact resistance: 30mΩ max.
Insulation resistance: 1000MΩ min.
Dielectric withstanding voltage: 750VAC at sea level
Capacitance: 2pF max.

Mechanical:
Random vibration: No discontinuity >1μs per EIA 364-28, cond. V, letter A
Physical shock: No discontinuity >1μs per EIA 364-27, condition H
Durability: 1500 cycles min. per EIA 364-09
Mating force: 35 Newtons max. per EIA 364-13
Unmating force: 10 Newtons min. per EIA 364-13

Environmental:
Thermal shock per EIA 364-32, condition I
Humidity per EIA 364-31, method II, condition A
Temperature life per EIA 364-17, condition 3, method A

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 897 • UNIVERSAL SERIAL BUS 3.0 MICRO-B • SURFACE MOUNT SOCKETS

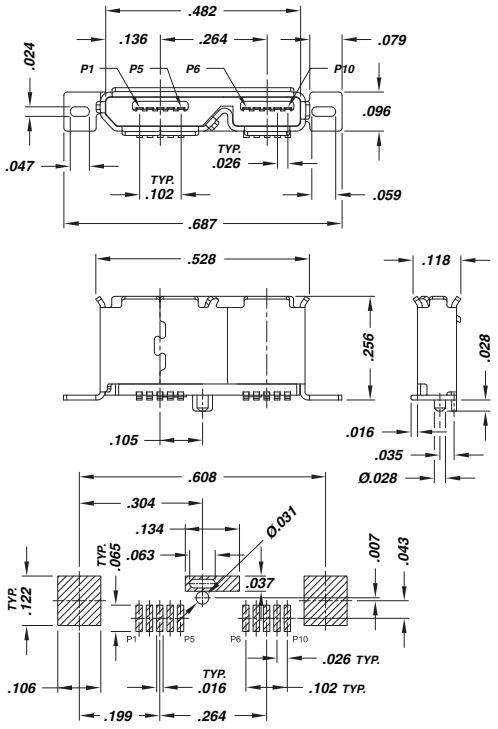


FIG. 1

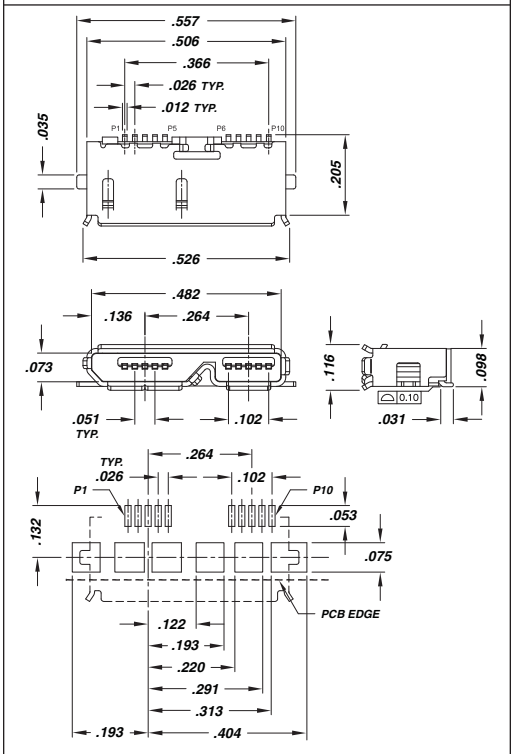


FIG. 2

- USB 3.0 Micro-B receptacles for surface mount
- Reduced mounting space
- Fully shielded
- Fully backwards compatible with USB 2.0
- 10X faster than USB 2.0 and provides optimized power efficiency
- Smaller and lighter than existing USB connectors, for portable & handheld devices
- Packaged on Tape and Reel:
  897-10-010-00-300002 - 900 pieces per reel
  897-10-010-40-300002 - 1,500 pieces per reel



ORDERING INFORMATION

FIG. 1	Micro Type B Receptacle, Single, Vertical Surface Mount
	897-10-010-00-300002
FIG. 2	Micro Type B Receptacle, Single, Surface Mount
	897-10-010-40-300002

Technical Specifications

RoHS-2 2011/65/EU

Materials:
Terminals: Copper Alloy, Gold Flash over Ni
Contacts: Copper Alloy, 15 µ" Gold-Plated over Ni
Shell material: Stainless Steel, Nickel-Plated
Insulator material: High temperature LCP thermoplastic rated UL94V-0

Ratings:
Voltage: 30VAC (rms)
Current: 1.5A (Pin 1 and 5), .25A (other pins)
All housing materials rated for "lead-free" soldering up to 260° C

Electrical:
Contact resistance: 30mΩ max. (Pin 1 and 5)
50mΩ max. (other pins)
Insulation resistance: 100MΩ min.
Dielectric withstanding voltage: 100VAC for 1 minute at sea level

Mechanical:
Random vibration: No discontinuity >1µs per EIA 364-28, cond. V, letter A
Durability: 10,000 cycles max. per EIA 364-09
Mating force: 35 Newtons max. per EIA 364-13
Unmating force: Initial - 10 Newtons min. per EIA 364-13
After test - 8 Newtons min. per EIA 364-13

Environmental:
Operating Temperature Range: -40°C to +85°C
Humidity per EIA 364-31, method II, condition A
Temperature Life per EIA 364-17, condition 3, method A
Solderability per EIA 364-52, category 2 (260°C for 3 seconds)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

IO SOCKETS

SERIES 896, 897 • MINI UNIVERSAL SERIAL BUS • SURFACE MOUNT SOCKETS

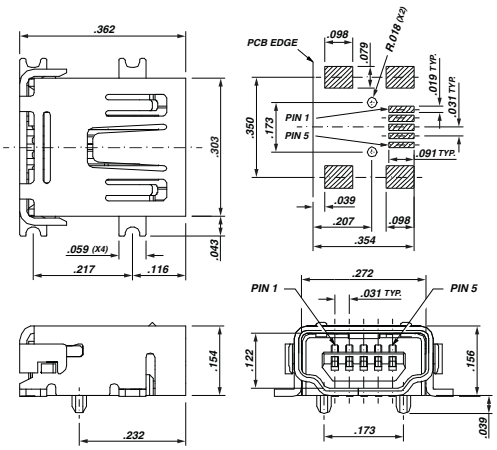


FIG. 1

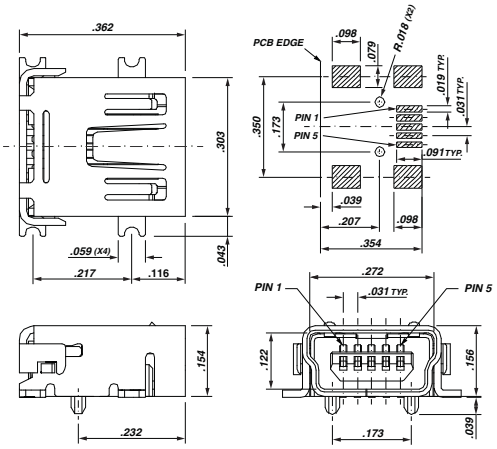


FIG. 2

- Mini USB receptacles for surface mount
- 5 Pin (one ID Pin), 0.8mm pitch, mini USB connector
- Reduced mounting space
- Fully Shielded
- Fully compliant with current USB 2.0 specifications
- Smaller and lighter than standard USB connectors for portable & handheld devices
- Packaged on Tape & Reel - 700 pieces per reel



ORDERING INFORMATION

FIG. 1	**Mini Type A Receptacle, Single, Surface Mount**
	896-43-005-00-100001
FIG. 2	**Mini Type B Receptacle, Single, Surface Mount**
	897-43-005-00-100001

Technical Specifications

RoHS-2 2011/65/EU

Materials:
Terminals: Copper Alloy, Tin Plated
Contacts: Copper Alloy, 30 µ" Gold Plated
Casing and Shield: Stainless Steel
Insulator material: High temperature thermoplastic rated UL94V-0

Ratings:
Voltage: 30VAC (rms)
Current: 1A max. per contact for 30°C temperature rise
All housing materials rated for "lead-free" soldering up to 260° C

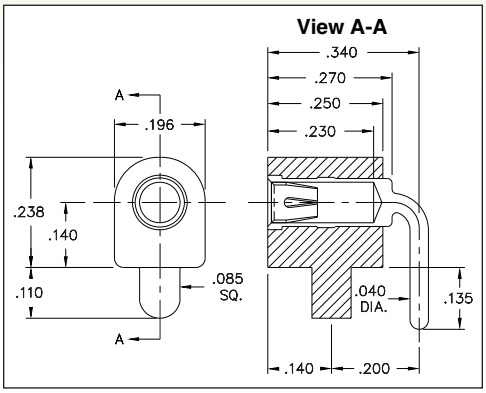
Electrical:
Contact resistance: 50mΩ max.
Insulation resistance: 100MΩ min.
Dielectric withstanding voltage: 100VAC at sea level
Capacitance: 2pF max.

Mechanical:
Random vibration: No discontinuity >1µs per EIA 364-28, cond. V, letter A
Physical shock: No discontinuity >1µs per EIA 364-27, condition H
Durability: 5000 cycles min. per EIA 364-09
Mating force: 35 Newtons max. per EIA 364-13
Unmating force: Initial - 7 Newtons min. per EIA 364-13
After test - 3 Newtons min. per EIA 364-13
Cable pull-out force per EIA 364-38

Environmental:
Thermal shock per EIA 364-32, condition I
Humidity per EIA 364-31, method II, condition A
Temperature life per EIA 364-17, condition 3, method A
Solderability per EIA 364-52, category 2

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 395...3XX • RIGHT ANGLE SOCKET • TEST POINT

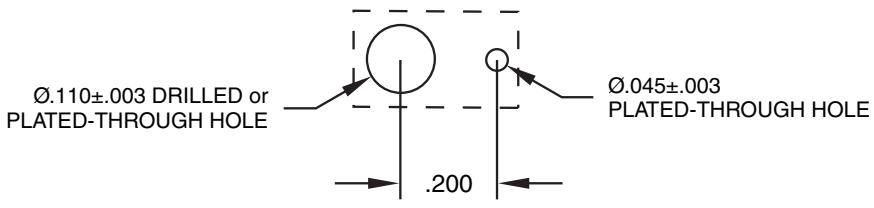


- Available to accept 3 pin sizes: 1, 1.5, & 2mm
- Uses high temperature PCT polyester insulator
- Standard insulator color is black
- For Electrical, Mechanical and Environmental Data, see page 264 for details



Pin Size	ORDERING INFORMATION
1.0mm	395-XX-101-34-340000
1.5mm	395-XX-101-03-380000
2.0mm	395-XX-101-07-350000

RECOMMENDED MOUNTING HOLES



XX=Plating Code See Below

RoHS-2 2011/65/EU

SPECIFY PLATING CODE XX =	13 ◆		93				
Sleeve (Pin)	10 µ" Au		200 µ" Sn/Pb				
Contact (Clip)	30 µ" Au		30 µ" Au				

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 388, 999 • MALE SHORTING JUMPERS & MICROPHONE SOCKETS

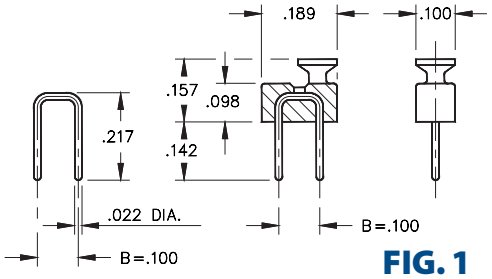


FIG. 1

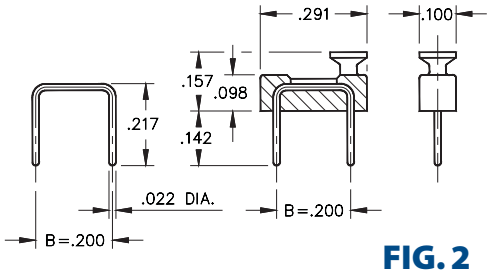


FIG. 2

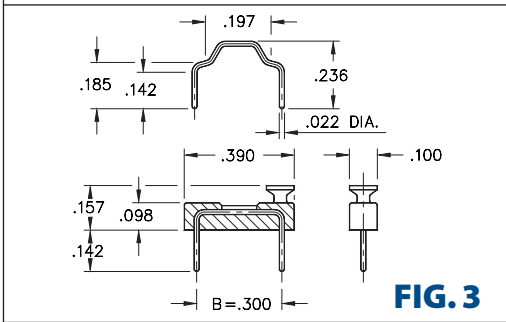
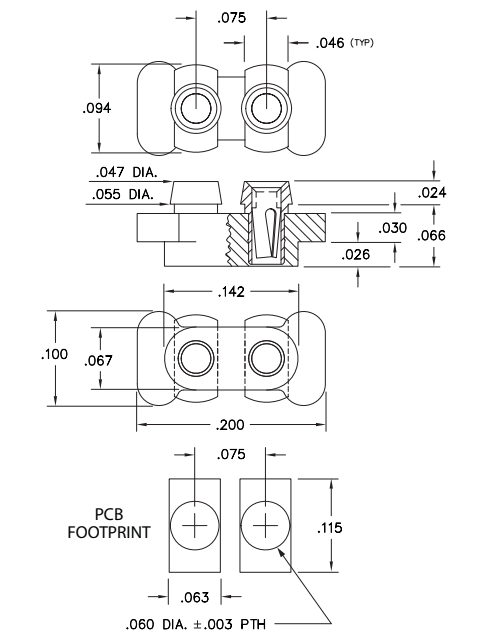
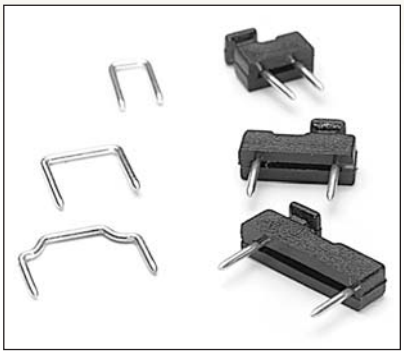


FIG. 3



- Male shorting jumpers are available with or without insulator and have .022" diameter pins with .100", .200" or .300" center spacing
- Insulator materials are not high temperature
- For Electrical, Mechanical & Environmental Data, see page 264 for details

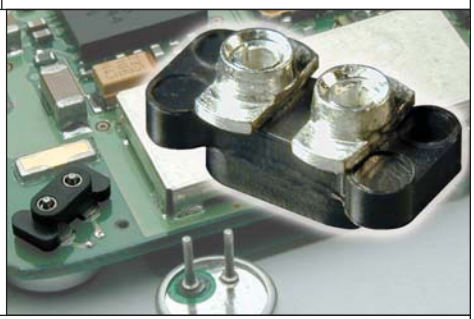
RoHS-2 2011/65/EU



ORDERING INFORMATION

	Male Shorting Jumper .100" Spacing	
FIG. 1	**Color / Style**	**Plating 10 µ" Au**
	Black Not Insulated	999-11-210-10-000000 999-11-110-10-000000
	Male Shorting Jumper .200" Spacing	
FIG. 2	**Color / Style**	**Plating 10 µ" Au**
	Black Not Insulated	999-11-220-10-000000 999-11-112-10-000000
	Male Shorting Jumper .300" Spacing	
FIG. 3	**Color / Style**	**Plating 10 µ" Au**
	Black Not Insulated	999-11-230-10-000000 999-11-113-10-000000

- Series 388 microphone socket is a bottom entry socket for microphones having Ø .018" pins on .075" centers
- Designed to be surface mount and intrusive reflow soldered
- Series 388 uses MM #8874 pins. See page 159 for details
- Hi-Rel, 3-finger BeCu #11 contact is rated at 3 amps. See page 251 for details
- Insulator is high temperature Nylon 46, rated UL 94 V-0



Ordering Information Microphone Socket

XX=Plating Code See Below

388-XX-102-11-740800 (Discrete socket)

Plating Code

388-XX-102-11-740799 (Tape and Reel)

(Supplied on 12mm wide carrier tape per EIA-481: 6,500 per 13" reel)

SPECIFY PLATING CODE XX=				99			44 ◆
Sleeve (Pin)				200 µ" Sn/Pb			200 µ" Sn
Contact (Clip)				200 µ" Sn/Pb			200 µ" Sn

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

WWW.MILL-MAX.COM

PIN RECEPTACLES

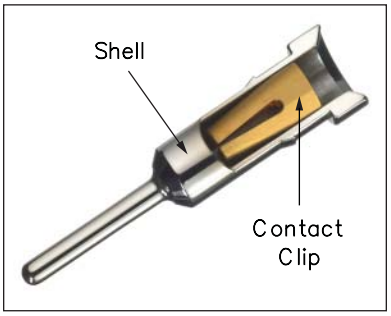


WWW.MILL-MAX.COM

The basic component used for making electrical connections in a wide array of electronic equipment is the pin receptacle. The Mill-Max pin receptacle provides a highly reliable, low resistance electrical path to terminate the pins of a device or discrete wires to a PCB or other mating apparatus such as cables, modules or other pins and wires. Assembled into sockets i.e. DIP, SIP, PGA, etc. or used discretely, receptacles make devices and modules pluggable for repair and replacement. The machined shell or housing of pin receptacles is available in various styles depending on the application, e.g. low profile, elevated, press-fit, SMT. The terminal end of pin receptacles has many variations: a round solder tail, a press-fit tail, a surface mount base, crimp barrel, soldercup, swage feature or no tail.



Inside every Mill-Max receptacle is a contact clip. A contact clip is a conductive, multi-finger, progressive die stamping. The standard material is beryllium copper and for high temperature applications, beryllium nickel is used. Both materials are heat treated to achieve optimal spring characteristics & durability. The contact clip engages, scores and holds the mated pin making an electrical and gas tight connection at 3, 4 or 6 points of contact, depending on the selected contact. Mill-Max receptacles are capable of 1,000 minimum insertion/extraction cycles for a broad range of applications. Mating pin size, shape and finish, along with application specific variables, will affect the life of a contact.



Mill-Max currently offers over 36 styles of contacts to engage pins from .008" to .102" in diameter. A convenient contact selector chart is located on page 248 showing the different specifications of each contact.



Pin receptacles can be utilized as discrete connectors for the plugging and unplugging of components on PC boards. They can be utilized individually or in random arrays where the usage is small. They can be handled and loaded manually in preparation for soldering or, with a different style shell, for press-fitting. When the requirement is for volume placement of receptacles, socket carriers or tape and reel packaging are tremendous labor-saving solutions for our customers.



In addition to the products found on the following pages, Mill-Max offers the following stock materials and diameters available for manufacture:

BRASS Alloy 360, 1/2 hard: .062/.072/.078/.093/.125/.156/.187/.250 diameters
PHOSPHOR BRONZE Alloy 544: .062/.072/.078 diameters
TELLURIUM COPPER Alloy 145: .079/.093/.125/.156 diameters

Mill-Max will gladly quote application specific products. Please complete the specification sheet on page **247** or send us your own drawings. We assure you a fast response.

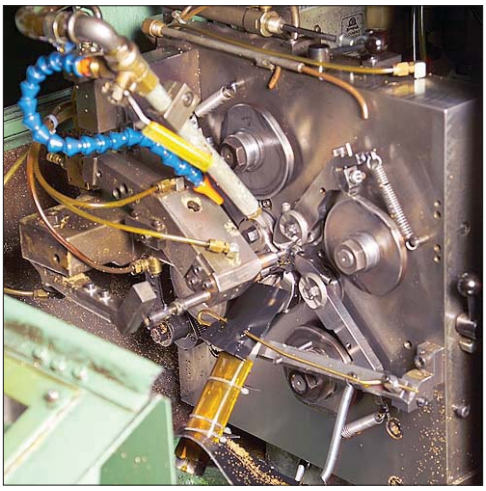
CUSTOM MACHINING CAPABILITY

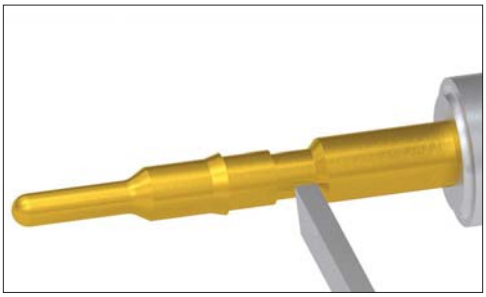
DON'T SEE QUITE WHAT YOU'RE LOOKING FOR IN THE PIN & RECEPTACLE SECTION OF THE CATALOG?

Mill-Max's unique high-speed precision-machining capability enables us to provide custom-designed pins or receptacles tailored to meet your specific requirement.

With over 200 high-speed turning machines on our premises in Oyster Bay, NY, Mill-Max is readily equipped to provide custom pins, terminals and receptacles to your exacting specifications.

Moreover, our in-house, state-of-the-art plating equipment allows us to plate your custom pin with a selection of industry standard finishes. Initial quantities are typically shipped in 5-6 weeks.





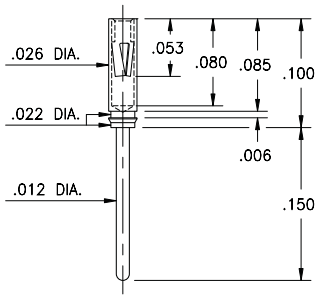


Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

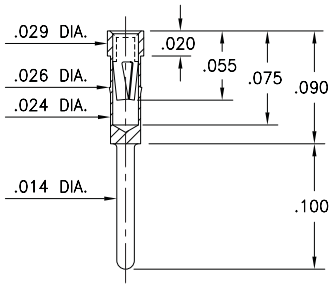
PIN RECEPTACLES

FOR .008" - .013" DIAMETER PINS (#04 CONTACT) AND .012" - .017" DIAMETER PINS (#10 CONTACT) (SEE SPECIFIC CONTACT RANGE ON PAGE 250)

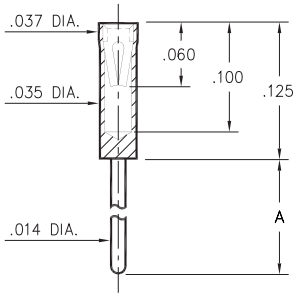
8210
8210-0-15-15-04-27-04-0
Press-fit in .024/.027 stepped hole



0439
0439-0-15-15-04-27-04-0
Press-fit in .025 mounting hole

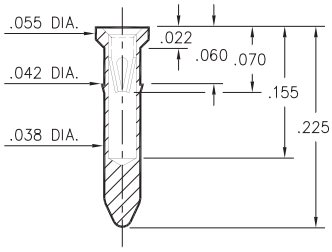


0464
0464-X-15-XX-10-XX-04-0
Solder mount in .016 min. mounting hole

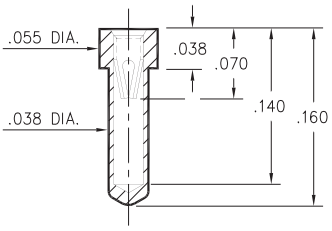


Basic Part Number	Length A
0464-0	.125
0464-1	.250

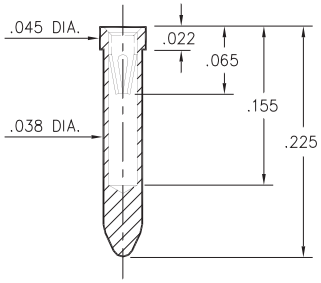
9225
9225-0-15-XX-10-XX-10-0
Press-fit in .039 mounting hole



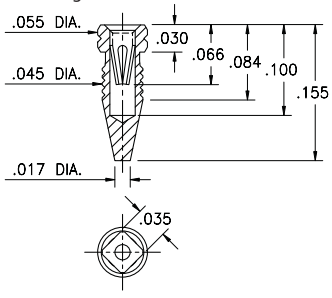
0529
0529-0-15-XX-10-XX-10-0
.040 min. mounting hole



8947
8947-0-15-XX-10-XX-10-0
Solder mount in .040 min. mounting hole



4993
4993-0-15-15-10-27-10-0
Compliant press-fit in .041 - .043 Dia. mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#04 or #10 CONTACT (DATA ON PAGE 250)
(CONTACTS #04 & #10 NOT INTERCHANGEABLE)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

PIN RECEPTACLES

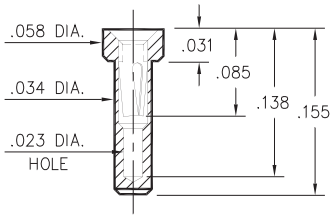
FOR .015" - .020" DIAMETER PINS (#11 CONTACT) AND .015" - .022" DIAMETER PINS (#21 CONTACT)

(SEE SPECIFIC CONTACT RANGE ON PAGE 251)

0548

0548-0-15-XX-21-XX-10-0

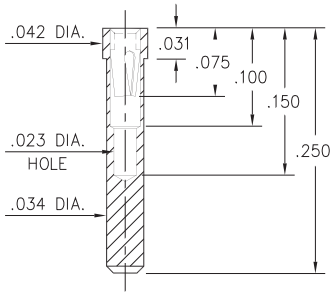
Solder mount in .036 min. mounting hole



8975

8975-0-15-XX-21-XX-10-0

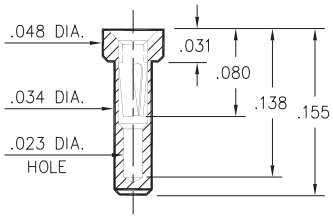
Solder mount in .036 min. mounting hole



3016

3016-0-15-XX-21-XX-10-0

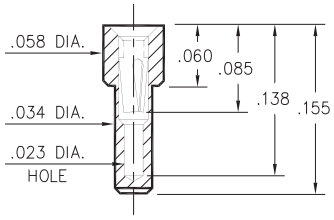
Solder mount in .036 min. mounting hole



9548

9548-0-15-XX-21-XX-10-0

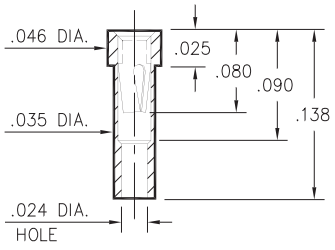
Solder mount in .036 min. mounting hole



8637

8637-0-15-XX-21-XX-10-0

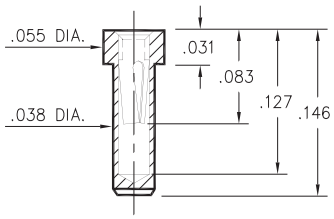
Solder mount in .037 min. mounting hole



1407

1407-0-15-XX-11-XX-10-0

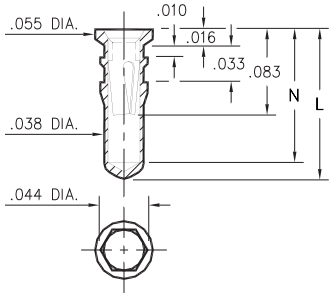
Solder mount in .040 min. mounting hole



0553/8553

X553-X-15-XX-X1-XX-10-0

Hex press-fit in .041 plated through-hole

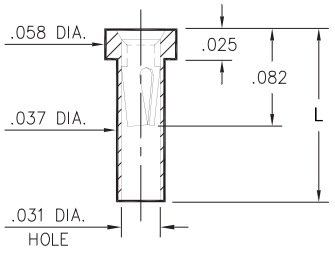


Basic Part Number	Length L	Depth N
0553-1	.140	.124
0553-2	.170	.154
0553-3	.282	.266
8553-0	.245	.229

0566

0566-X-15-XX-21-XX-10-0

Solder mount in .039 min. mounting hole

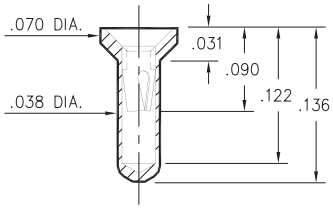


Basic Part Number	Length L
0566-1	.083
0566-2	.138

0442

0442-0-15-XX-11-XX-10-0

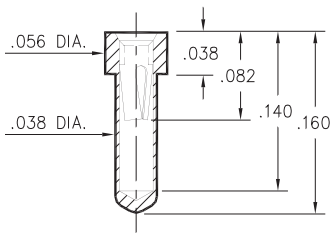
Solder mount in .040 min. mounting hole



0554

0554-0-15-XX-21-XX-10-0

Solder mount in .040 min. mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - XX - XX - 10 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

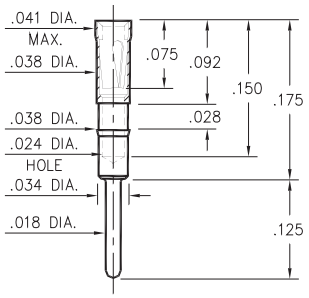
SELECT CONTACT:
#11 or #21 CONTACT (DATA ON PAGE 251)
(For alternate contact choices, see group A on page 248)

PIN RECEPTACLES

FOR .015" - .018" DIAMETER PINS (#09 CONTACT)
FOR .015" - .020" DIAMETER PINS (#11 CONTACT)
AND .015" - .022" DIAMETER PINS (#21 CONTACT)

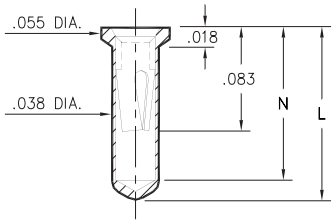
0467
0467-0-15-XX-21-XX-04-0

Press-fit in .037 mounting hole



0552
0552-X-15-XX-X1-XX-10-0

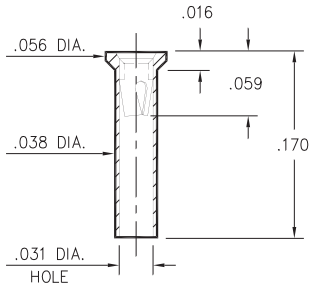
Solder mount in .040 min. mounting hole
Also available on 16mm wide carrier tape:
1,500 parts per 13" reel
Order as: 0552-X-57-XX-X1-XX-10-0



Basic Part Number	Length L	Depth N
0552-1	.136	.120
0552-2	.170	.150

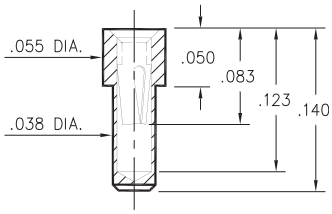
5522
5522-0-15-XX-09-XX-10-0

Solder mount in .040 min. mounting hole



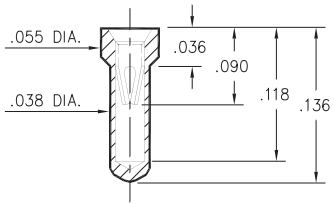
0569
0569-0-15-XX-X1-XX-10-0

Solder mount in .040 min. mounting hole



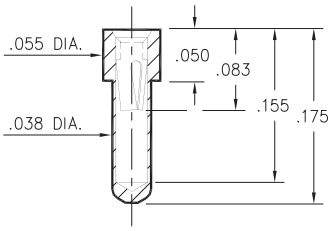
6023
6023-0-15-XX-21-XX-10-0

Solder mount in .040 min. mounting hole



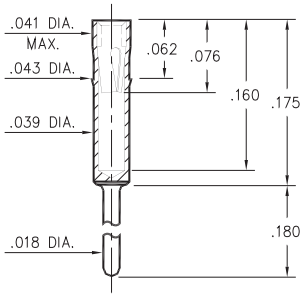
6214
6214-0-15-XX-21-XX-10-0

Solder mount in .040 min. mounting hole



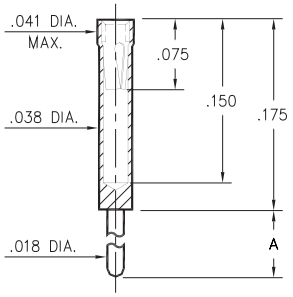
2086
2086-0-15-XX-21-XX-04-0

Press-fit in .040 mounting hole



0461
0461-X-15-XX-X1-XX-04-0

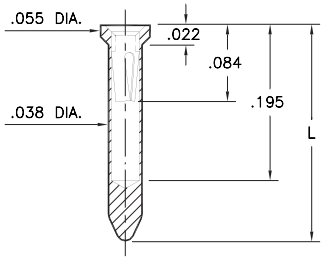
Solder mount in .020 min. mounting hole



Basic Part Number	Length L
0461-0	.400
0461-1	.275
0461-2	.180
0461-3	.125
0461-4	.060
0461-5	.440

8579
8579-X-15-XX-X1-XX-10-0

Solder mount in .040 min. mounting hole
Also available on 24mm wide carrier tape:
1,200 parts per 13" reel
Order as: 8579-0-57-XX-X1-XX-10-0



Basic Part Number	Length L
8579-0	.234
8579-1	.295

SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

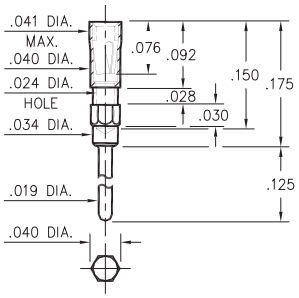
SELECT CONTACT:
#09, #11 or #21 CONTACT (DATA ON PAGES 250 & 251)
(For alternate contact choices, see group A on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

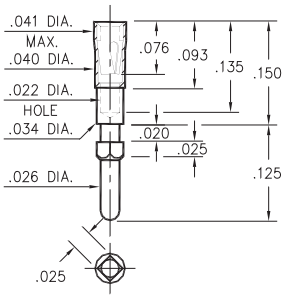
PIN RECEPTACLES

FOR .015" - .020" DIAMETER PINS (#11 CONTACT) AND .015" - .022" DIAMETER PINS (#21 CONTACT) (SEE SPECIFIC CONTACT RANGE ON PAGE 251)

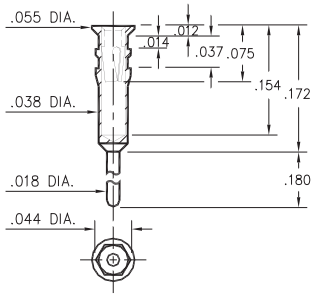
8467
8467-0-15-XX-21-XX-04-0
Hex press-fit in .036 plated through-hole



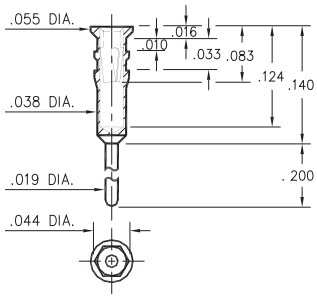
6192
6192-0-15-XX-21-XX-04-0
Square press-fit in .032 plated through-hole



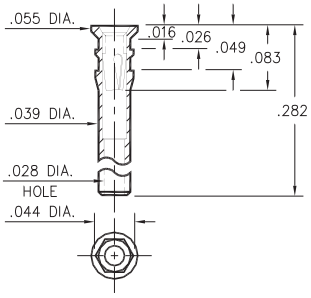
9553
9553-0-15-XX-X1-XX-04-0
Hex press-fit in .041 plated through-hole



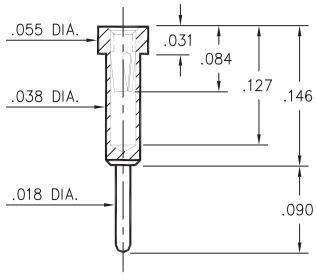
5531
5531-0-15-XX-21-XX-10-0
Hex press-fit in .041 plated through-hole



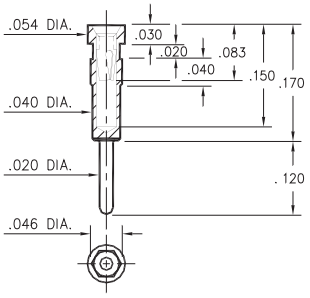
7553
7553-0-15-XX-11-XX-10-0
Hex press-fit in .041 plated through-hole



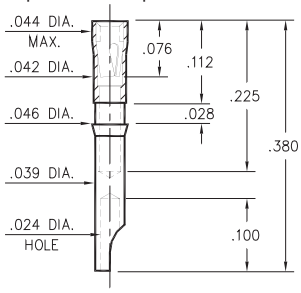
9407
9407-0-15-XX-11-XX-10-0
Solder mount in .040 min. mounting hole



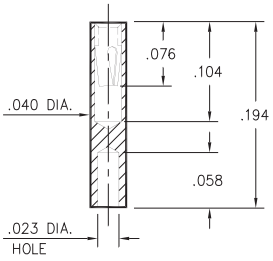
9462
9462-0-15-XX-21-XX-04-0
Hex press-fit in .043 plated through-hole



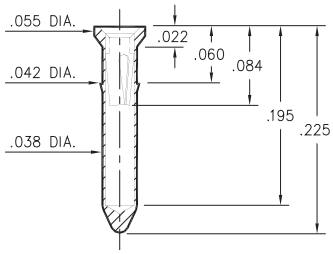
1147
1147-0-18-XX-21-XX-10-0
Press-fit in .043 min. mounting hole
Accepts wire sizes up to .014" dia.



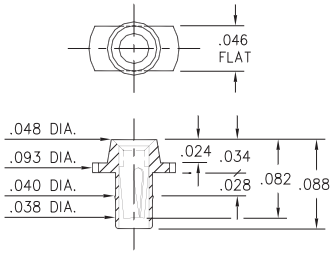
3061
3061-0-19-XX-21-XX-10-0
Wire Crimp Termination. Accepts wire sizes 28 AWG Max. / 32 AWG Min.



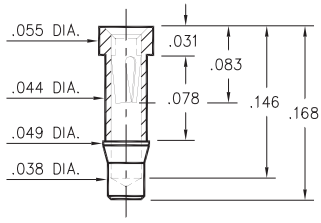
0579
0579-0-15-XX-X1-XX-10-0
Press-fit in .040 mounting hole



8874
8874-0-15-XX-11-XX-10-0
Bottom entry surface mount
See page 152 for application details



0613
0613-0-15-XX-21-XX-10-0
Press-fit in .047 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#11 or #21 CONTACT (DATA ON PAGE 251)
(For alternate contact choices, see group A on page 248)

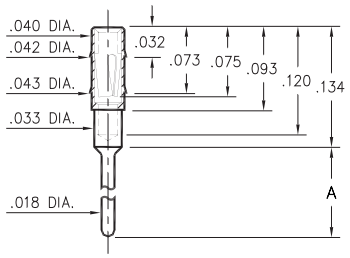
PIN RECEPTACLES

FOR .015" - .020" DIAMETER PINS (#11 CONTACT) AND .015" - .022" DIAMETER PINS (#05 & #21 CONTACTS) (SEE SPECIFIC CONTACT RANGE ON PAGE 251)

0489

0489-X-15-XX-11-XX-04-0

Press-fit in .041 mounting hole

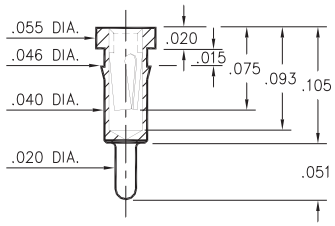


Basic Part Number	Length A
0489-0	.102
0489-1	.199
0489-2	.299

0463

0463-0-15-XX-21-XX-04-0

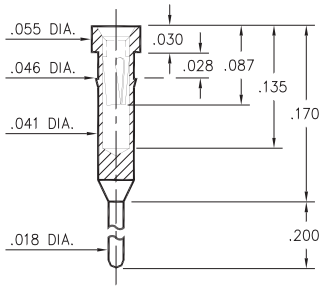
Press-fit in .043 mounting hole.
Shell is Phosphor Bronze Alloy 544 (B2)



0466

0466-0-15-XX-21-XX-04-0

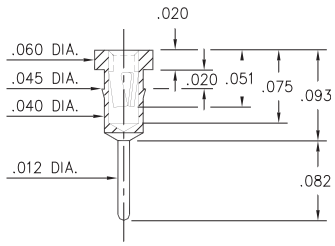
Press-fit in .043 mounting hole.
Shell is Phosphor Bronze Alloy 544 (B2)



7491

7491-0-15-XX-09-XX-04-0

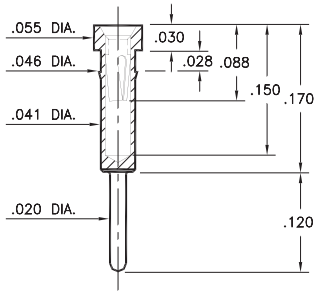
Press-fit in .042 mounting hole
∗Contact substitution not recommended



0462

0462-0-15-XX-X1-XX-04-0

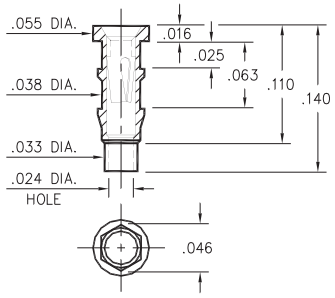
Press-fit in .043 mounting hole



0560

0560-0-15-XX-11-XX-10-0

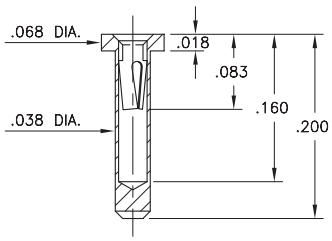
Hex press-fit in .043 plated through-hole



5552

5552-0-15-XX-05-XX-10-0

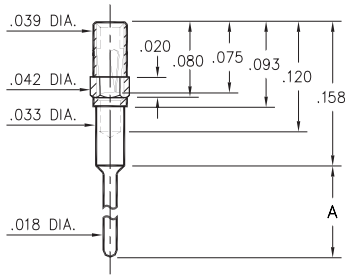
Solder mount in .040 min. mounting hole



4890

4890-X-15-XX-11-XX-04-0

Octagonal press-fit in .041 mounting hole

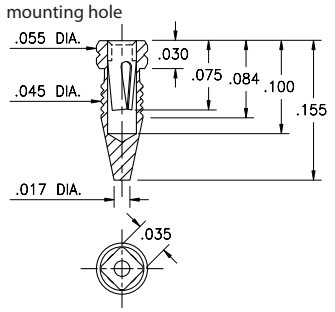


Basic Part Number	Length A
4890-0	.102
4890-1	.199
4890-2	.299

4994

4994-0-15-15-11-27-10-0

Compliant press-fit in .041 - .044 dia. mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

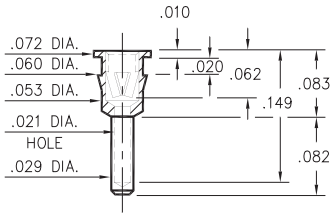
SELECT CONTACT:
#05, #11 or #21 CONTACT (DATA ON PAGE 251)
(For alternate contact choices, see group A on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

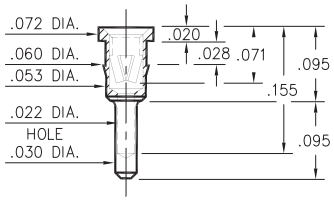
PIN RECEPTACLES

FOR .015" - .022" DIAMETER PINS

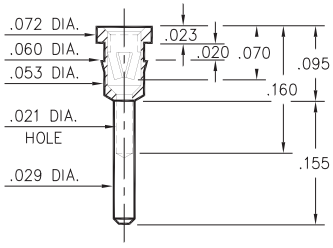
0512
0512-0-15-XX-12-XX-04-0
Press-fit in .057 mounting hole



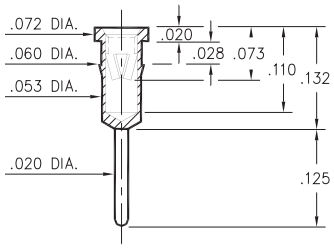
0703
0703-0-15-XX-12-XX-04-0
Press-fit in .057 mounting hole



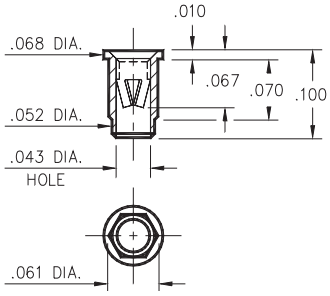
0574
0574-0-15-XX-12-XX-04-0
Press-fit in .057 mounting hole



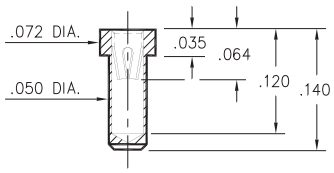
0468 *
0468-0-15-XX-12-XX-04-0
Press-fit in .057 mounting hole



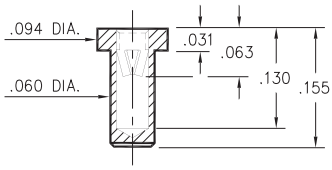
8894 *
8894-0-15-XX-12-XX-10-0
Hex press-fit in .059 plated through-hole



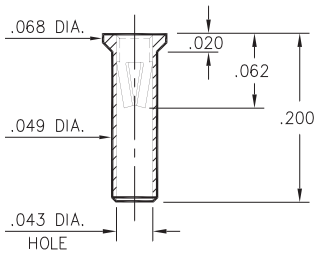
0550 *
0550-0-15-XX-22-XX-10-0
Solder mount in .052 min. mounting hole
Also available on 16mm wide carrier tape:
1,700 parts per 13" reel
Order as: 0550-0-57-XX-22-XX-10-0



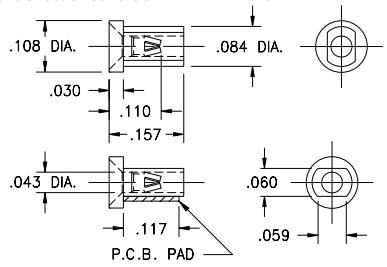
0671 *
0671-0-15-XX-12-XX-10-0
Solder mount in .063 min. mounting hole



0707 *
0707-0-15-XX-12-XX-10-0
Solder mount in .051 min. mounting hole

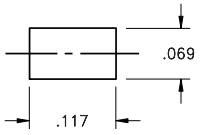


5739 *
5739-0-18-XX-12-XX-10-0
Surface mount
Also available on 16mm wide carrier tape:
3,000 parts per 13" reel
Order as: 5739-0-58-XX-12-XX-10-0

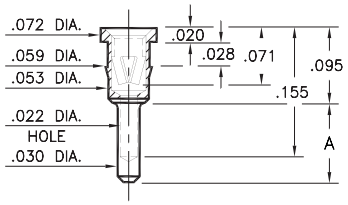




P.C.B. Layout



1534
1534-X-15-XX-12-XX-04-0
Press-fit in .056 mounting hole



Basic Part Number	Length A
1534-0	.095
1534-1	.125

SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- ◆ **84** 100 µ" TIN OVER NICKEL (RoHS)
- ◆ **27** 30 µ" GOLD OVER NICKEL (RoHS)

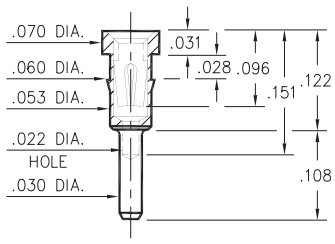
SELECT CONTACT:
#12 or #22 CONTACT (DATA ON PAGE 252)

* (Contact may be interchanged with group B or C contact on page 248)

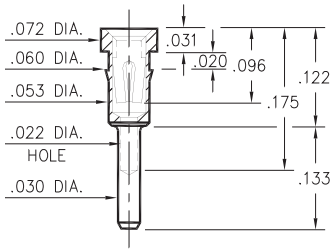
PIN RECEPTACLES

FOR .015" - .025" DIAMETER PINS

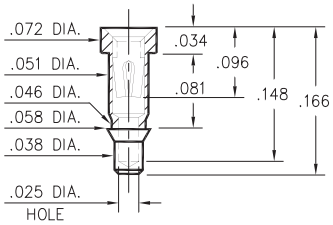
0501
0501-0-15-XX-30-XX-04-0
Press-fit in .057 mounting hole



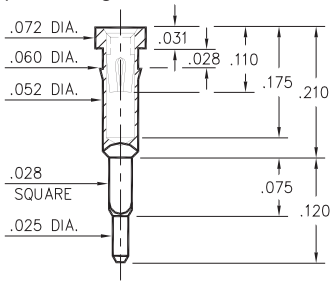
8427
8427-0-15-XX-30-XX-04-0
Press-fit in .057 mounting hole



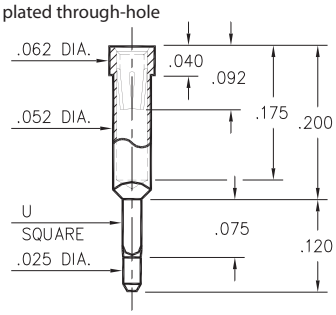
1434
1434-0-15-XX-30-XX-10-0
Press-fit in .055 mounting hole



9970
9970-0-15-XX-30-XX-04-0
Square press-fit in .032 ± .002 plated through-hole

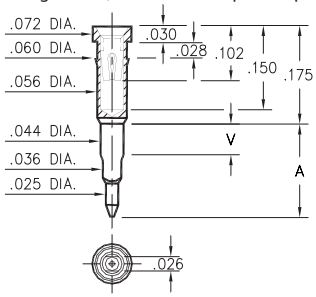


5970
5970-X-15-XX-32-XX-04-0
Square press-fit for .032 or .039 ± .002 plated through-hole



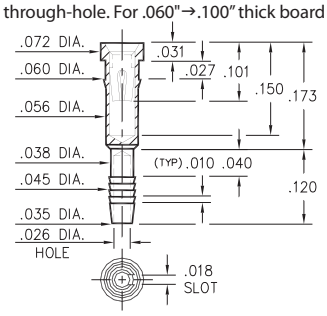
Basic Part Number	U Square	Mounting Hole
5970-1	.028	.032
5970-2	.034	.039

0477/0478
047X-0-18-XX-30-XX-04-0
Solderless press-fit in .038 +.003 / -.002 plated through-hole (use 1.1mm drill prior to plating)

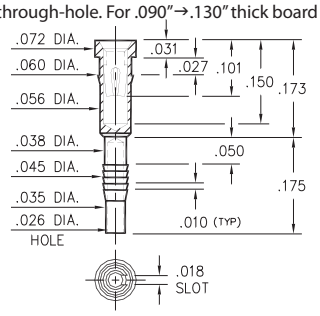


Basic Part Number	Board Thick-ness	Length V	Length A
0477-0	.062	.075	.175
0478-0	.125	.140	.250

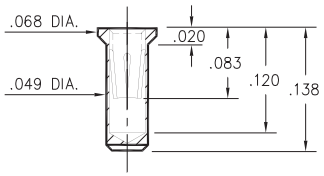
4612
4612-0-31-XX-30-XX-04-0
Compliant press-fit in .040 ± .003 plated through-hole. For .060"→.100" thick board



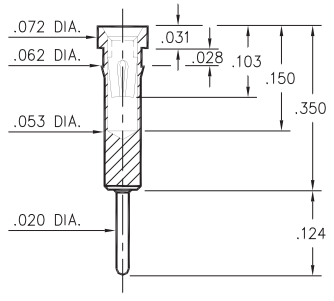
4613
4613-0-31-XX-30-XX-04-0
Compliant press-fit in .040 ± .003 plated through-hole. For .090"→.130" thick board



0680
0680-0-15-XX-32-XX-10-0
Solder mount in .051 min. mounting hole
Also available on 16mm wide carrier tape: 1,700 parts per 13" reel
Order as: 0680-0-57-XX-32-XX-10-0



0149
0149-0-15-XX-30-XX-04-0
Press-fit in .059 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

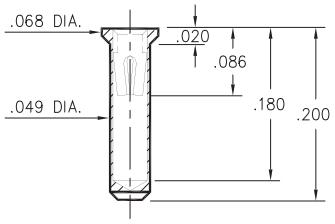
SELECT CONTACT:
#30 or #32 CONTACT (DATA ON PAGE 253)
(For alternate contact choices, see groups B and C on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

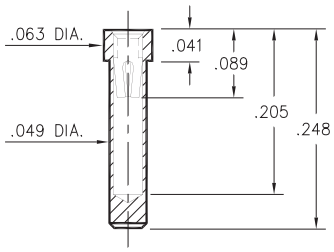
PIN RECEPTACLES

FOR .015" - .025" DIAMETER PINS

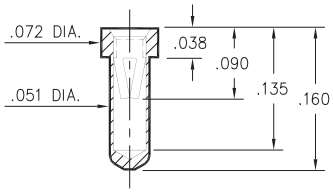
0660
0660-0-15-XX-30-XX-10-0
Solder mount in .051 min. mounting hole



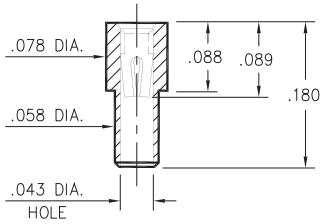
0677
0677-0-15-XX-30-XX-10-0
Solder mount in .051 min. mounting hole



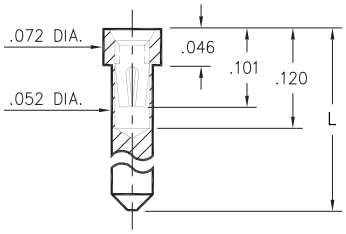
0555
0555-0-15-XX-32-XX-10-0
Solder mount in .053 min. mounting hole
Also available on 16mm wide carrier tape:
1,800 parts per 13" reel
Order as: 0555-0-57-XX-32-XX-10-0



0558
0558-0-15-XX-30-XX-10-0
Solder mount in .061 min. mounting hole

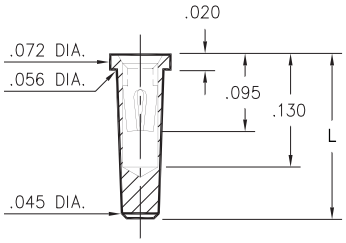


0675/0679
067X-0-15-XX-30-XX-10-0
Solder mount in .054 min. mounting hole



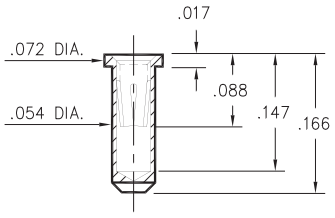
Basic Part Number	Length L
0675-0	.145
0679-0	.203

1065/1066/7065
X06X-0-15-XX-30-XX-10-0
Solder mount in .055 min. mounting hole

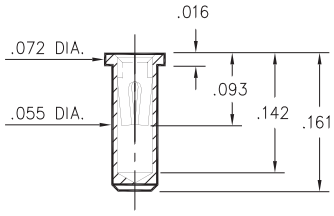


Basic Part Number	Length L
1065-0	.190
1066-0	.160
7065-0	.181

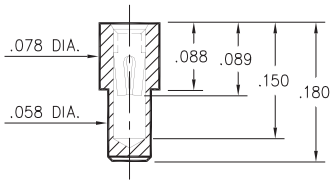
0682
0682-0-15-XX-32-XX-10-0
Solder mount in .056 min. mounting hole
Also available on 16mm wide carrier tape:
1,500 parts per 13" reel
Order as: 0682-0-57-XX-32-XX-10-0



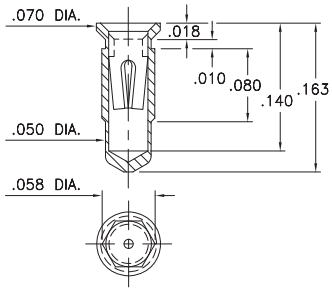
0667
0667-0-15-XX-30-XX-10-0
Solder mount in .057 min. mounting hole
Also available on 16mm wide carrier tape:
1,700 parts per 13" reel
Order as: 0667-0-57-XX-30-XX-10-0



0665
0665-0-15-XX-30-XX-10-0
Solder mount in .061 min. mounting hole



4286
4286-0-15-XX-30-XX-10-0
Hex press-fit in .055 plated through-hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - XX - XX - 10 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

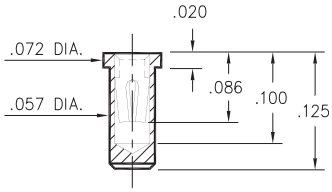
SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#30 or #32 CONTACT (DATA ON PAGE 253)
(For alternate contact choices, see groups B and C on page 248)

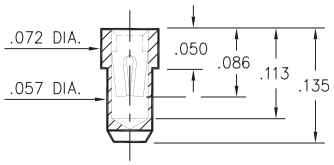
PIN RECEPTACLES

FOR .015" - .025" DIAMETER PINS

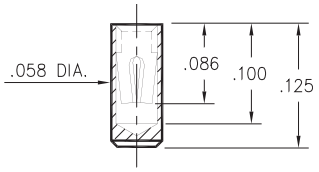
0669
0669-0-15-XX-30-XX-10-0
Solder mount in .060 min. mounting hole
Also available on 16mm wide carrier tape:
1,700 parts per 13" reel
Order as: 0669-0-57-XX-30-XX-10-0



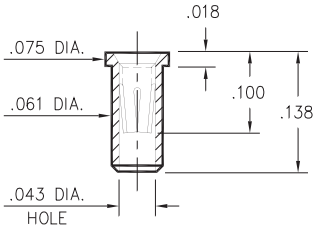
0670
0670-0-15-XX-30-XX-10-0
Solder mount in .060 min. mounting hole



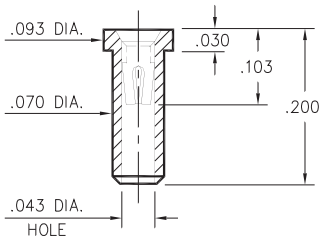
0673
0673-0-15-XX-30-XX-10-0
Surface mount



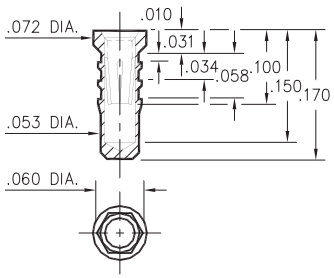
0666
0666-0-15-XX-32-XX-10-0
Solder mount in .064 min. mounting hole
Also available on 24mm wide carrier tape:
1,500 parts per 13" reel
Order as: 0666-0-57-XX-32-XX-10-0



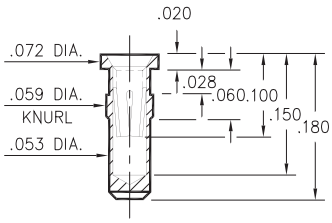
0341
0341-0-15-XX-30-XX-10-0
Solder mount in .073 mounting hole
Also available on 12mm wide carrier tape:
1,400 parts per 13" reel
Order as: 0341-0-57-XX-30-XX-10-0



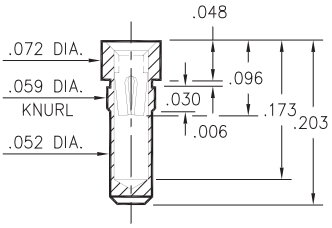
0252
0252-0-15-XX-32-XX-10-0
Hex press-fit in .057 plated through-hole



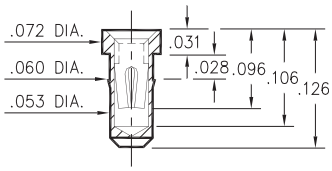
0678
0678-0-15-XX-32-XX-10-0
Press-fit in .057 mounting hole



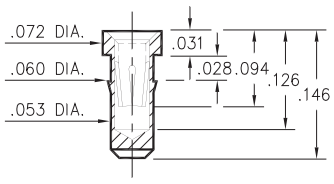
0676
0676-0-15-XX-30-XX-10-0
Press-fit in .057 mounting hole



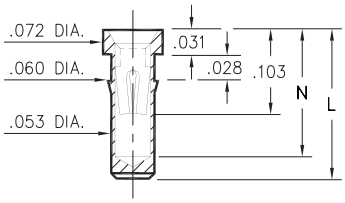
0697
0697-0-15-XX-30-XX-10-0
Press-fit in .057 mounting hole



0668
0668-0-15-XX-30-XX-10-0
Press-fit in .057 mounting hole



0253/1033
XXX3-0-15-XX-30-XX-10-0
Press-fit in .057 mounting hole



Basic Part Number	Length L	Depth N
0253-0	.173	.148
1033-0	.203	.162

SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - XX - XX - 10 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

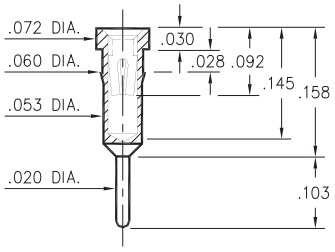
SELECT CONTACT:
#30 or #32 CONTACT (DATA ON PAGE 253)
(For alternate contact choices, see groups B and C on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

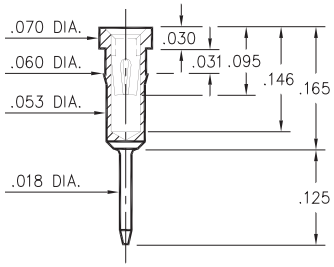
PIN RECEPTACLES

FOR .015" - .025" DIAMETER PINS

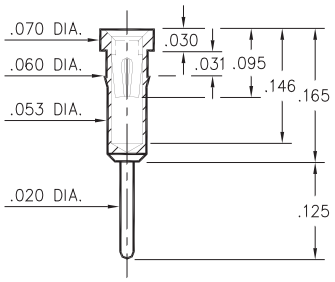
4011
4011-0-15-XX-30-XX-04-0
Press-fit in .057 mounting hole



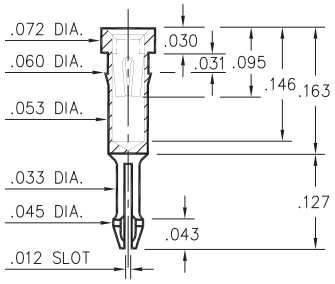
1801
1801-0-15-XX-30-XX-04-0
Press-fit in .057 mounting hole.
Shell is Phosphor Bronze Alloy 544 (B2)



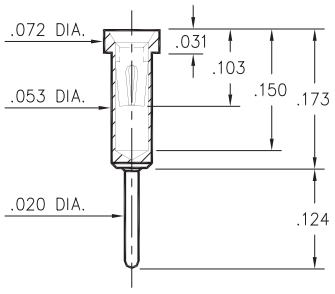
1001
1001-0-15-XX-3X-XX-04-0
Press-fit in .057 mounting hole



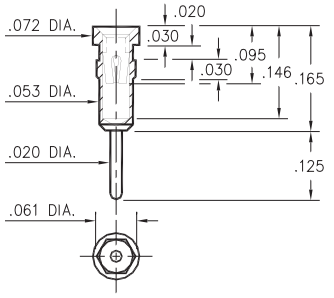
0156
0156-0-18-XX-30-XX-04-0
Self-retention socket pin .038 - .043
hole prior to soldering



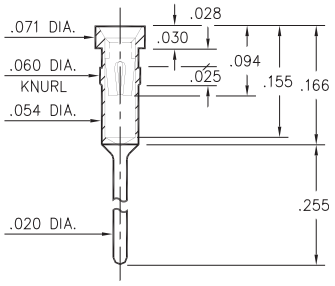
0255
0255-0-15-XX-30-XX-04-0
Solder mount in .022 min. mounting hole



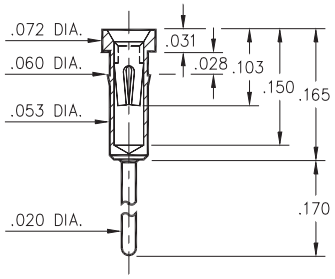
1109
1109-0-15-XX-30-XX-04-0
Hex press-fit in .057 plated through-hole



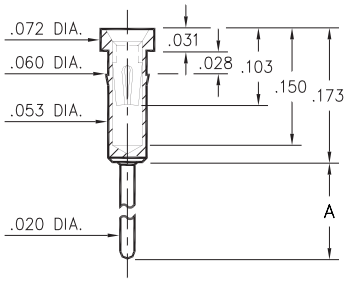
3013
3013-0-15-XX-32-XX-04-0
Press-fit in .057 mounting hole



0134
0134-0-15-XX-3X-XX-04-0
Press-fit in .057 mounting hole

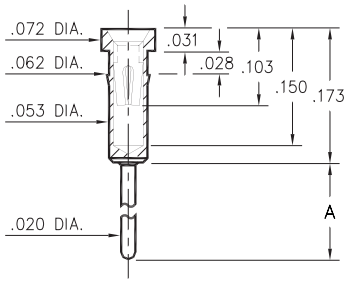


0132/0135
013X-0-15-XX-30-XX-04-0
Press-fit in .057 mounting hole



Basic Part Number	Length A
0132-0	.273
0135-0	.183

0133/0147
01XX-0-15-XX-30-XX-04-0
Press-fit in .059 mounting hole



Basic Part Number	Length A
0133-0	.382
0147-0	.563

SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - XX - XX - 10 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#30 or #32 CONTACT (DATA ON PAGE 253)
(For alternate contact choices, see groups B and C on page 248)

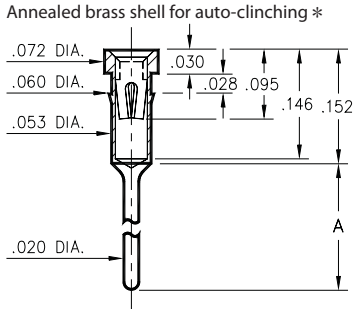
PIN RECEPTACLES

FOR .015" - .025" DIAMETER PINS

1005/1013/8898

XXXX-0-15-XX-3X-XX-04-0

Press-fit in .057 mounting hole
Annealed brass shell for auto-clinching *



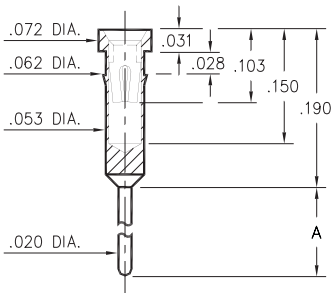
Basic Part Number	Length A
1005-0	.138
1013-0	.165
8898-0	.224

* NOTE: 8898 is not annealed & not suitable for auto-clinching

0145/0146

014X-0-15-XX-30-XX-04-0

Press-fit in .059 mounting hole

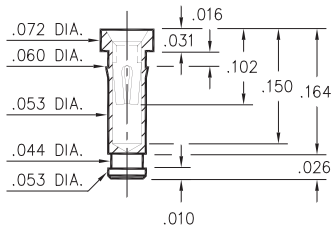


Basic Part Number	Length A
0145-0	.300
0146-0	.410

4378

4378-0-15-XX-30-XX-10-0

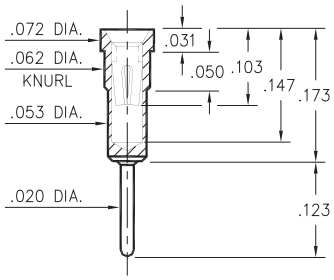
Press-fit in .057 mounting hole



0556

0556-0-15-XX-30-XX-04-0

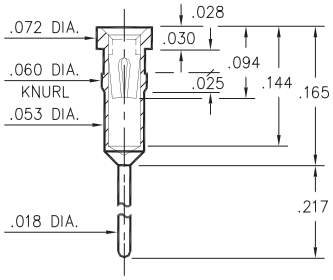
Press-fit in .059 mounting hole



1103

1103-0-15-XX-30-XX-04-0

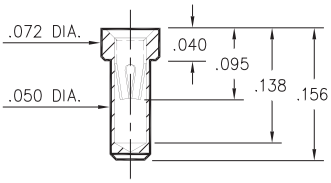
Press-fit in .057 mounting hole



9234

9234-0-15-XX-30-XX-10-0

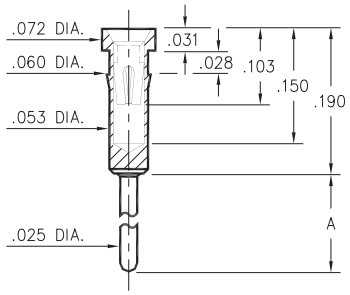
Solder mount in .052 min. mounting hole



0136/37/38/39/41/48/52

01XX-0-15-XX-30-XX-04-0

Press-fit in .057 mounting hole

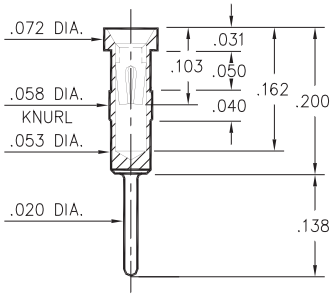


Basic Part Number	Length A
0136-0	1.215
0137-0	.560
0138-0	.210
0139-0	.635
0141-0	.700
0148-0	.455
0152-0	.410

0447

0447-0-15-XX-30-XX-04-0

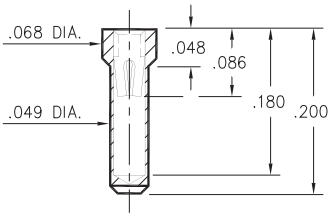
Press-fit in .056 mounting hole



5660

5660-0-15-XX-30-XX-10-0

Solder mount in .051 min. mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

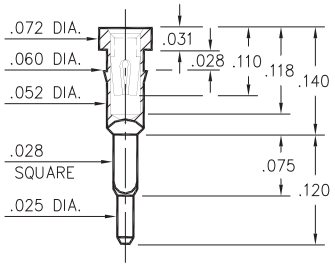
SELECT CONTACT:
#30 or #32 CONTACT (DATA ON PAGE 253)
(For alternate contact choices, see groups B and C on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

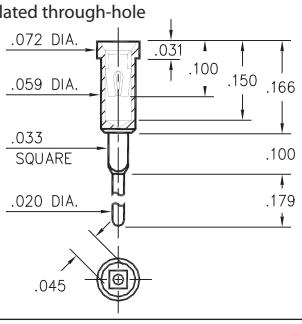
PIN RECEPTACLES

FOR .015" - .025" DIAMETER PINS

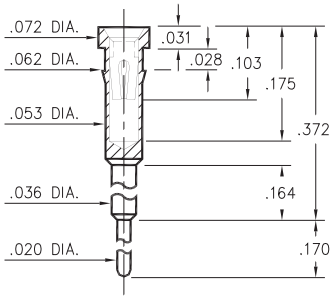
7132
7132-0-15-XX-30-XX-04-0
Square press-fit for .032 ± .002
plated through-hole



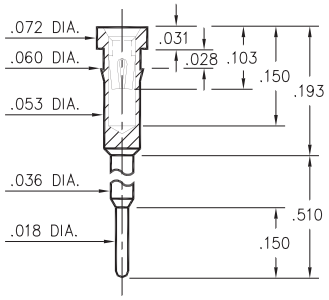
8445
8445-0-15-XX-30-XX-04-0
Square press-fit for .039 ± .002
plated through-hole



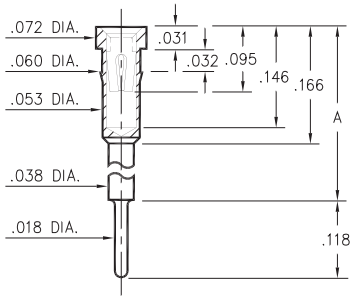
1038
1038-0-15-XX-30-XX-04-0
Press-fit in .059 mounting hole



1261
1261-0-15-XX-30-XX-04-0
Press-fit in .057 mounting hole

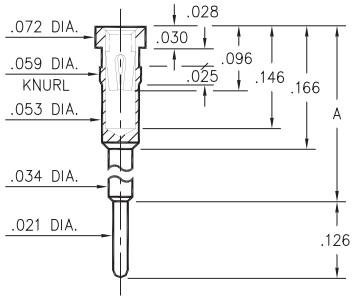


0153
0153-X-15-XX-30-XX-04-0
Press-fit in .057 mounting hole



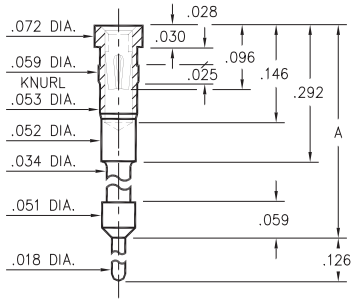
Basic Part Number	Height A
0153-1	.236
0153-2	.315
0153-3	.402
0153-4	.472
0153-5	.594
0153-6	.699

1602/1610
16XX-0-15-XX-30-XX-04-0
Press-fit in .057 mounting hole



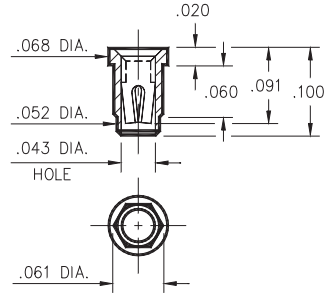
Basic Part Number	Height A
1602-0	.441
1610-0	.642

0903/0904
090X-0-15-XX-30-XX-04-0
Press-fit in .057 mounting hole

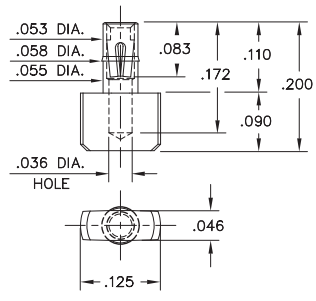


Basic Part Number	Height A
0903-0	.841
0904-0	1.141

8252
8252-0-15-XX-30-XX-10-0
Press-fit in .057 plated through-hole



4078
4078-0-15-XX-30-XX-40-0
Press-fit in .057 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - 30 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

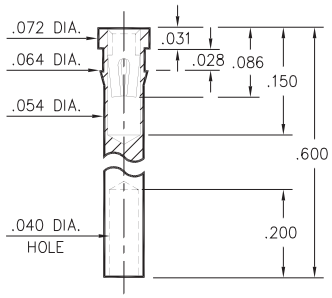
SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#30 CONTACT (DATA ON PAGE 253
(For alternate contact choices, see groups B and C on page 248)

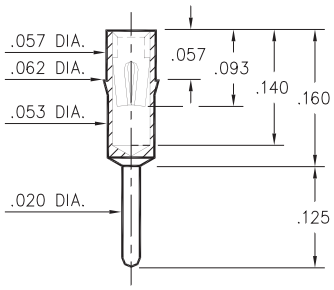
PIN RECEPTACLES

FOR .015" - .025" DIAMETER PINS

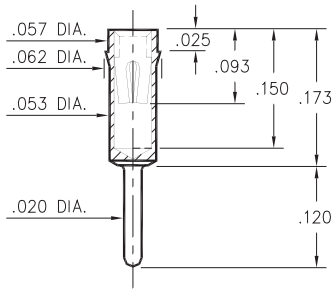
1707
1707-0-19-XX-30-XX-10-0
Press-fit in .061 mounting hole



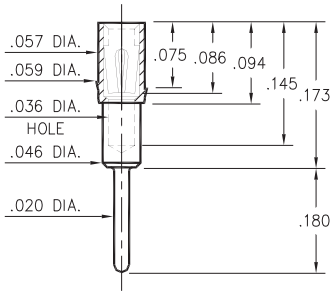
0240
0240-0-15-XX-30-XX-04-0
Press-fit in .059 mounting hole



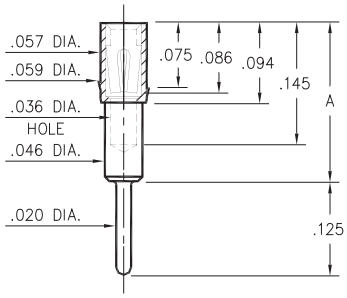
0307
0307-0-15-XX-30-XX-04-0
Press-fit in .059 mounting hole



1753
1753-0-15-XX-30-XX-04-0
Press-fit in .057 mounting hole

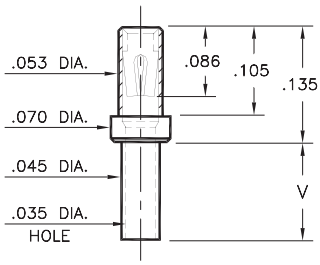


1705/1706/1762
17XX-0-15-XX-3X-XX-04-0
Press-fit in .057 mounting hole



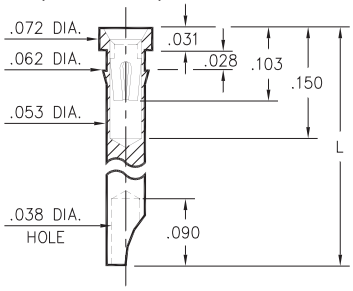
Basic Part Number	Height A
1705-0	.165
1706-0	.218
1762-0	.300

0672
0672-X-15-XX-30-XX-10-0
Swage mount in .049 hole



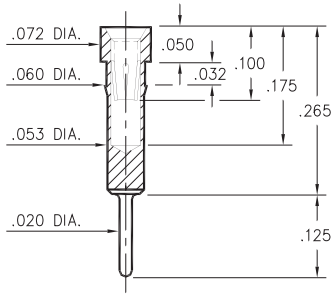
Basic Part Number	Board Thickness	Length V
0672-1	.031	.052
0672-2	.062	.084
0672-3	.094	.115
0672-4	.125	.146

1024/1104
1XX4-0-18-XX-30-XX-10-0
Press-fit in .059 mounting hole
Accepts wire sizes up to .028" dia.

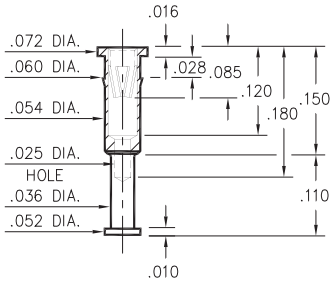


Basic Part Number	Length L
1024-0	.290
1104-0	.450

0498
0498-0-15-XX-35-XX-04-0
Press-fit in .057 mounting hole



8131
8131-0-15-XX-30-XX-10-0
Press-fit in .057 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#30 or #35 CONTACT (DATA ON PAGE 253 & 254)
(For alternate contact choices, see groups B and C on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

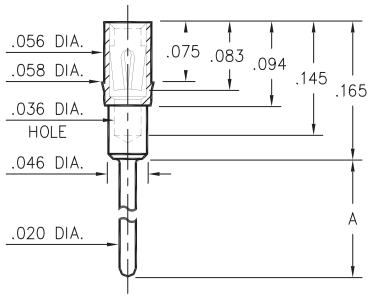
PIN RECEPTACLES

FOR .015" - .025" DIAMETER PINS

1802/3802/4030/8866

XXXX-0-15-XX-43-XX-04-0

Press-fit in .057 mounting hole

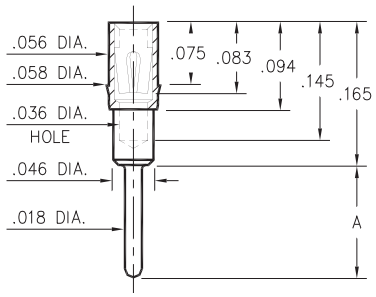


Basic Part Number	Length A
1802-0	.125
3802-0	.165
8866-0	.775
4030-0	.815

1803/1805/1808/3805

XXXX-0-15-XX-XX-XX-04-0

Press-fit in .057 mounting hole

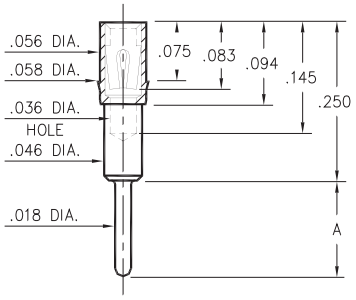


Basic Part Number	Length A
1808-0	.100
1803-0	.145
1805-0	.213
3805-0	.393

1804/1806

180X-0-15-XX-43-XX-04-0

Press-fit in .057 mounting hole

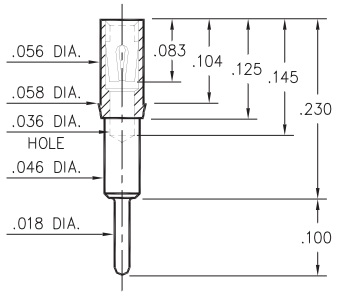


Basic Part Number	Length A
1804-0	.080
1806-0	.115

1807

1807-0-15-XX-43-XX-04-0

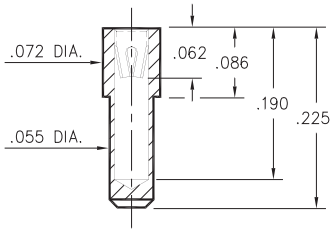
Press-fit in .057 mounting hole



8830

8830-15-XX-22-XX-10-0

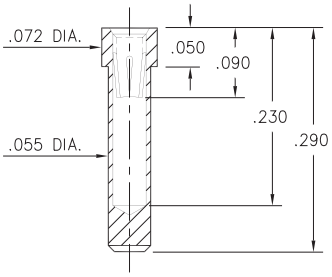
Solder mount in .057 min. mounting hole



8363

8363-0-15-XX-35-XX-10-0

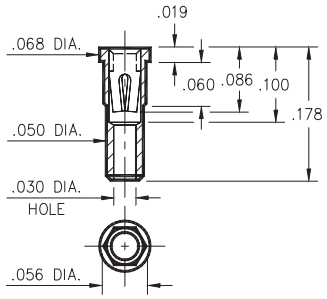
Solder mount in .057 min. mounting hole



4622

4622-0-15-XX-30-XX-10-0

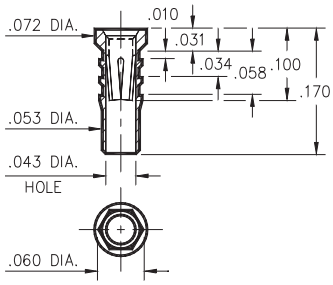
Hex press-fit in .053 plated through-hole



6252

6252-0-15-XX-32-XX-10-0

Hex press-fit in .057 plated through-hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

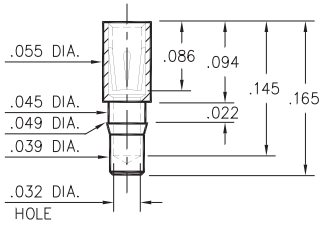
SELECT CONTACT:

#22, #30, #32 or #43 CONTACT (DATA ON PAGES 252, 253 & 254)
(For alternate contact choices, see groups B and C on page 248)

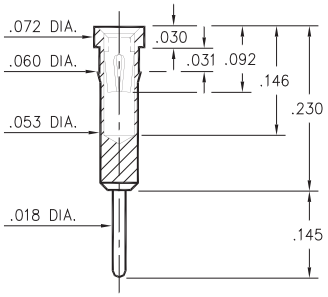
PIN RECEPTACLES

FOR .015" - .025" DIAMETER PINS

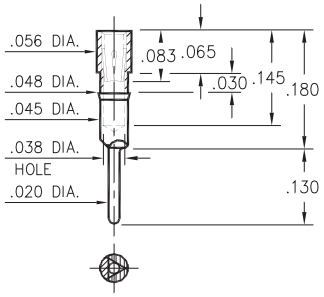
0385
0385-0-15-XX-43-XX-10-0
Press-fit in .046 mounting hole



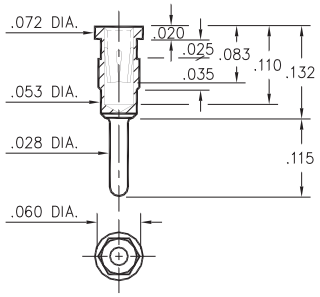
4001
4001-0-15-XX-43-XX-04-0
Press-fit in .057 mounting hole



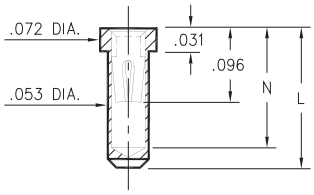
1782
1782-0-15-XX-43-XX-04-0
Press-fit in .045 mounting hole



5960
5960-0-15-XX-43-XX-04-0
Hex press-fit in .057 plated through-hole

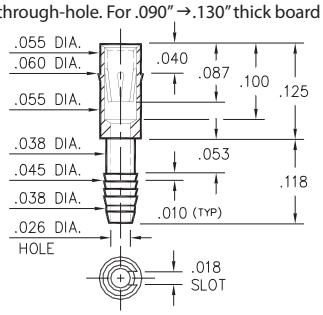


1401/3185
XXXX-0-15-XX-30-XX-10-0
Solder mount in .055 min. mounting hole
Also available on 16mm wide carrier tape:
1,700 parts per 13" reel
Order as: XXXX-0-57-XX-30-XX-10-0

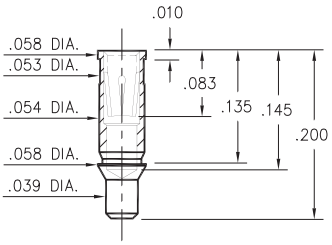


Basic Part Number	Length L	Depth N
1401-0	.165	.145
3185-0	.130	.109

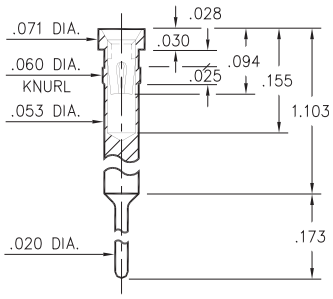
4310
4310-0-31-XX-43-XX-04-0
Compliant press-fit in .040 ± .003 plated through-hole. For .090" → .130" thick board



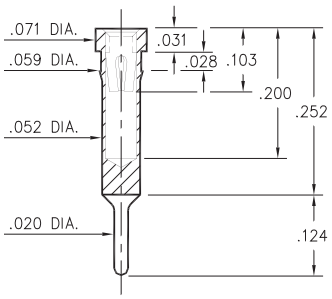
1385
1385-0-15-XX-43-XX-10-0
Surface mount



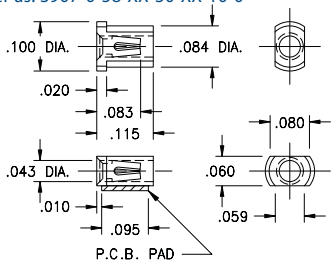
3018
3018-0-15-XX-30-XX-04-0
Press-fit in .057 mounting hole



8852
8852-0-15-XX-30-XX-04-0
Press-fit in .056 mounting hole

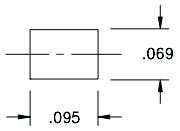


3907
3907-0-18-XX-30-XX-10-0
Surface mount
Also available on 12mm wide carrier tape:
4,000 parts per 13" reel
Order as: 3907-0-58-XX-30-XX-10-0





P.C.B. Layout



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#30, #35 or #43 CONTACT (DATA ON PAGE 253 & 254)
(For alternate contact choices, see groups B and C on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

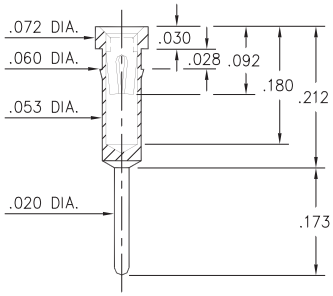
PIN RECEPTACLES

FOR .015" - .025" DIAMETER PINS

8964

8964-0-15-XX-30-XX-04-0

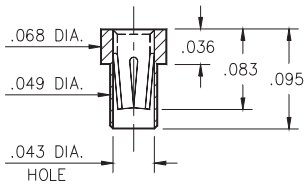
Press-fit in .057 mounting hole



5342

5342-0-15-XX-35-XX-10-0

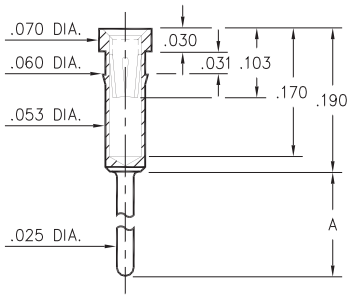
Solder mount in .051 min. mounting hole
Also available on 8mm wide carrier tape:
6,000 parts per 13" reel
Order as: 5342-0-57-XX-35-XX-10-0



8857

8857-X-15-XX-32-XX-04-0

Press-fit in .057 mounting hole

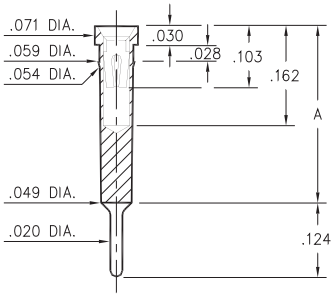


Basic Part Number	Length A
8857-0	.311
8857-1	.448
8857-2	.589
8857-3	.731
8857-4	.871

8862/8877

88XX-0-15-XX-30-XX-04-0

Press-fit in .056 mounting hole

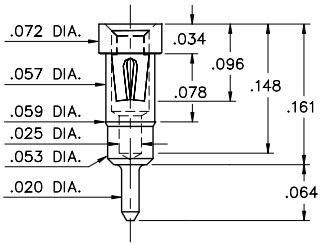


Basic Part Number	Length A
8862-0	.300
8877-0	.350

1334

1334-0-15-XX-30-XX-04-0

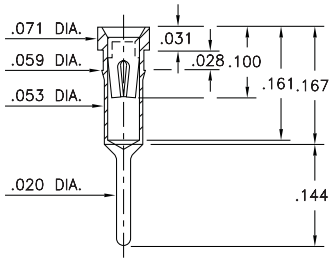
Press-fit in .057 mounting hole



8855

8855-0-15-XX-30-XX-04-0

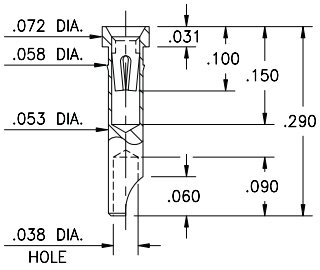
Press-fit in .057 mounting hole



2954

2954-0-18-XX-30-XX-10-0

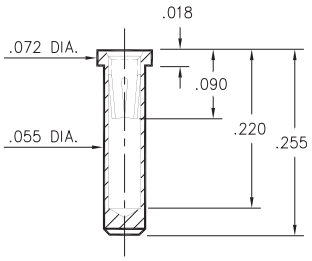
Press-fit in .057 mounting hole
Accepts wire sizes up to .028" dia.



9363

9363-0-15-XX-35-XX-10-0

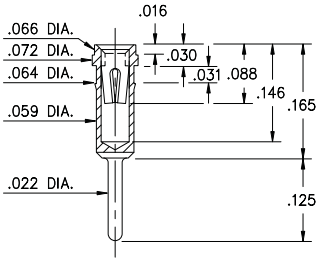
Solder mount in .057 min. mounting hole



1023

1023-0-15-XX-30-XX-04-0

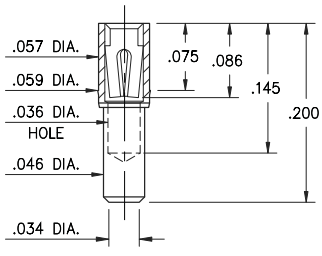
Press-fit in .061 mounting hole



1701

1701-0-15-XX-30-XX-10-0

Press-fit in .057 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - XX - XX - 10 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

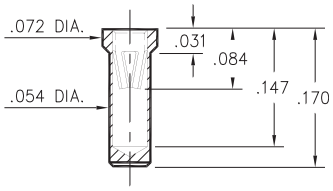
SELECT CONTACT:
#30, #32 or #35 CONTACT (DATA ON PAGE 253 & 254)
(For alternate contact choices, see groups B and C on page 248)

PIN RECEPTACLES

FOR .020" - .032" DIAMETER PINS

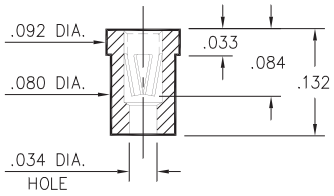
0338
0338-0-15-XX-15-XX-10-0

Solder mount in .057 min. mounting hole
Also available on 12mm wide carrier tape:
1,700 parts per 13" reel
Order as: 0338-0-57-XX-15-XX-10-0



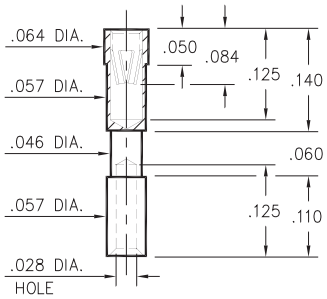
0378
0378-0-15-XX-15-XX-10-0

Solder mount in .082 min. mounting hole



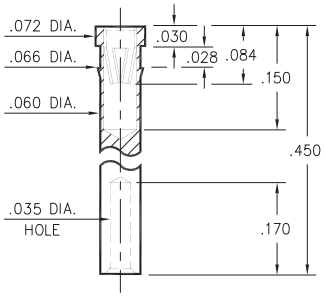
6002
6002-0-19-XX-15-XX-10-0

Solder mount in .059 min. mounting hole



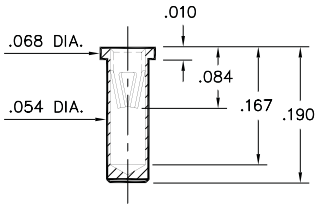
7009
7009-0-19-XX-15-XX-10-0

Press-fit in .063 mounting hole



0339
0339-0-15-XX-15-XX-10-0

Solder mount in .057 min. mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - 15 - XX - 10 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#15 CONTACT (DATA ON PAGE 254)
(For alternate contact choices, see group K on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

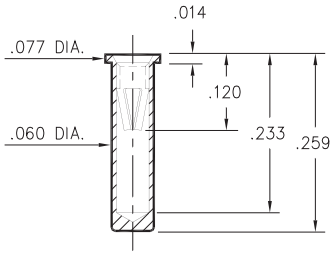
PIN RECEPTACLES

FOR .022" - .032" DIAMETER PINS

0295

0295-0-15-XX-06-XX-10-0

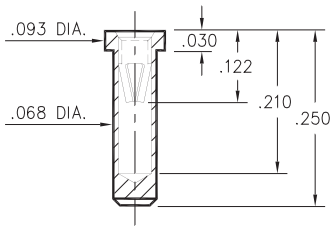
Solder mount in .063 min. mounting hole
Also available on 24mm wide carrier tape:
1,000 parts per 13" reel
Order as: 0295-0-57-XX-06-XX-10-0



0292

0292-0-15-XX-06-XX-10-0

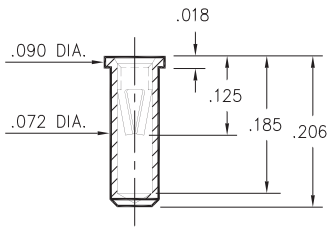
Solder mount in .071 min. mounting hole



0294

0294-0-15-XX-06-XX-10-0

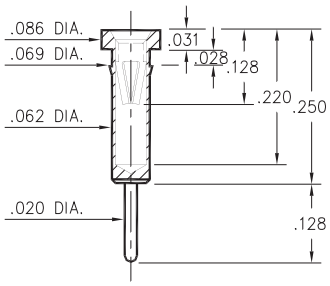
Solder mount in .076 min. mounting hole



0398

0398-0-15-XX-06-XX-04-0

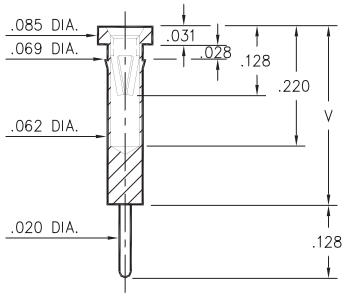
Press-fit in .066 mounting hole



0397

0397-X-15-XX-06-XX-04-0

Press-fit in .066 mounting hole

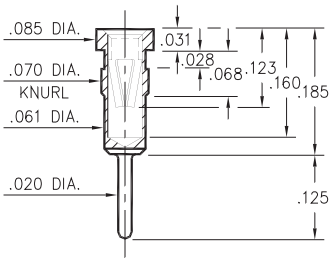


Basic Part Number	Length V
0397-0	.353
0397-1	.333
0397-2	.413

0297

0297-0-15-XX-06-XX-04-0

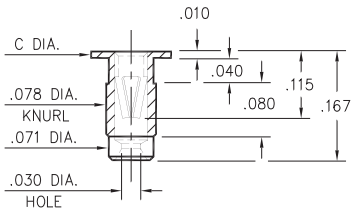
Press-fit in .067 mounting hole



9019/9039

90X9-0-19-XX-06-XX-10-0

Press-fit in .075 mounting hole



Basic Part Number	Head Dia. C
9019-0	.125
9039-0	.100

SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - 06 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#06 CONTACT (DATA ON PAGE 255)
(For alternate contact choices, see group D on page 248)

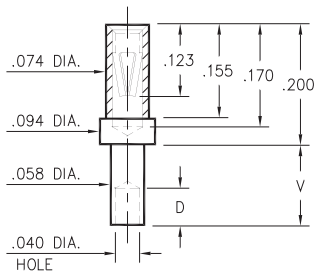
PIN RECEPTACLES

FOR .022" - .032" DIAMETER PINS

0326

0326-X-19-XX-06-XX-10-0

Swage mount in .060 hole

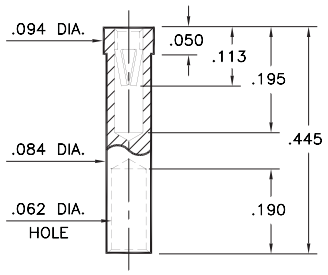


Basic Part Number	Board Thickness	Length V	Depth D
0326-1	.031	.062	.040
0326-2	.062	.094	.062
0326-3	.094	.125	.062
0326-4	.125	.156	.062

5295

5295-0-19-XX-06-XX-10-0

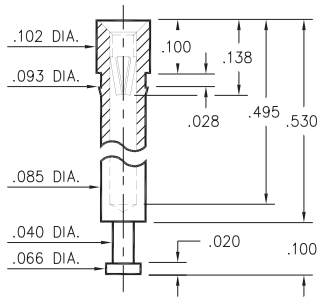
Solder mount in .086 min. mounting hole
Wire Crimp Termination. Accepts wire sizes 18AWG Max. / 22 AWG Min.



0396

0396-0-15-XX-06-XX-10-0

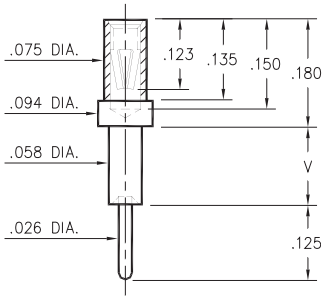
Press-fit in .090 mounting hole



0298

0298-X-15-XX-06-XX-10-0

Swage mount in .060 hole

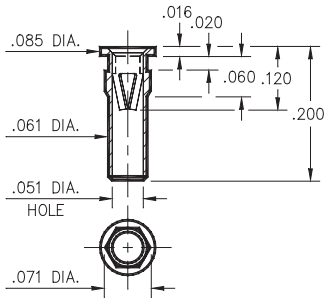


Basic Part Number	Board Thickness	Length V
0298-1	.031	.051
0298-2	.062	.082
0298-3	.094	.113
0298-4	.125	.145

9293

9293-0-15-XX-06-XX-04-0

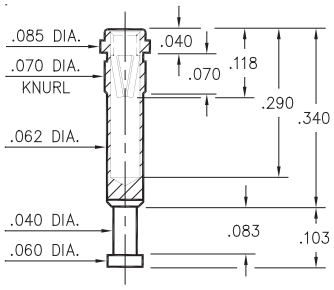
Hex press-fit in .067 plated through-hole



8864

8864-0-15-XX-06-XX-10-0

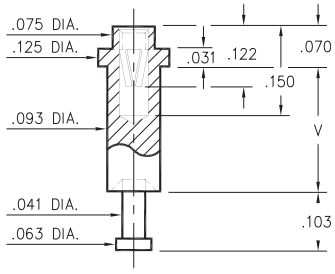
Press-fit in .067 mounting hole



0664

0664-X-15-XX-06-XX-10-0

Swage mount in .096 hole



Basic Part Number	Board Thickness	Length V
0664-1	.094	.125
0664-2	.125	.156
0664-3	.188	.219

SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - 06 - XX - 10 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

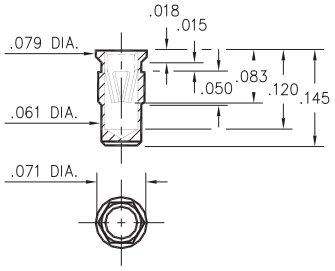
SELECT CONTACT:
#06 CONTACT (DATA ON PAGE 255)
(For alternate contact choices, see group D on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

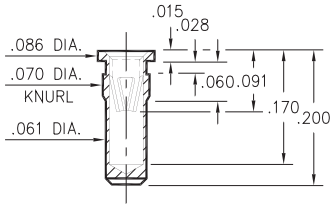
PIN RECEPTACLES

FOR .022" - .034" DIAMETER PINS AND .025" SQUARE PINS

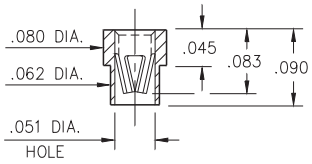
0291
0291-0-15-XX-16-XX-10-0
Hex press-fit in .067 plated through-hole



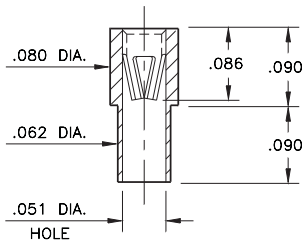
0293
0293-0-15-XX-16-XX-10-0
Press-fit in .067 mounting hole



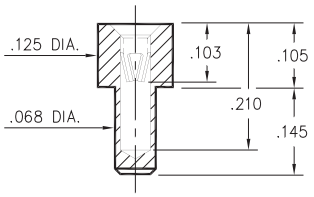
0287
0287-0-15-XX-16-XX-10-0
Solder mount in .065 min. mounting hole
Also available on 8mm wide carrier tape:
3,250 parts per 13" reel
Order as: 0287-0-57-XX-16-XX-10-0



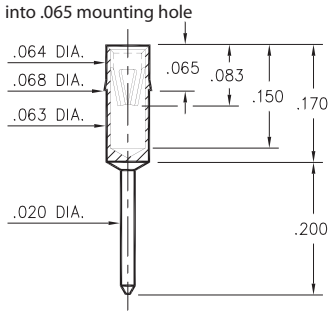
0285
0285-0-15-XX-16-XX-10-0
Solder mount in .065 min. mounting hole



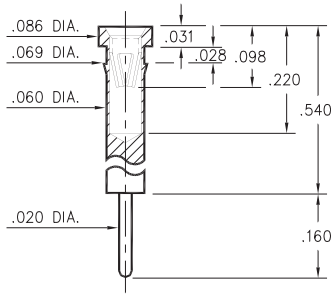
0284
0284-0-15-XX-16-XX-10-0
Solder mount in .070 min. mounting hole



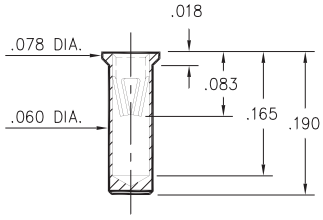
8114
8114-0-15-XX-16-XX-04-0
Press-fit from underside of pc board
into .065 mounting hole



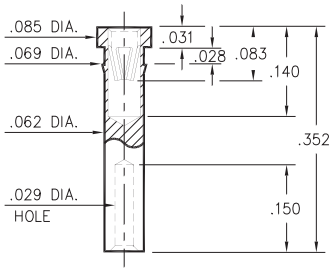
0407
0407-0-15-XX-16-XX-04-0
Press-fit in .066 mounting hole



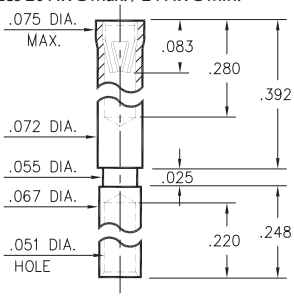
0415
0415-0-15-XX-16-XX-10-0
Solder mount in .063 min. mounting hole
Also available on 24mm wide carrier tape:
1,500 parts per 13" reel
Order as: 0415-0-57-XX-16-XX-10-0



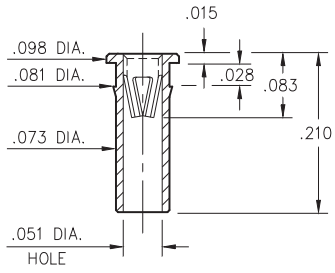
0303
0303-0-19-XX-16-XX-10-0
Press-fit in .067 mounting hole
Wire Crimp Termination. Accepts wire
sizes 26 AWG Max. / 30 AWG Min.



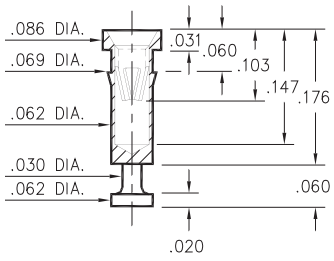
0306
0306-0-19-XX-16-XX-10-0
Wire Crimp Termination. Accepts wire
sizes 20 AWG Max. / 24 AWG Min.



0273
0273-0-15-XX-16-XX-10-0
Press-fit in .078 mounting hole



7520
7520-0-15-XX-16-XX-10-0
Press-fit in .066 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - 16 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

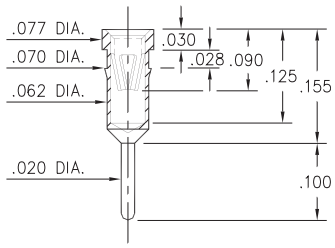
SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#16 CONTACT (DATA ON PAGE 256)
(For alternate contact choices, see group D on page 248)

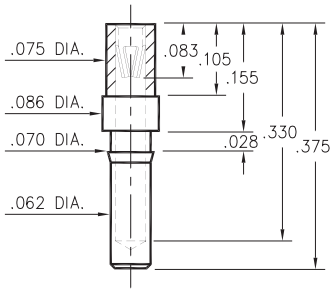
PIN RECEPTACLES

FOR .022" - .034" DIAMETER PINS AND .025" SQUARE PINS

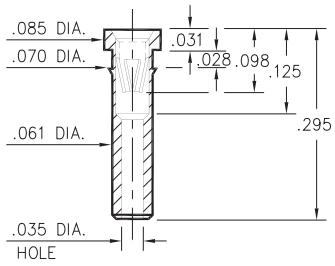
9808
9808-0-15-XX-16-XX-04-0
Press-fit in .067 mounting hole



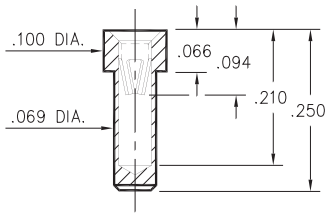
9101
9101-0-15-XX-16-XX-10-0
Press-fit in .067 mounting hole



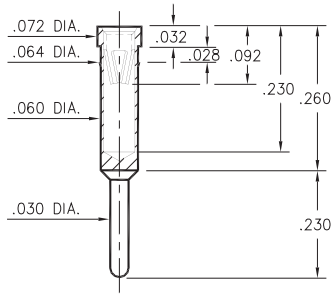
5650
5650-0-19-XX-16-XX-10-0
Press-fit in .067 mounting hole



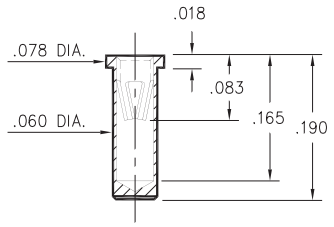
8679
8679-0-15-XX-16-XX-10-0
Solder mount in .071 min. mounting hole



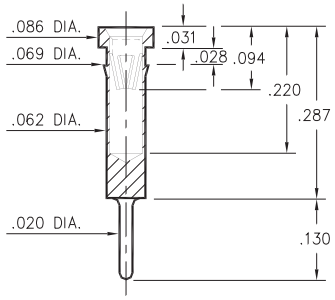
8827
8827-0-15-XX-16-XX-04-0
Press-fit in .061 mounting hole



6021
6021-0-15-XX-16-XX-10-0
Solder mount in .062 min. mounting hole



1873
1873-0-15-XX-16-XX-04-0
Press-fit in .066 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - 16 - XX - 10 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#16 CONTACT (DATA ON PAGE 256)
(For alternate contact choices, see group D on page 248)

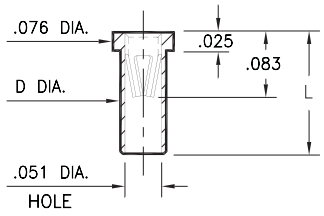
PIN RECEPTACLES

FOR .025" - .037" DIAMETER PINS AND .025" SQUARE PINS

0305

0305-X-15-XX-47-XX-10-0

Solder mount in .059/.061 mounting hole
Also available on 8mm or 24mm wide carrier tape: See chart for details
Order as: 0305-X-57-XX-47-XX-10-0



Basic Part Number	Length L	Dia. D
0305-0	.095	.056
0305-1	.105	.058
0305-2	.155	.058

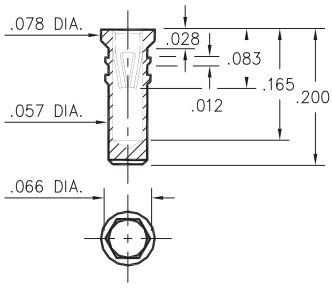
T&R Packaging

Basic Part Number	Tape Width	Parts per 13" Reel
0305-0	8mm	6,000
0305-1	8mm	6,000
0305-2	24mm	1,500

0279

0279-0-15-XX-47-XX-10-0

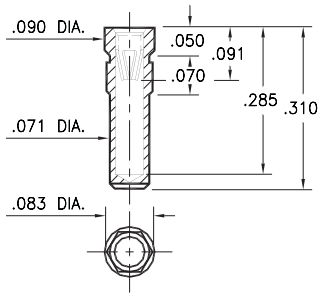
Hex press-fit in .062 plated through-hole



0330

0330-0-15-XX-47-XX-10-0

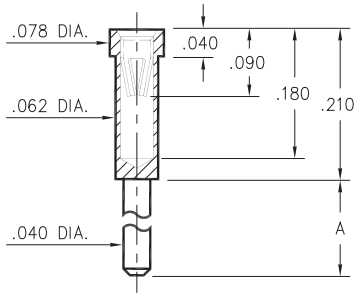
Hex press-fit in .079 plated through-hole



0300/8300

X300-X-15-XX-47-XX-10-0

Solder mount in .042 min. mounting hole

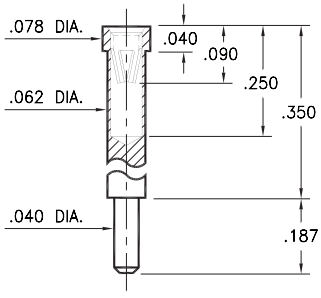


Basic Part Number	Length A
0300-1	.110
0300-2	.187
8300-0	.140

0301

0301-1-15-XX-47-XX-10-0

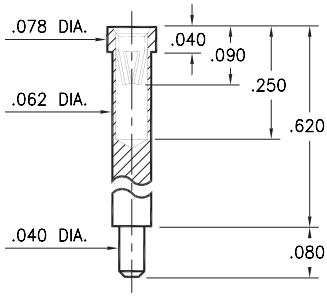
Solder mount in .042 min. mounting hole



0309

0309-2-15-XX-47-XX-10-0

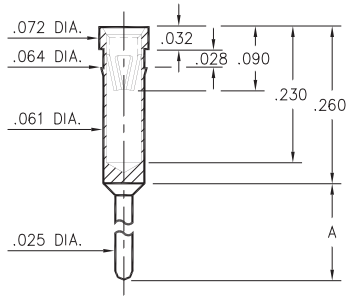
Solder mount in .042 min. mounting hole



0399

0399-X-15-XX-47-XX-04-0

Press-fit in .062 mounting hole

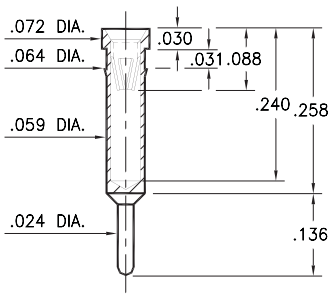


Basic Part Number	Length A
0399-0	.230
0399-1	.180

1304

1304-0-15-XX-47-XX-04-0

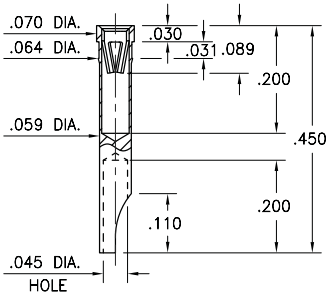
Press-fit in .061 mounting hole



1134

1134-0-18-15-47-27-10-0

Press-fit in .061 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - 47 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#47 CONTACT (DATA ON PAGE 256)
(For alternate contact choices, see group D on page 248)

COMPLIANT TAIL PINS & RECEPTACLES

DESIGNED FOR A SECURE PRESS-FIT IN STANDARD PLATED THROUGH-HOLES

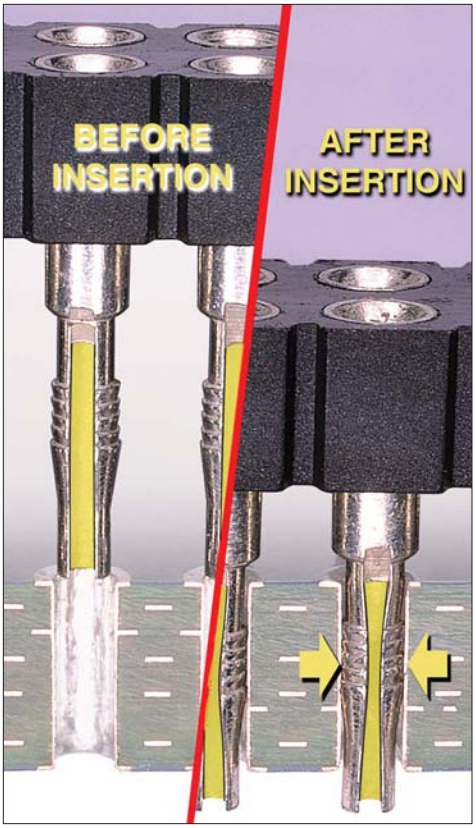
The unique compliant pin design is characterized by a hollow and slotted tail that closes down and conforms to the size of the plated through-hole, thus preventing damage. In addition, the combination of slotted tail and a series of fine serrations make a reliable gas-tight connection with the plating inside the hole.

Mill-Max offers sockets, headers and discrete pins and receptacles with compliant tail or barrel features to address a broad range of applications where press-fitting is the desired solution over soldering. Mill-Max compliant tail sockets are available in dual-in-line packages (Series 146) and single and double row strips (Series 346 and 446, respectively).

For higher current and more rugged applications, Mill-Max has single row (Series 800) and double row (Series 802) interconnects and mating sockets, single row (Series 801) and double row (Series 803). Multi-layer boards can be stacked by mating these pin headers with sockets containing highly reliable six-finger inner contacts that accept .030" diameter round pins as well as .025" square pins.

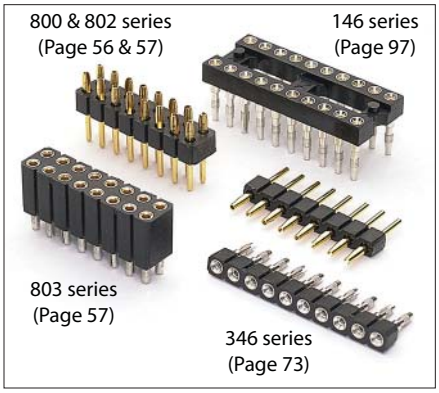
Both compliant tail sockets and interconnects are available in two tail lengths, one for .060"-.100" thick panels and another for .090"-.130" thick panels.

Discrete pins (P/N's 5601, 5602 & 2617) and receptacles (P/N's 4993 & 4994) are useful for single location requirements or for non-standard layouts. The receptacles are low profile. The 4993 accepts leads from .012" - .017" and 4994 accepts leads from .015" - .020".









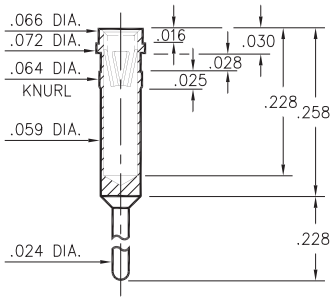


Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

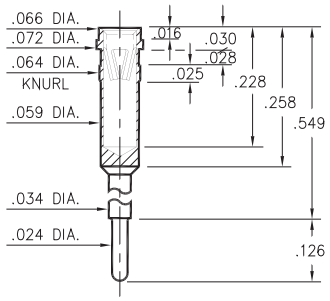
PIN RECEPTACLES

FOR .025" - .037" DIAMETER PINS AND .025" SQUARE PINS

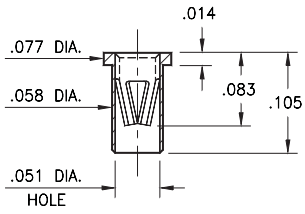
1305
1305-0-15-XX-47-XX-04-0
Press-fit in .061 mounting hole



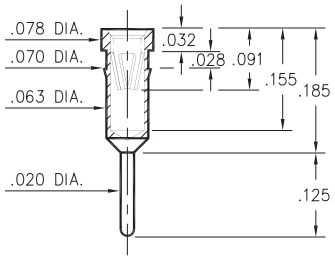
1306
1306-0-15-XX-47-XX-04-0
Press-fit in .061 mounting hole



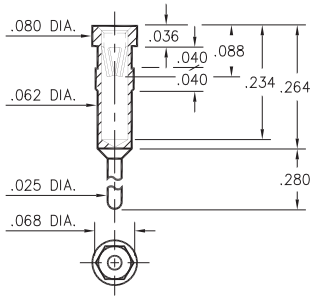
7305
7305-0-15-XX-47-XX-10-0
Solder mount in .060 min. mounting hole
Also available on 8mm wide carrier tape:
6,000 parts per 13" reel
Order as: 7305-0-57-XX-47-XX-10-0



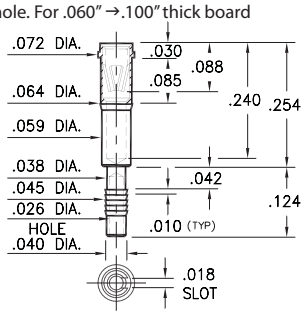
0400
0400-0-15-XX-47-XX-04-0
Press-fit in .067 mounting hole



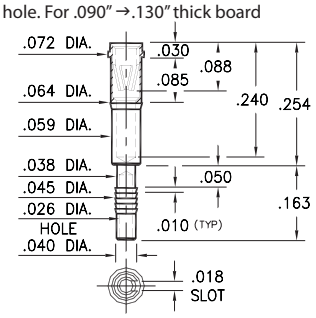
0335
0335-0-15-XX-47-XX-04-0
Hex press-fit in .064 plated through-hole



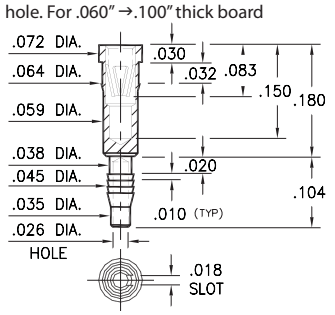
4614
4614-0-31-XX-47-XX-04-0
Compliant press-fit in .040 ± .003 plated hole. For .060" →.100" thick board



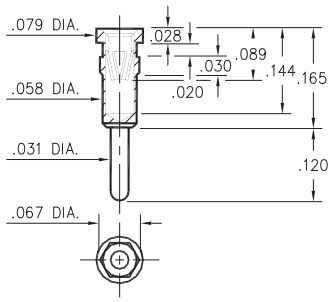
4615
4615-0-31-XX-47-XX-04-0
Compliant press-fit in .040 ± .003 plated hole. For .090" →.130" thick board



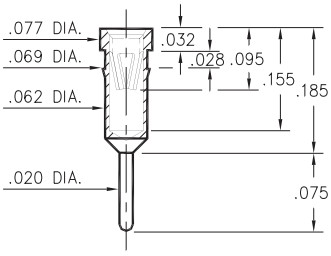
7614
7614-0-31-XX-47-XX-04-0
Compliant press-fit in .040 ± .003 plated hole. For .060" →.100" thick board



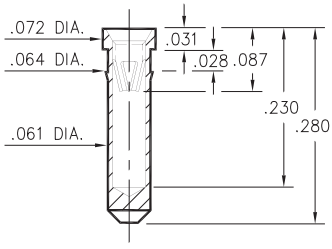
8401
8401-0-15-XX-47-XX-04-0
Hex press-fit in .063 plated through-hole



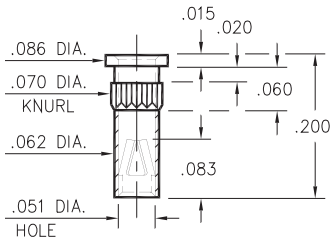
2400
2400-0-15-XX-47-XX-04-0
Press-fit in .066 mounting hole



6857
6857-0-15-XX-47-XX-10-0
Press-fit in .062 mounting hole



9393
9393-0-15-XX-47-XX-10-0
Press-fit in .067 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - XX - XX - 47 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#47 CONTACT (DATA ON PAGE 256)
(For alternate contact choices, see group D on page 248)

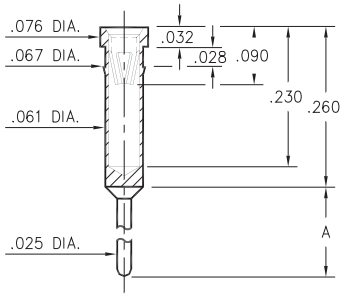
PIN RECEPTACLES

FOR .025" - .037" DIAMETER PINS AND .025" SQUARE PINS

0401/6401

X401-0-15-XX-47-XX-04-0

Press-fit in .064 mounting hole

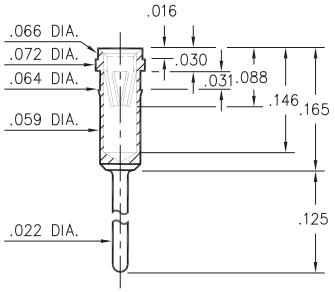


Basic Part Number	Length A
0401-0	.340
6401-0	.540

1303

1303-0-15-XX-47-XX-04-0

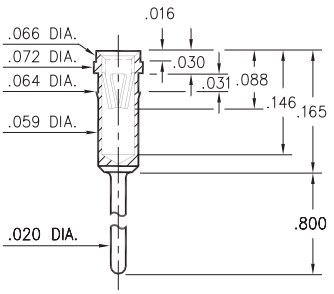
Press-fit in .061 mounting hole



8303

8303-0-15-XX-47-XX-04-0

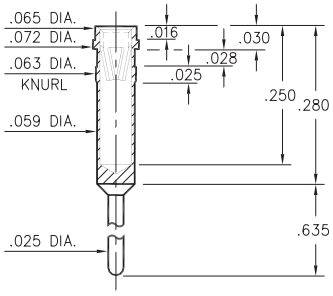
Press-fit in .061 mounting hole



4095

4095-0-15-XX-47-XX-04-0

Press-fit in .061 mounting hole



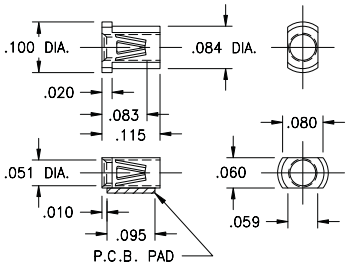
8806

8806-0-18-XX-47-XX-40-0

Surface mount

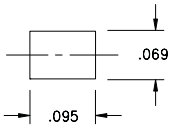
Also available on 12mm wide carrier tape:
4,000 parts per 13" reel

Order as: 8806-0-58-XX-47-XX-10-0





P.C.B. Layout



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - 47 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#47 CONTACT (DATA ON PAGE 256)
(For alternate contact choices, see group D on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

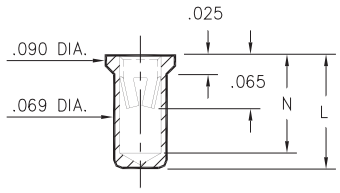
PIN RECEPTACLES

FOR .037" - .043" DIAMETER PINS

0331/9353

X3XX-0-15-XX-18-XX-10-0

Solder mount in .071 min. mounting hole
Also available on 24mm wide carrier tape:
1,000 parts per 13" reel
Order as: X3XX-0-57-XX-18-XX-10-0

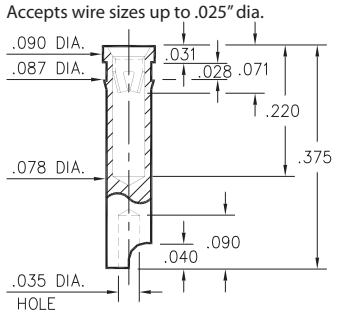


Basic Part Number	Length L	Depth N
0331-0	.150	.127
9353-0	.170	.147

7405

7405-0-18-XX-18-XX-10-0

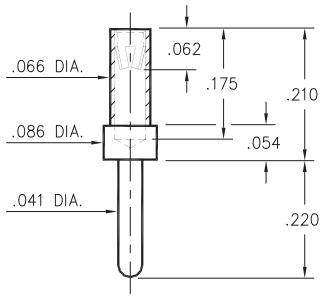
Press-fit in .084 mounting hole
Accepts wire sizes up to .025" dia.



3450

3450-0-15-XX-18-XX-04-0

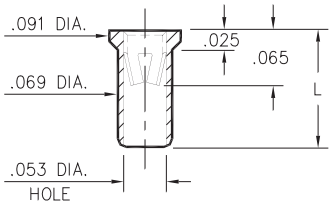
Solder mount in .043 min. mounting hole



9354/7406

XXXX-0-15-XX-18-XX-10-0

Solder mount in .071 min. mounting hole

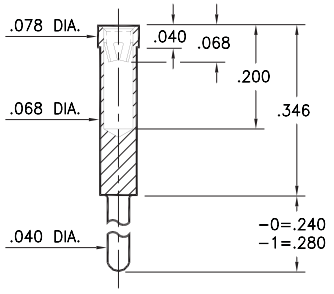


Basic Part Number	Length L
7406-0	.120
9354-0	.170

0319

0319-X-15-XX-18-XX-04-0

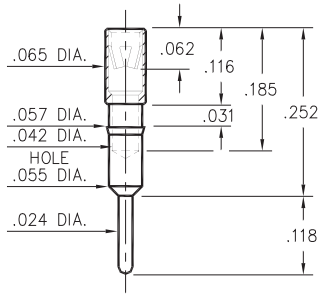
Solder mount in .042 min. mounting hole



1313

1313-0-15-XX-18-XX-04-0

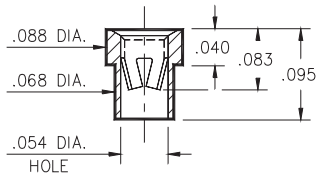
Press-fit in .056 mounting hole



3520

3520-0-15-XX-18-XX-10-0

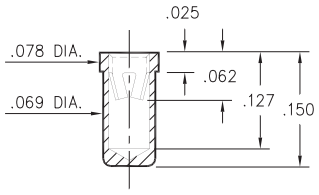
Solder mount in .070 min. mounting hole



8331

8331-0-15-XX-18-XX-10-0

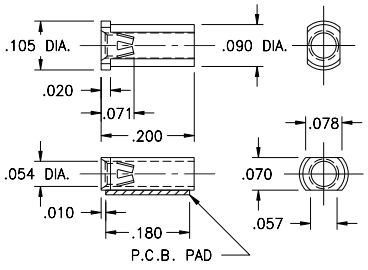
Solder mount in .071 min. mounting hole



6628

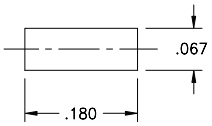
6628-0-18-XX-18-XX-10-0

Surface mount
Also available on 12mm wide carrier tape:
3,700 parts per 13" reel
Order as: 6628-0-58-XX-18-XX-10-0





P.C.B. Layout



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - 18 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#18 CONTACT (DATA ON PAGE 257)
(For alternate contact choices, see group L on page 248)

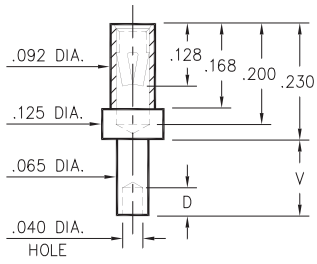
PIN RECEPTACLES

FOR .032" - .046" DIAMETER PINS

0344

0344-X-19-XX-34-XX-10-0

Swage mount in .067 hole

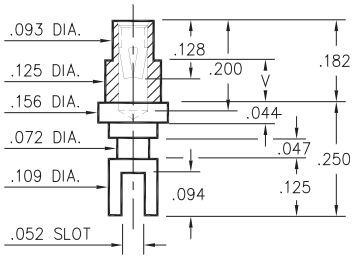


Basic Part Number	Board Thickness	Length V	Depth D
0344-1	.031	.062	.040
0344-2	.062	.094	.062
0344-3	.094	.125	.062
0344-4	.125	.156	.062

0349

0349-X-31-XX-34-XX-10-0

Swage mount in .129 hole

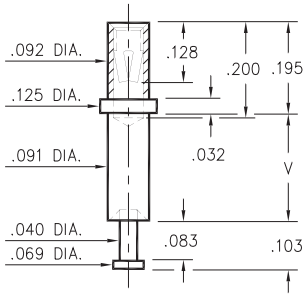


Basic Part Number	Board Thickness	Length V
0349-2	.062	.094
0349-3	.094	.125
0349-4	.125	.156

0323

0323-X-15-XX-34-XX-10-0

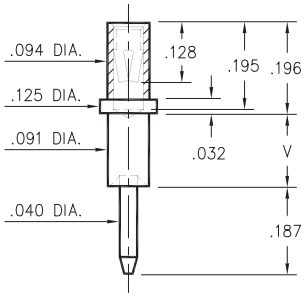
Swage mount in .094 hole



0324

0324-X-15-XX-34-XX-10-0

Swage mount in .094 hole

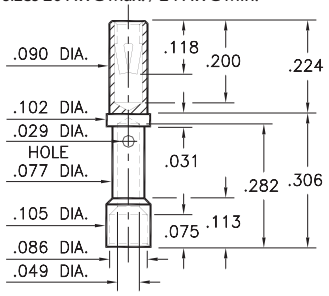


Basic Part Number	Board Thickness	Length V
032X-1	.031	.062
032X-2	.062	.094
032X-3	.094	.125
032X-4	.125	.156
032X-5	.188	.219

0348

0348-0-33-XX-34-XX-10-0

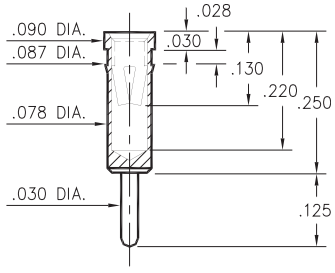
Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.



0405

0405-0-15-XX-34-XX-04-0

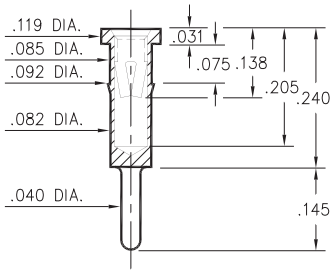
Press-fit in .084 mounting hole



0336

0336-0-15-XX-34-XX-04-0

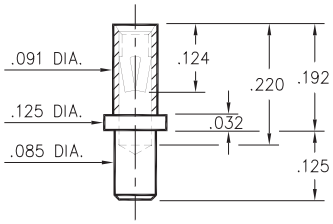
Press-fit in .089 mounting hole



0322

0322-0-15-XX-34-XX-10-0

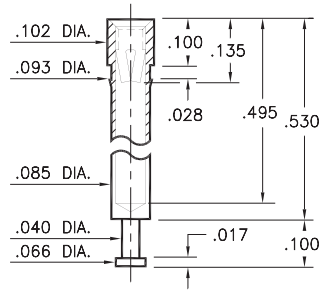
Solder mount in .089 min. mounting hole



0325

0325-0-15-XX-34-XX-10-0

Press-fit in .090 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - XX - XX - 34 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#34 CONTACT (DATA ON PAGE 258)
(For alternate contact choices, see group E on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

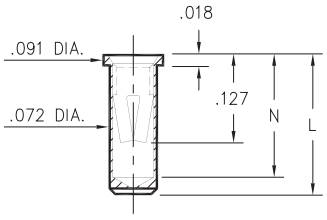
PIN RECEPTACLES

FOR .032" - .046" DIAMETER PINS

0327/0351/0373

03XX-0-15-XX-34-XX-10-0

Solder mount in .075 min. mounting hole
Also available on 12mm or 24mm wide carrier tape: See chart for details
Order as: 03XX-0-57-XX-34-XX-10-0



Basic Part Number	Length L	Depth N
0327-0	.206	.180
0351-0	.226	.200
0373-0	.270	.241

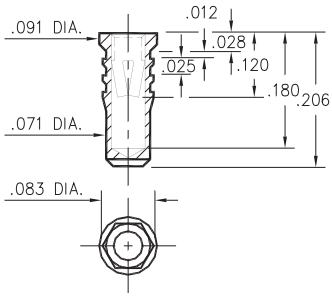
T&R Packaging

Basic Part Number	Tape Width	Parts per 13" Reel
0327-0	12mm	1,400
0351-0	24mm	1,100

0328

0328-0-15-XX-34-XX-10-0

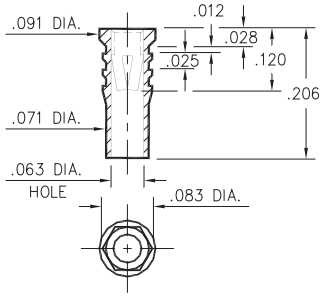
Hex press-fit in .079 plated through-hole



0334

0334-0-15-XX-34-XX-10-0

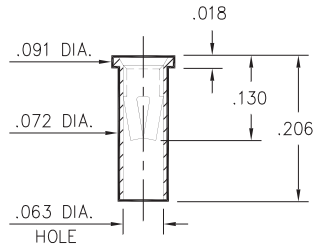
Hex press-fit in .079 plated through-hole



0312

0312-0-15-XX-34-XX-10-0

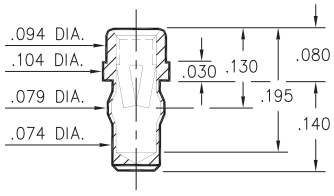
Solder mount in .075 min. mounting hole
Also available on 12mm wide carrier tape: 1,400 parts per 13" reel
Order as: 0312-0-57-XX-34-XX-10-0



0333

0333-0-42-XX-34-XX-10-0

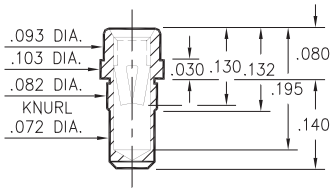
Press-fit in .076 mounting hole



0357

0357-0-15-XX-34-XX-10-0

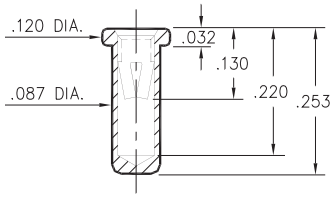
Press-fit in .078 mounting hole



0317

0317-0-15-XX-34-XX-04-0

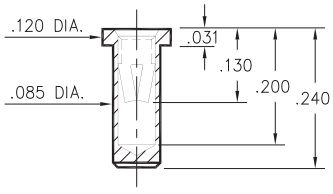
Solder mount in .091 min. mounting hole



0340

0340-0-15-XX-34-XX-10-0

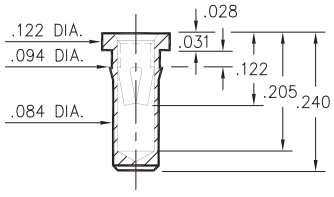
Solder mount in .087 min. mounting hole



0345

0345-0-15-XX-34-XX-10-0

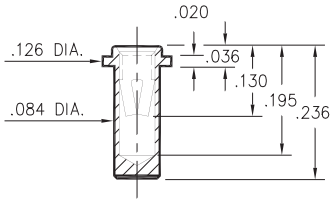
Press-fit in .089 mounting hole



0316

0316-0-15-XX-34-XX-10-0

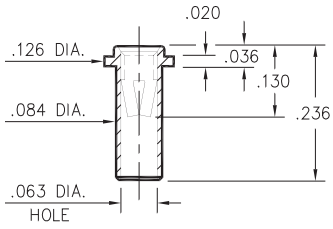
Solder mount in .087 min. mounting hole



0314

0314-0-15-XX-34-XX-10-0

Solder mount in .087 min. mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - XX - XX - 34 - XX - 10 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

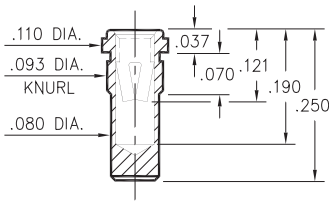
SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#34 CONTACT (DATA ON PAGE 258)
(For alternate contact choices, see group E on page 248)

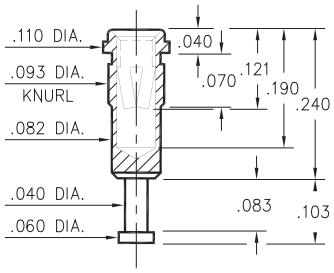
PIN RECEPTACLES

FOR .032" - .046" DIAMETER PINS

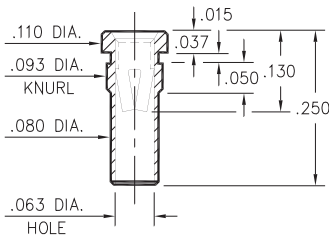
0359
0359-0-15-XX-34-XX-10-0
Press-fit in .090 mounting hole



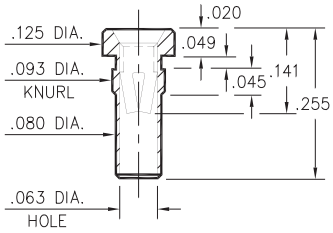
0358
0358-0-15-XX-34-XX-10-0
Press-fit in .090 mounting hole



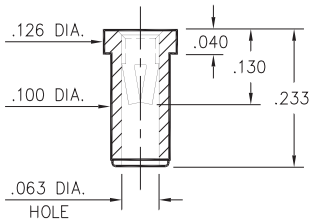
0360
0360-0-15-XX-34-XX-10-0
Press-fit in .090 mounting hole



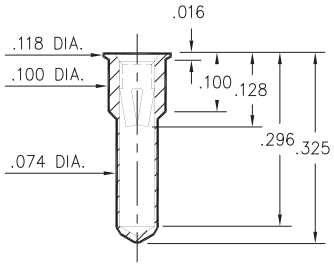
0343
0343-0-15-XX-34-XX-10-0
Press-fit in .090 mounting hole



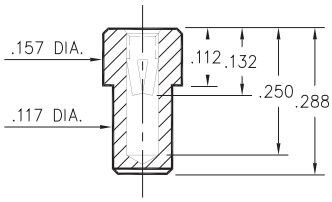
0356
0356-0-15-XX-34-XX-10-0
Solder mount in .102 min. mounting hole
Also available on 24mm wide carrier tape:
1,100 parts per 13" reel
Order as: 0356-0-57-XX-34-XX-10-0



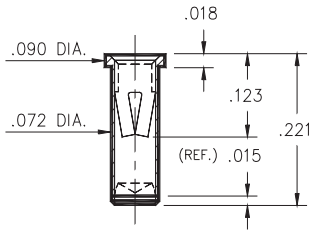
6659
6659-0-15-XX-34-XX-10-0
Solder mount in .102 min. mounting hole



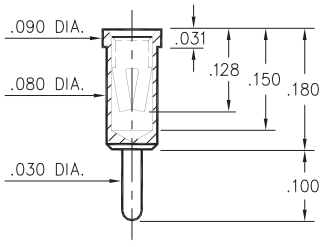
0347
0347-0-15-XX-34-XX-10-0
Solder mount in .120 min. mounting hole



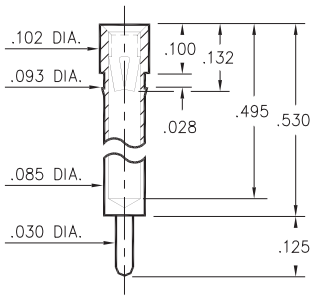
0329
0329-0-15-XX-34-XX-10-0
Solder mount in .075 min. mounting hole. "Knock out" bottom



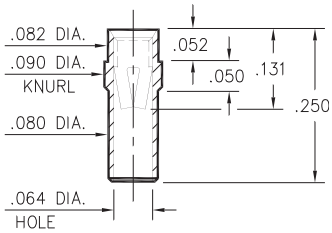
0814
0814-0-15-XX-34-XX-04-0
Solder mount in .082 min. mounting hole



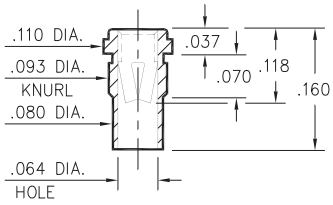
5059
5059-0-15-XX-34-XX-04-0
Press-fit in .090 mounting hole



8360
8360-0-15-XX-34-XX-10-0
Press-fit in .087 mounting hole



9359
9359-0-15-XX-34-XX-10-0
Press-fit in .090 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - 34 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

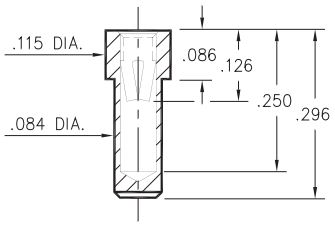
SELECT CONTACT:
#34 CONTACT (DATA ON PAGE 258)
(For alternate contact choices, see group E on page 248)

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

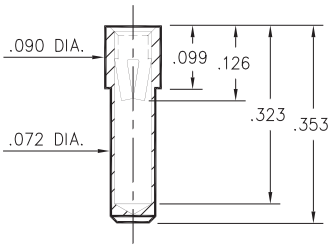
PIN RECEPTACLES

FOR .032" - .046" DIAMETER PINS

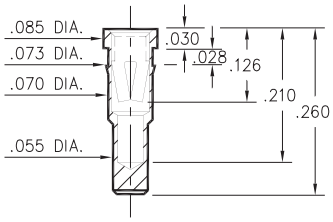
8838
8838-0-15-XX-34-XX-10-0
Solder mount in .086 min. mounting hole



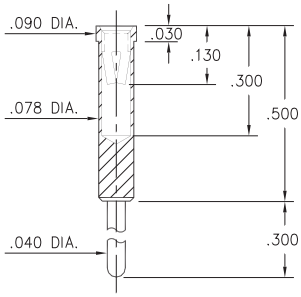
3100
3100-0-15-XX-34-XX-10-0
Solder mount in .074 min. mounting hole



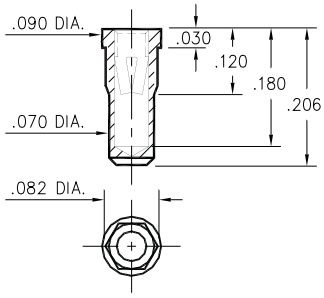
8853
8853-0-15-XX-34-XX-10-0
Press-fit in .071 mounting hole



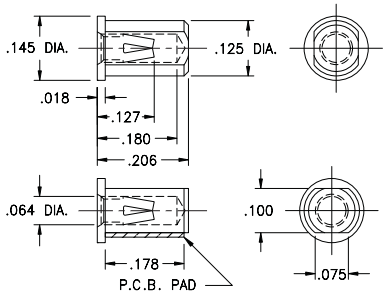
6800
6800-0-15-XX-34-XX-04-0
Solder mount in .080 min. mounting hole



0739
0739-0-15-XX-34-XX-10-0
Hex press-fit in .078 plated through-hole

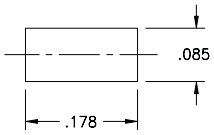


8206
8206-0-15-XX-34-XX-40-0
Surface mount, board edge





P.C.B. Layout



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - 34 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#34 CONTACT (DATA ON PAGE 258)
(For alternate contact choices, see group E on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

LOOSE PINS & RECEPTACLES ON T&R

LOOSE PINS & RECEPTACLES FOR AUTOMATED 'PICK & PLACE' ASSEMBLY

Mill-Max offers receptacles (discrete sockets) on carrier tape per EIA-481 to feed automated 'pick & place' assembly equipment. Our standard reel size is 13".

Two types of pins and receptacles are available on carrier tape: surface mount, flat types, which sit on the surface of the PCB where the pin or component lead plugs-in parallel to the PCB; and through-hole types where the lead plugs-in perpendicular to the PCB. Through-hole pins and receptacles are intrusive reflow soldered *.

In addition, open bottom through-hole receptacles are available loaded with our Organic Fibre Plug® barrier which prevents solder paste or flux from contaminating the spring contact. After soldering, the OFP® barrier is pushed out of the receptacle when the device is plugged in.

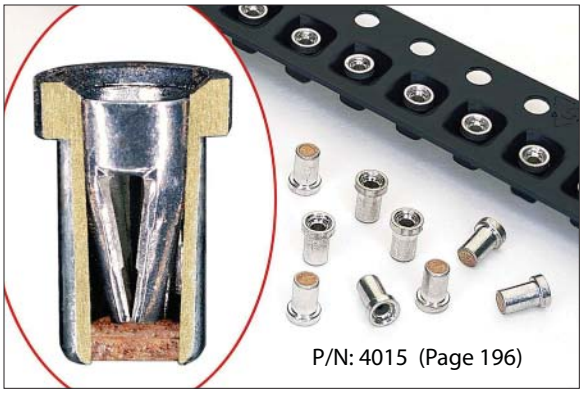
*Intrusive reflow (also called "pin-in-paste") is a technique of using conventional through-hole components in a reflow soldering process. The receptacles are placed into plated-through-holes in the circuit board (solder paste has previously been screen printed on pads adjacent to the holes) and the board is reflowed in the same pass as other SMT components. Solder will fill the plated-through-holes and achieve solder joints as reliable as wave soldering. The OFP® barrier prevents solder paste from being picked up inside the contact during pick 'n place assembly. "Overprinting" paste on the solder mask can be used to adjust the volume of paste required to fill each hole.



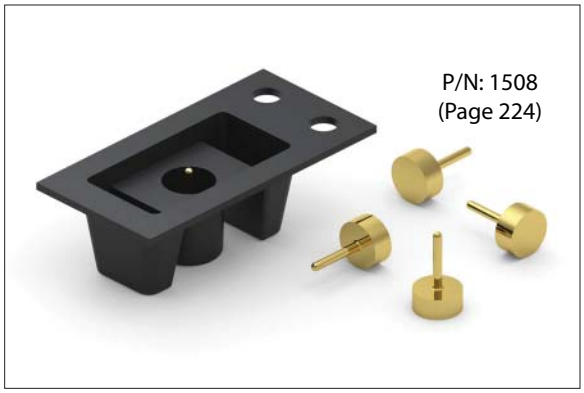
P/N: 3907
(Page 170)



P/N: 9222 (Page 187)



P/N: 4015 (Page 196)



P/N: 1508
(Page 224)

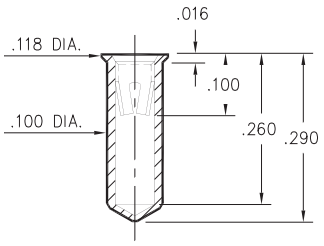
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

PIN RECEPTACLES

FOR .040" - .050" DIAMETER PINS

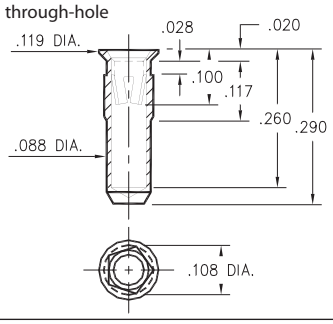
0355
0355-0-15-XX-02-XX-10-0

Solder mount in .102 min. mounting hole



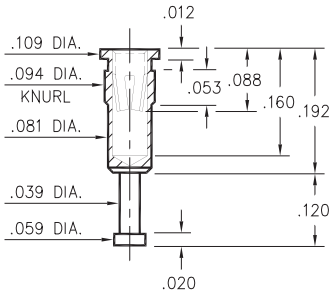
0354
0354-0-15-XX-02-XX-10-0

Pentagonal press-fit in .104 min. plated through-hole



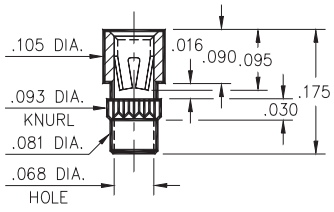
3490
3490-0-15-XX-02-XX-10-0

Press-fit in .091 mounting hole



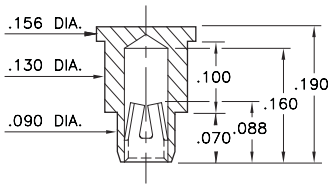
3808
3808-0-15-XX-02-XX-10-0

Press-fit in .090 mounting hole



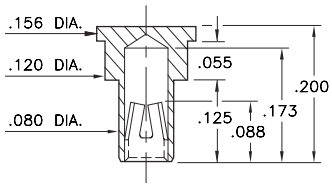
9184
9184-0-15-XX-02-XX-40-0

Bottom entry, surface mount
.092 min. plated through-hole
Also available on carrier tape,
Order as: 9184-0-57-XX-02-XX-40-0

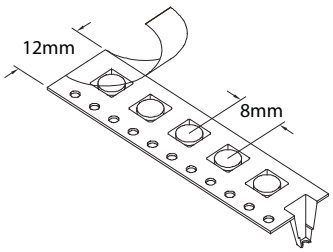


9222
9222-2-15-XX-02-XX-40-0

Bottom entry, surface mount
.082 min. plated through-hole
Also available on carrier tape,
Order as: 9222-2-57-XX-02-XX-40-0



Carrier tape format for 9184 and 9222.
1,500 pieces per 13" reel



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - 02 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#02 CONTACT (DATA ON PAGE 259)
(For alternate contact choices, see group F on page 248)

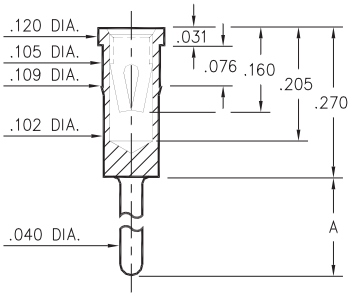
PIN RECEPTACLES

FOR .040" - .060" DIAMETER PINS (#03 CONTACT)
FOR .059" - .063" DIAMETER PINS (#42 CONTACT)

0433/8433

X433-0-15-XX-03-XX-04-0

Press-fit in .106 mounting hole

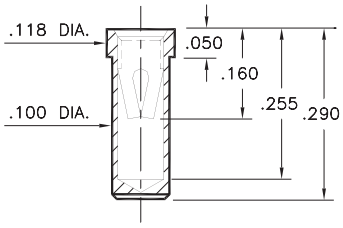


Basic Part Number	Length A
0433-0	.120
8433-0	.330

0435/0436

043X-0-15-XX-03-XX-10-0

Solder mount in .102 min. mounting hole
Also available on 24mm wide carrier tape:
950 parts per 13" reel
Order as: 0435-0-57-XX-03-XX-10-0

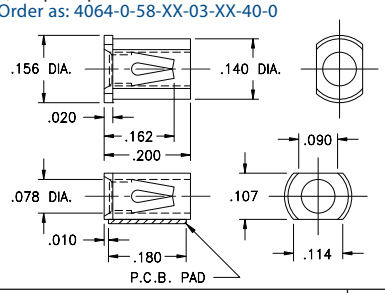


Basic Part Number	Dia. C	Length K
0435-0	.118	.050
0436-0	.125	.070

4064

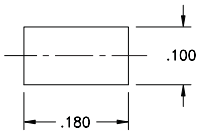
4064-0-18-XX-03-XX-40-0

Surface mount
Also available on 16mm wide carrier tape:
2,400 parts per 13" reel
Order as: 4064-0-58-XX-03-XX-40-0





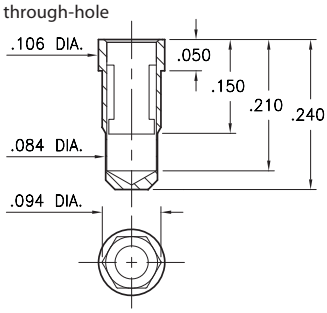
P.C.B. Layout



0342

0342-0-15-XX-42-XX-10-0

Hex press-fit in .090±.002 plated through-hole

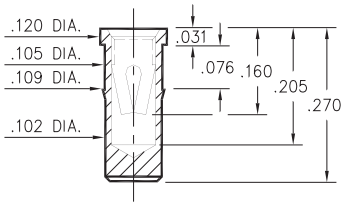


- 0342 receptacle uses Mill-Max's new #42 Contact. This receptacle will accept the Ø.061 ±.002 power pins of ¼ brick DC/DC converters.
- #42 contact can be ordered in standard receptacles that use #03 contact; or it can be specified as the spring element inside custom made receptacles.

0434

0434-0-15-XX-03-XX-10-0

Press-fit in .106 mounting hole



Mechanical Data #42 Contact:
Insertion/Extraction Force with a Ø.061 (nominal) pin:

First Cycle		2nd & Subsequent Cycles	
Insertion Force	Extraction Force	Insertion Force	Extraction Force
20N	6N	10N	6N

Compliancy Test (the "spring back" characteristic of the contact to accept Ø .059 small pin after insertion of a Ø.063 large pin) :

Initial Cycle with Ø.059 pin		Second Cycle with Ø.063 pin		Third Cycle with Ø.059 pin	
Ins. Force	Ext. Force	Ins. Force	Ext. Force	Ins. Force	Ext. Force
18N	6N	22N	7N	3N	2N

(Insertion/Extraction Forces are in Newtons and measured with polished steel gage pins having elliptical shaped tips).

SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#03 or #42 CONTACT (DATA ON PAGE 259)

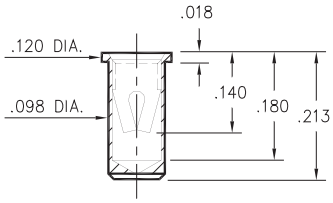
SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

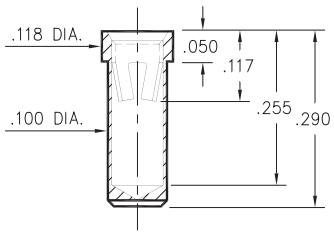
PIN RECEPTACLES

FOR .048" - .064" DIAMETER PINS (#13 CONTACT)
FOR .045" - .065" DIAMETER PINS (#23 CONTACT)

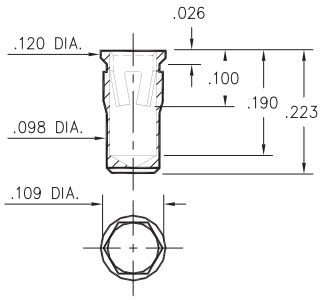
0364
0364-0-15-XX-13-XX-10-0
Solder mount in .100 min. mounting hole
Also available on 16mm wide carrier tape:
1,300 parts per 13" reel
Order as: 0364-0-57-XX-13-XX-10-0



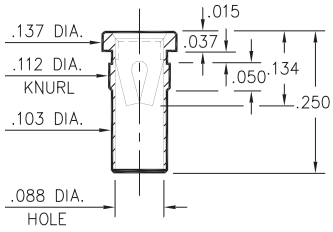
0363
0363-0-15-XX-23-XX-10-0
Solder mount in .102 min. mounting hole



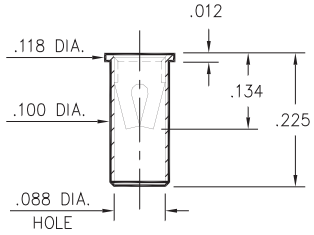
0365
0365-0-15-XX-23-XX-10-0
Hex press-fit in .105 plated through-hole



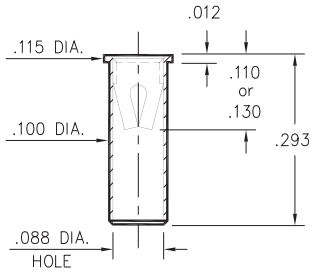
0366
0366-0-15-XX-13-XX-10-0
Press-fit in .109 mounting hole



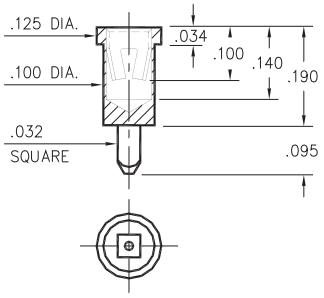
0372
0372-0-15-XX-13-XX-10-0
Solder mount in .102 min. mounting hole
Also available on 24mm wide carrier tape:
950 parts per 13" reel
Order as: 0372-0-57-XX-13-XX-10-0



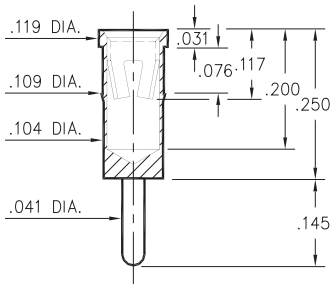
0362
0362-0-15-XX-X3-XX-10-0
Solder mount in .102 min. mounting hole



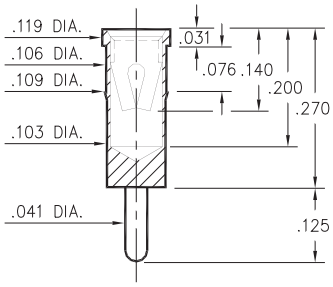
0367
0367-0-15-XX-23-XX-10-0
Square press-fit in .040 plated through-hole



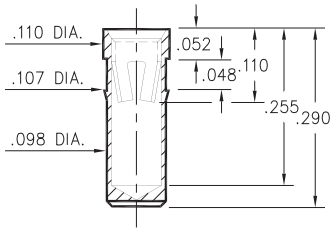
9324
9324-0-15-XX-23-XX-04-0
Press-fit in .106 mounting hole



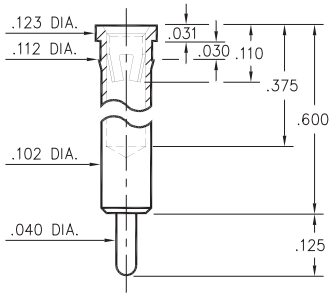
0492
0492-0-15-XX-13-XX-04-0
Press-fit in .106 mounting hole



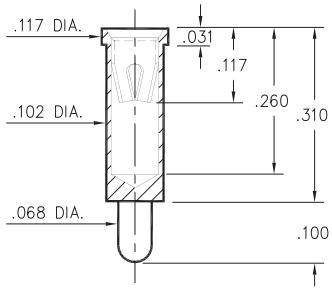
0381
0381-0-15-XX-23-XX-10-0
Press-fit in .104 mounting hole



4034
4034-0-15-XX-23-XX-04-0
Press-fit in .109 mounting hole



3044
3044-0-15-XX-23-XX-04-0
Solder mount in .104 min. mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

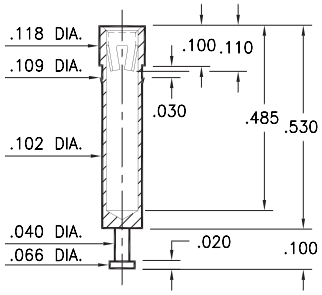
SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#13 or #23 CONTACT (DATA ON PAGE 260)
(For alternate contact choices, see group G on page 248)

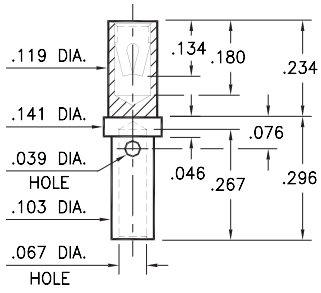
PIN RECEPTACLES

FOR .048" - .064" DIAMETER PINS (#13 CONTACT)
FOR .045" - .065" DIAMETER PINS (#23 CONTACT)

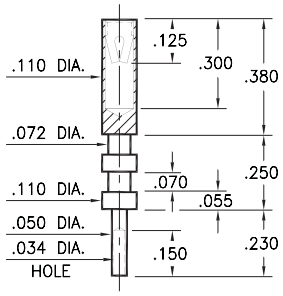
0496
0496-0-15-XX-23-XX-10-0
Press-fit in .106 mounting hole



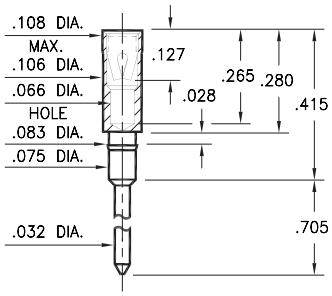
0368
0368-0-33-XX-13-XX-10-0
Wire crimp termination. Accepts wire sizes 16 AWG Max. / 20 AWG Min.



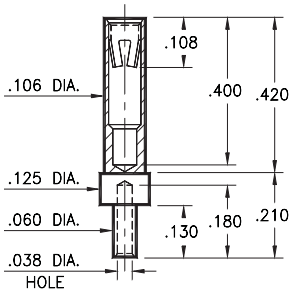
8067
8067-0-19-XX-13-XX-10-0
Wire crimp termination. Accepts wire sizes 24 AWG Max. / 28 AWG Min.



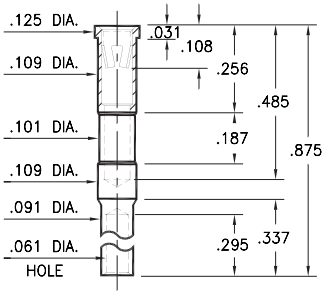
1105
1105-0-15-XX-13-XX-04-0
Press-fit in .080 mounting hole



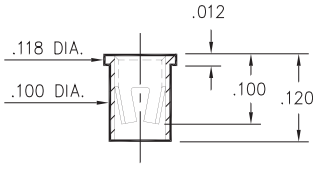
8730
8730-0-19-XX-23-XX-10-0
Wire crimp termination. Accepts wire sizes 22 AWG Max. / 26 AWG Min.



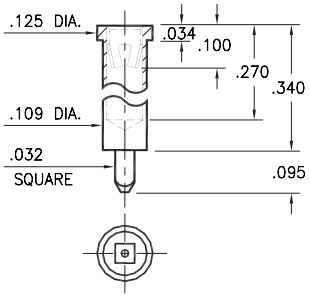
3667
3667-0-19-XX-23-XX-10-0
Wire crimp termination. Accepts wire sizes 18 AWG Max. / 22 AWG Min.



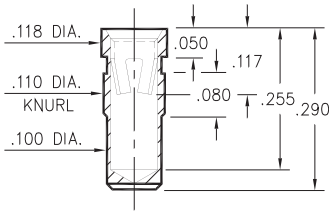
9372
9372-0-15-XX-23-XX-10-0
Solder mount in .102 min. mounting hole



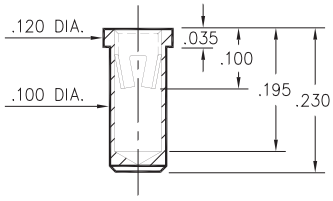
4582
4582-0-15-XX-23-XX-10-0
Square press-fit in .040 plated through-hole



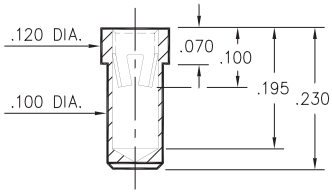
5834
5834-0-15-XX-23-XX-10-0
Press-fit in .107 mounting hole



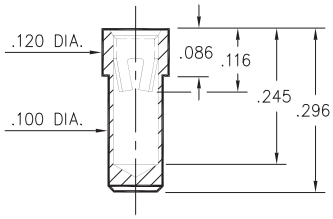
9401
9401-0-15-XX-23-XX-10-0
Solder mount in .102 min. mounting hole
Also available on 24mm wide carrier tape: 1,100 parts per 13" reel
Order as: 9401-0-57-XX-23-XX-10-0



9801
9801-0-15-XX-23-XX-10-0
Solder mount in .102 min. mounting hole
Also available on 16mm wide carrier tape: 1,200 parts per 13" reel
Order as: 9801-0-57-XX-23-XX-10-0



8829
8829-0-15-XX-23-XX-10-0
Solder mount in .102 min. mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#13 or #23 CONTACT (DATA ON PAGE 260)
(For alternate contact choices, see group G on page 248)

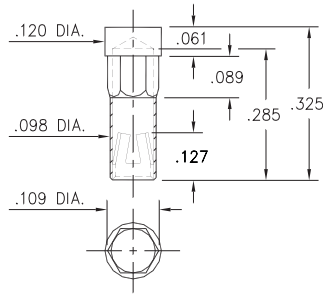
MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

PIN RECEPTACLES

FOR .048" - .064" DIAMETER PINS (#13 CONTACT)
FOR .045" - .065" DIAMETER PINS (#23 CONTACT)

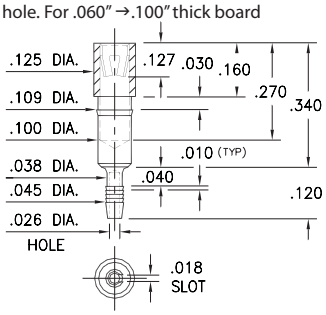
8365
8365-0-15-XX-13-XX-10-0

Hex press-fit in .106 plated through-hole



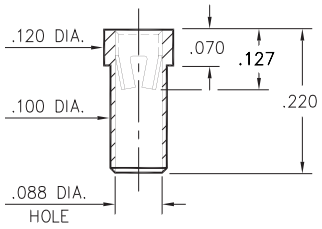
8996
8996-0-31-XX-13-XX-04-0

Compliant press-fit in .040 ± .003 plated hole. For .060" →.100" thick board



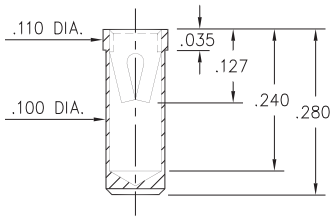
9064
9064-0-15-XX-13-XX-10-0

Solder mount in .102 min. mounting hole
Also available on 16mm wide carrier tape: 1,300 parts per 13" reel
Order as: 9064-0-57-XX-13-XX-10-0



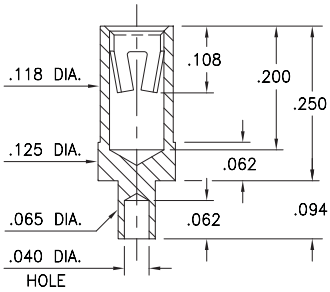
9280
9280-0-15-XX-13-XX-10-0

Solder mount in .102 min. mounting hole



4900
4900-0-19-XX-23-XX-10-0

Swage mount in .067 hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

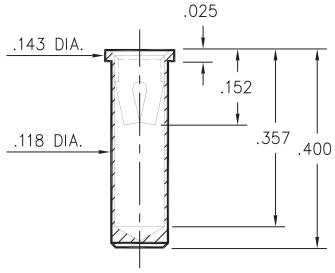
SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#13 or #23 CONTACT (DATA ON PAGE 260)
(For alternate contact choices, see group G on page 248)

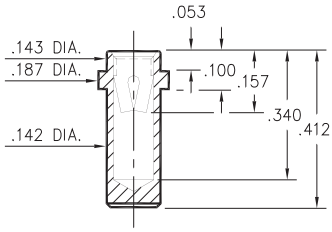
PIN RECEPTACLES

FOR .065" - .082" DIAMETER PINS

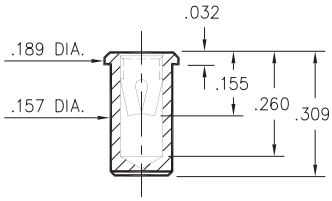
0394
0394-0-15-XX-07-XX-10-0
Solder mount in .120 min. mounting hole



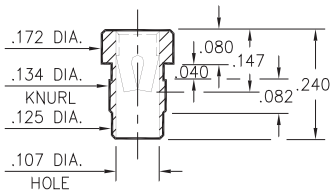
0393
0393-0-15-XX-07-XX-10-0
Solder mount in .144 min. mounting hole



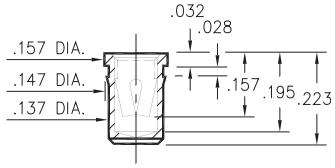
0391
0391-0-15-XX-07-XX-10-0
Solder mount in .159 min. mounting hole



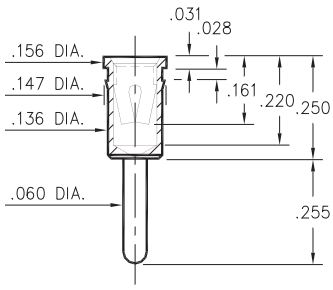
9016
9016-0-15-XX-07-XX-10-0
Press-fit in .131 mounting hole



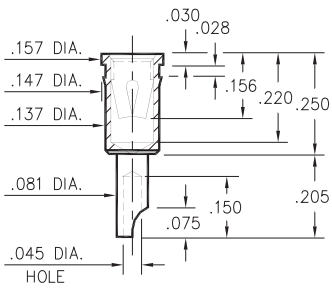
0493
0493-0-15-XX-07-XX-10-0
Press-fit in .144 mounting hole



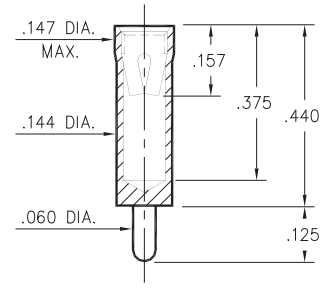
0490
0490-0-15-XX-07-XX-04-0
Press-fit in .144 mounting hole



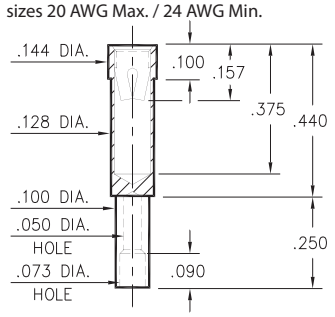
0616
0616-0-18-XX-07-XX-10-0
Press-fit in .144 mouting hole
Accepts wire sizes up to .035" dia.



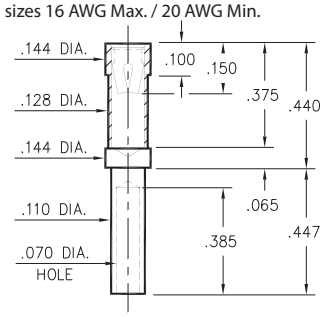
0387
0387-0-15-XX-07-XX-04-0
Solder mount in .063 min. mounting hole



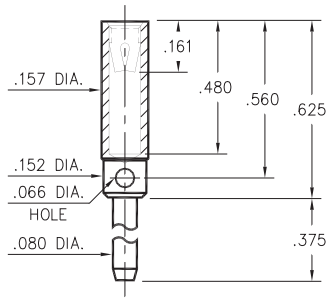
0370
0370-0-19-XX-07-XX-10-0
Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.



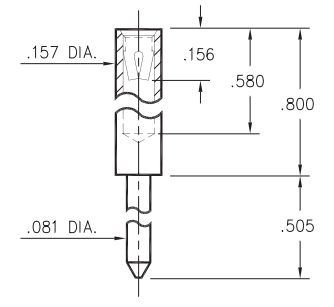
4040
4040-0-19-XX-07-XX-10-0
Wire crimp termination. Accepts wire sizes 16 AWG Max. / 20 AWG Min.



0491
0491-0-19-XX-07-XX-04-0
For use in stackable patch cords



9214
9214-0-15-XX-07-XX-10-0
Solder mount in .083 min. mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 1X - XX - 07 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#07 CONTACT (DATA ON PAGE 261)
(For alternate contact choices, see group H on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

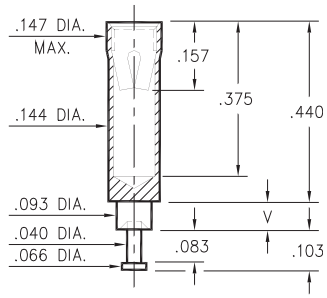
PIN RECEPTACLES

FOR .065" - .082" DIAMETER PINS

0395

0395-X-15-XX-07-XX-10-0

Swage mount in .096 hole

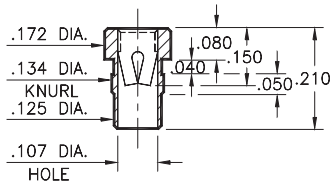


Basic Part Number	Board Thickness	Length V
0395-1	.031	.062
0395-2	.062	.094
0395-3	.094	.125
0395-4	.125	.156
0395-5	.188	.219

8016

8016-0-15-XX-07-XX-10-0

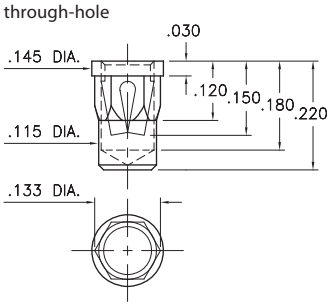
Press-fit in .131 mounting hole



0350

0350-0-15-XX-07-XX-10-0

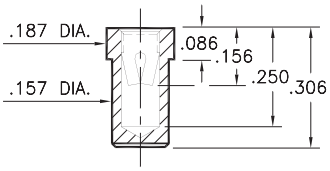
Hex press-fit in .129±.002 plated through-hole



8837

8837-0-15-XX-14-XX-10-0

Solder mount in .159 min. mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 15 - XX - XX - XX - 10 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#07 or #14 CONTACT (DATA ON PAGE 261)
(For alternate contact choices, see group H on page 248)

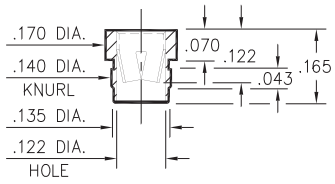
PIN RECEPTACLES

FOR .084" - .102" DIAMETER PINS

0388

0388-0-15-XX-08-XX-10-0

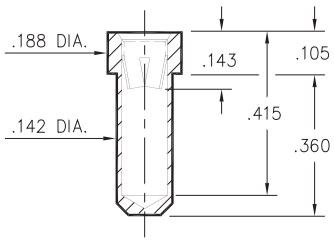
Press-fit in .138 mounting hole



0390

0390-0-15-XX-08-XX-10-0

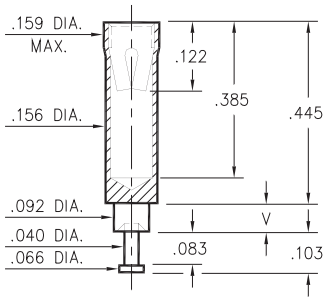
Solder mount in .144 min. mounting hole



0389

0389-X-15-XX-08-XX-10-0

Swage mount in .094 hole

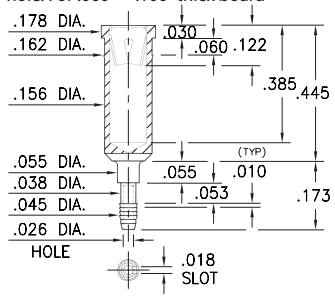


Basic Part Number	Board Thickness	Length V
0389-2	.062	.094
0389-3	.094	.125
0389-4	.125	.156

8963

8963-0-31-XX-08-XX-04-0

Compliant press-fit in .040 ± .003 plated hole. For .060" →.100" thick board



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - XX - XX - 08 - XX - XX - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#08 CONTACT (DATA ON PAGE 262)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

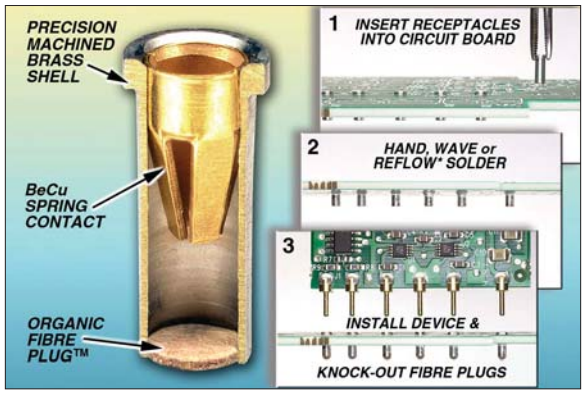
ORGANIC FIBRE PLUG® RECEPTACLES

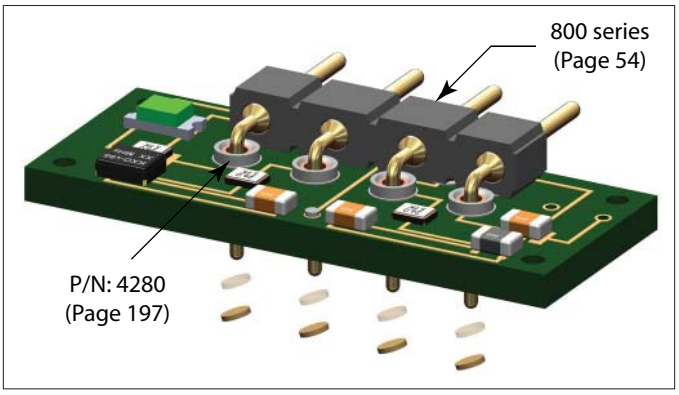
RECEPTACLES WITH ORGANIC FIBRE PLUG® SOLDER BARRIER

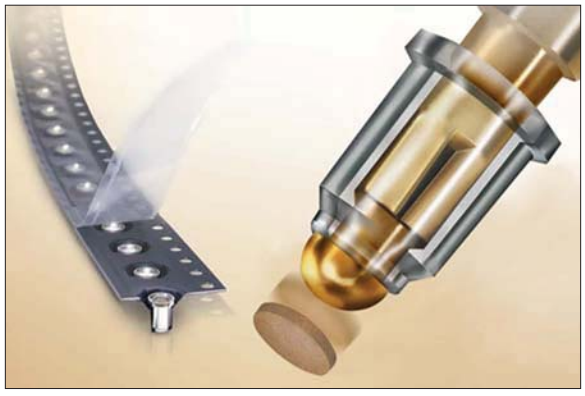
Mill-Max's organic fibre plug (OFP®) solder barrier receptacles are discrete sockets for through-hole soldering into printed circuit boards. These open bottom receptacles are fitted with organic fibre plugs to prevent solder paste or flux from contaminating the internal contact during the pick & place and soldering process. When the device/mating lead is plugged into the receptacle, the OFP® is knocked out allowing the mating lead to pass through the fingers of the internal contact and make a reliable electrical connection.

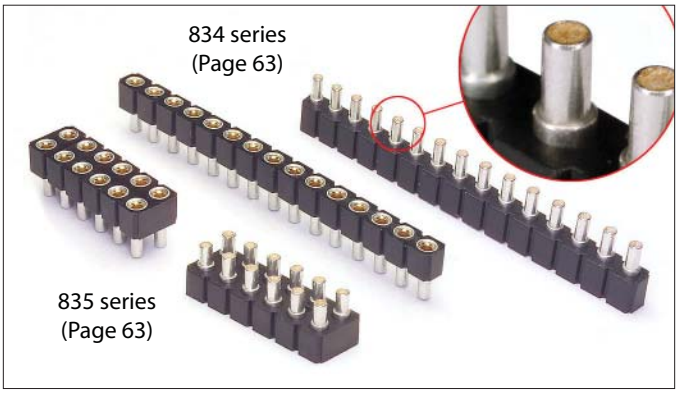
OFP® receptacles are available to accommodate pin diameters from .008" - .102" (See pages 196 & 197 for the full line of standard OFP® receptacles). Packaging options are bulk or tape & reel (Per EIA- 481), standard reel size is 13". The advantage of tape & reel packaging is it allows these through-hole components to be placed simultaneously with surface mount parts on pick 'n place assembly lines -- eliminating the need to hand place the receptacles in an additional manufacturing step. The OFP® barrier permits the sockets to be vacuum picked from the tape prior to placement in the circuit board.

The knock-out-bottom feature enables these sockets to be made relatively short compared to many similar receptacles. The reduced length means minimal protrusion through the PCB. The open bottom receptacle design eliminates the need to trim long device leads that would otherwise bottom out in a closed design.









Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

PIN RECEPTACLES

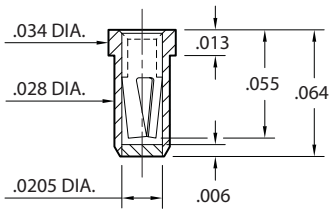
PIN RECEPTACLES
WITH ORGANIC FIBRE PLUG® SOLDER BARRIER
(SEE SPECIFIC CONTACT RANGE ON PAGES 250, 251 & 253)

- These through-hole (tubular) receptacles are designed for hand, wave or reflow* soldering. The *ORGANIC FIBRE PLUG®* barrier prevents solder paste or flux from contaminating the spring contact.
- After soldering, the *OFP®* barrier is pushed out of the receptacle when the device is plugged in.
- All parts are available as discrete receptacles or supplied on carrier tape per EIA-481 to feed industry standard pick and place machines.

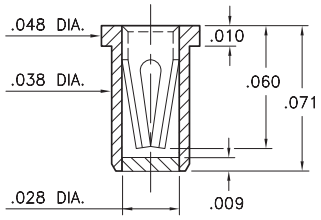


**Intrusive reflow (also called "pin-in-paste") is a technique of using conventional through-hole components in a reflow soldering process. The receptacles are placed into plated through-holes in the circuit board (solder paste has previously been screen printed on pads adjacent to the holes) and the board is reflowed in the same pass as other SMT components. Solder will fill the plated through-holes and achieve solder joints as reliable as wave soldering. The OFP® barrier prevents solder paste from being picked-up inside the contact during pick 'n place assembly. "Overprinting" paste on the solder mask can be used to adjust the volume of paste required to fill each hole.*

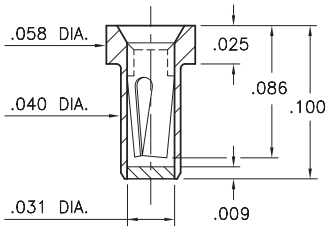
4428
4428-0-XX-XX-04-XX-10-0
Solder mount in Ø .032" max. PTH
#04 Contact for Ø .008" - .013" pins
Also available on 16mm wide carrier tape:
3,400 parts per 13" reel



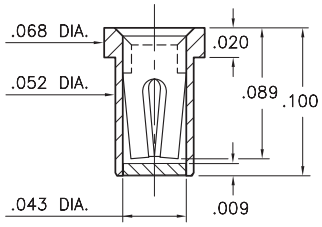
5359
5359-0-XX-XX-10-XX-10-0
Solder mount in Ø .043" ± .003" PTH
#10 Contact for Ø .012" - .017" pins
Also available on 16mm wide carrier tape:
3,000 parts per 13" reel



0577
0577-0-XX-XX-21-XX-10-0
Solder mount in Ø .045" ± .003" PTH
#21 Contact for Ø .015" - .022" pins
Also available on 12mm wide carrier tape:
3,000 parts per 13" reel



4015
4015-0-XX-XX-30-XX-10-0
Solder mount in Ø .057" ± .003" PTH
#30 Contact for Ø .015" - .025" pins
Also available on 8mm wide carrier tape:
5,500 parts per 13" reel



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Solder Barrier: Organic Fibre Plug®

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - 0 - XX - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY PACKAGING:
43 Discrete Receptacles
67 Supplied on 13" Reels

SPECIFY SHELL FINISH:
01 200 µ" TIN/LEAD OVER NICKEL
◆ **80** 200 µ" TIN OVER NICKEL (RoHS)

CONTACT:
#04, #10, #21 or #30 CONTACT (DATA ON PAGES 250, 251 & 253)

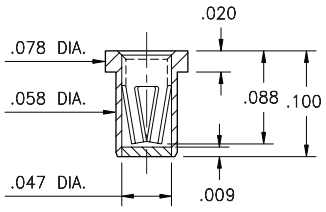
SPECIFY CONTACT FINISH:
◆ **27** 30 µ" GOLD OVER NICKEL (RoHS)
02 100 µ" TIN/LEAD OVER NICKEL
◆ **84** 200 µ" TIN OVER NICKEL (RoHS)

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

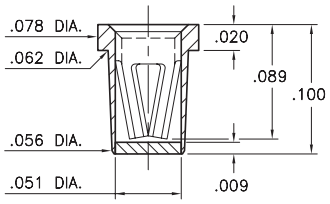
PIN RECEPTACLES

PIN RECEPTACLES
WITH ORGANIC FIBRE PLUG® SOLDER BARRIER
(SEE SPECIFIC CONTACT RANGE ON PAGES 254 - 262)

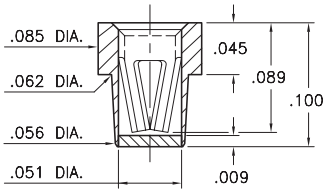
0337
0337-0-XX-XX-15-XX-10-0
Solder mount in Ø .066" ± .003" PTH
#15 Contact for Ø .020" - .032" pins
Also available on 8mm wide carrier tape:
6,000 parts per 13" reel



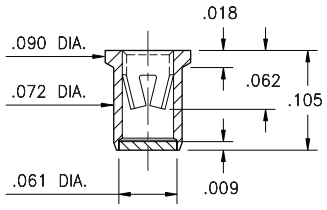
4280
4280-0-XX-XX-16-XX-10-0
Solder mount in Ø .067" ± .003" PTH
#16 Contact for Ø .022" - .034" pins
Also available on 8mm wide carrier tape:
6,000 parts per 13" reel



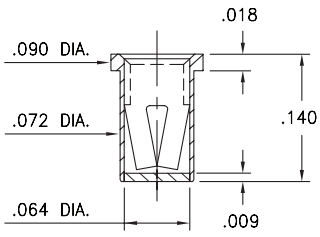
5280
5280-0-XX-XX-16-XX-40-0
Solder mount in Ø .067" ± .003" PTH
#16 Contact for Ø .022" - .034" pins
Also available on 16mm wide carrier tape:
2,200 parts per 13" reel



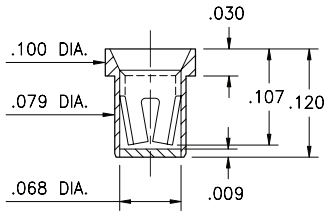
0332
0332-0-XX-XX-18-XX-10-0
Solder mount in Ø .079" ± .003" PTH
#18 Contact for Ø .037" - .043" pins
Also available on 16mm wide carrier tape:
2,200 parts per 13" reel



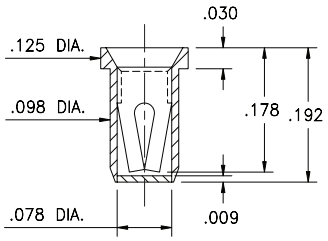
0479
0479-0-XX-XX-34-XX-10-0
Solder mount in Ø .077" ± .003" PTH
#34 Contact for Ø .032" - .046" pins
Also available on 16mm wide carrier tape:
2,200 parts per 13" reel



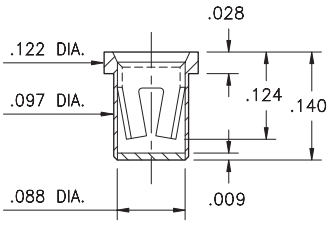
0375
0375-0-XX-XX-02-XX-10-0
Solder mount in Ø .087" ± .003" PTH
#02 Contact for Ø .040" - .050" pins
Also available on 12mm wide carrier tape:
4,500 parts per 13" reel



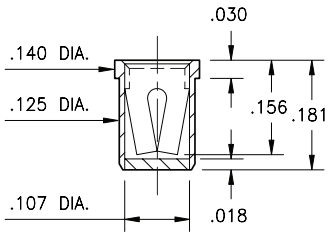
0353
0353-0-XX-XX-03-XX-10-0
Solder mount in Ø .106" ± .003" PTH
#03 Contact for Ø .040" - .060" pins
Also available on 12mm wide carrier tape:
1,300 parts per 13" reel



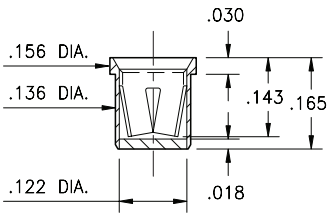
0384
0384-0-XX-XX-23-XX-10-0
Solder mount in Ø .105" ± .003" PTH
#23 Contact for Ø .045" - .065" pins
Also available on 12mm wide carrier tape:
2,000 parts per 13" reel



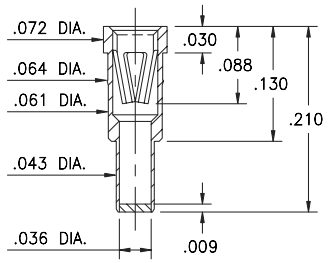
0376
0376-0-XX-XX-07-XX-10-0
Solder mount in Ø .133" ± .003" PTH
#07 Contact for Ø .065" - .082" pins
Also available on 16mm wide carrier tape:
1,500 parts per 13" reel



0321
0321-0-XX-XX-08-XX-10-0
Solder mount in Ø .144" ± .003" PTH
#08 Contact for Ø .084" - .102" pins
Also available on 16mm wide carrier tape:
1,700 parts per 13" reel



3435
3435-0-XX-XX-47-XX-04-0
Solder mount in Ø .046" ± .003" PTH
#47 Contact for Ø .025" - .036" and
.025" square pins



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Solder Barrier: Organic Fibre Plug®

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - 0 - XX - XX - XX - XX - XX - 0

BASIC PART #

SPECIFY PACKAGING:
43 Discrete Receptacles
67 Supplied on 13" Reels

SPECIFY SHELL FINISH:
01 200 µ" TIN/LEAD OVER NICKEL
◆ **80** 200 µ" TIN OVER NICKEL (RoHS)

CONTACT:
#02, #07, #08, #15, #16, #18, #23, #34 or #47 CONTACT (DATA ON PAGES 254 - 262)

SPECIFY CONTACT FINISH:
◆ **27** 30 µ" GOLD OVER NICKEL (RoHS)
02 100 µ" TIN/LEAD OVER NICKEL
◆ **84** 200 µ" TIN OVER NICKEL (RoHS)

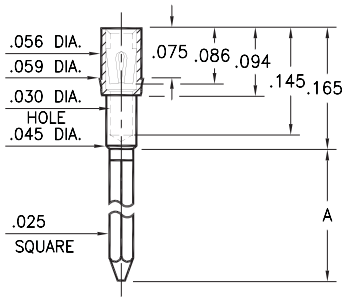
WRAPOST RECEPTACLES

FOR .015" - .025" DIAMETER PINS

1702/1703

170X-X-15-XX-30-XX-02-0

Press-fit in .057 mounting hole

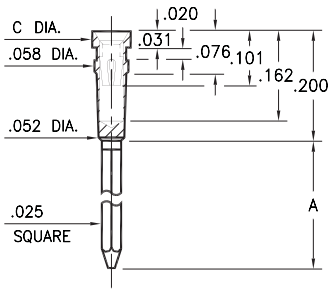


Basic Part Number	# of Wraps	Length A
1702-2	2	.370
1703-3	3	.510

0038⇨0040/0066⇨0068

00XX-X-17-XX-30-XX-02-0

Press-fit in .057 mounting hole

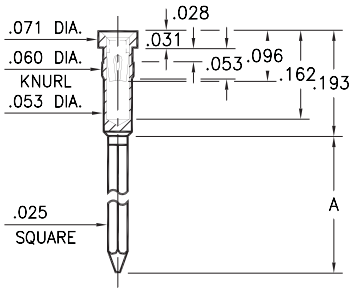


Basic Part #	# of Wraps	Length A	Dia. C
0040-1	1	.260	
0039-2	2	.360	.072
0038-3	3	.500	
0068-1	1	.260	
0067-2	2	.360	.062
0066-3	3	.500	

0086/0088/0089

008X-X-17-XX-3X-XX-02-0

Press-fit in .057 mounting hole

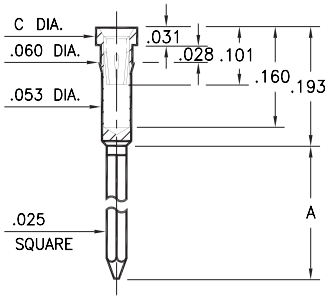


Basic Part Number	# of Wraps	Length A
0089-2	2	.370
0088-3	3	.510
0086-4	4	.630

1030⇨1036

103X-X-17-XX-3X-XX-02-0

Press-fit in .057 mounting hole

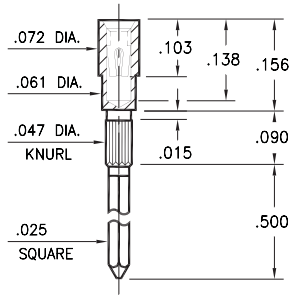


Basic Part #	# of Wraps	Length A	Dia. C
1032-1	1	.260	
1031-2	2	.360	.072
1030-3	3	.510	
1036-1	1	.260	
1035-2	2	.360	.062
1034-3	3	.510	

1045

1045-3-17-XX-30-XX-02-0

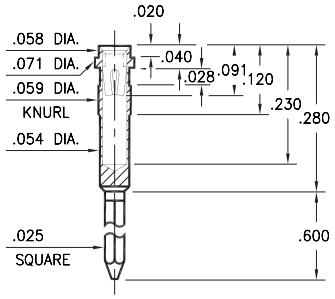
Press-fit in .043 mounting hole



1040

1040-3-17-XX-30-XX-02-0

Press-fit in .056 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 17 - XX - XX - XX - 02 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **02** 100 µ" TIN/LEAD OVER NICKEL
- ◆ **84** 100 µ" TIN OVER NICKEL (RoHS)
- ◆ **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#30 or #32 CONTACT (DATA ON PAGE 253)
(For alternate contact choices, see groups B and C on page 248)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

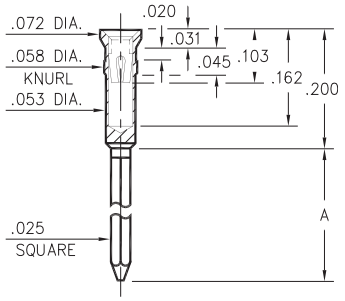
WRAPOST RECEPTACLES

FOR .015" - .025" DIAMETER PINS

0444

0444-X-17-XX-30-XX-02-0

Press-fit in .056 mounting hole

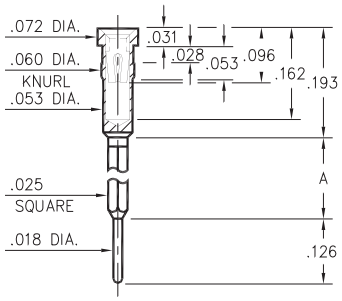


Basic Part Number	# of Wraps	Length A
0444-1	1	.260
0444-2	2	.370
0444-3	3	.505

2601⇨2603

260X-0-17-XX-30-XX-02-0

Press-fit in .057 mounting hole

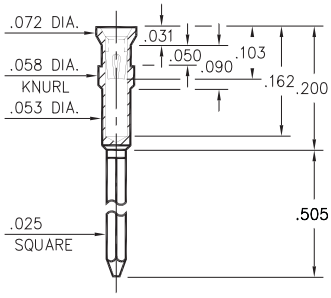


Basic Part Number	# of Wraps	Length A
2601-0	1	.232
2602-0	2	.350
2603-0	3	.468

0445

0445-3-17-XX-30-XX-02-0

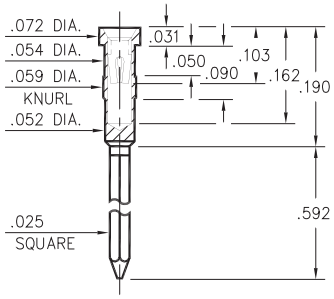
Press-fit in .056 mounting hole



1047

1047-3-17-XX-30-XX-02-0

Press-fit in .056 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 17 - XX - 30 - XX - 02 - 0

BASIC PART #

SPECIFY SHELL FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

- **02** 100 µ" TIN/LEAD OVER NICKEL
- **84** 100 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

#30 or #32 CONTACT (DATA ON PAGE 253)

(For alternate contact choices, see groups B and C on page 248)

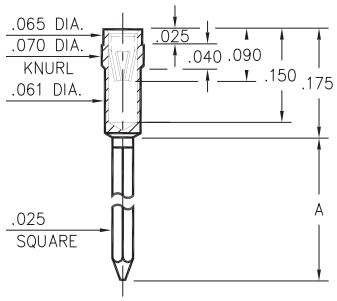
WRAPOST RECEPTACLES

FOR .022" - .032" DIAMETER PINS (#06 CONTACT)
FOR .022" - .034" DIAMETER PINS (#16 CONTACT)

2297

2297-X-17-XX-16-XX-02-0

Press-fit in .067 mounting hole

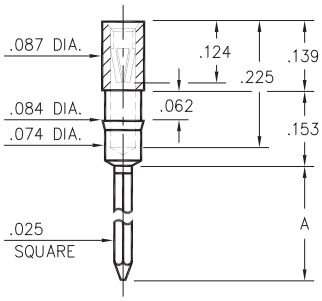


Basic Part Number	# of Wraps	Length A
2297-2	2	.370
2297-3	3	.430

0280

0280-X-17-XX-06-XX-02-0

Press-fit in .081 mounting hole

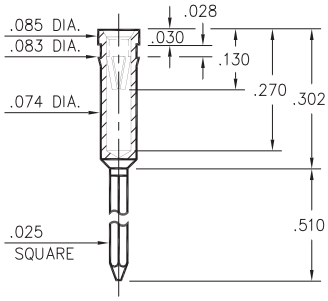


Basic Part Number	# of Wraps	Length A
0280-2	2	.360
0280-3	3	.510

0281

0281-3-17-XX-06-XX-02-0

Press-fit in .080 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 17 - XX - XX - XX - 02 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#06 or #16 CONTACT (DATA ON PAGES 255 & 256)
(For alternate contact choices, see group D on page 248)

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

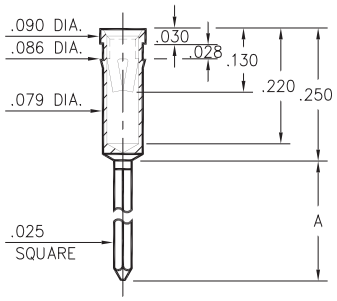
WRAPOST RECEPTACLES

FOR .032" - .046" DIAMETER PINS

1052/1053

105X-X-17-XX-34-XX-02-0

Press-fit in .083 mounting hole

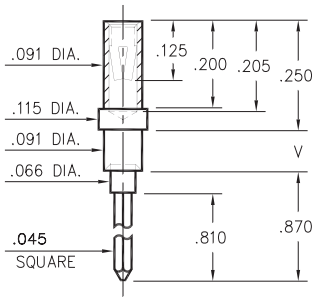


Basic Part Number	# of Wraps	Length A
1053-2	2	.360
1052-3	3	.515

0383

0383-X-17-XX-34-XX-02-0

Swage mount in .094 hole

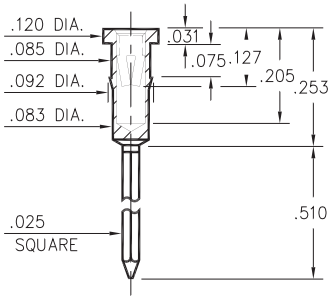


Basic Part Number	Board Thickness	Length V
0383-1	.062	.094
0383-2	.094	.125
0383-3	.125	.156

0382

0382-3-17-XX-34-XX-02-0

Press-fit in .089 mounting hole



SPECIFICATIONS:

Shell Material: Brass Alloy 360, 1/2 Hard

Contact Material: Beryllium Copper Alloy 172, HT

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2°

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 17 - XX - 34 - XX - 02 - 0

BASIC PART #

SPECIFY SHELL FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **27** 30 µ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:
#34 CONTACT (DATA ON PAGE 258)
(For alternate contact choices, see group E on page 248)

WWW.MILL-MAX.COM

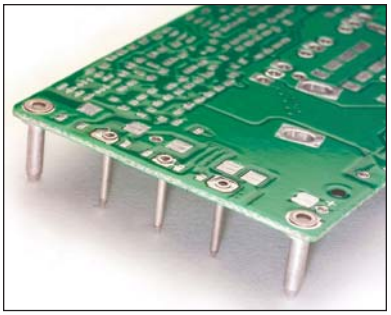
MALE PCB PINS



WWW.MILL-MAX.COM

MILL-MAX PRINTED CIRCUIT PINS ARE MACHINED INDIVIDUAL PINS USED FOR VARIOUS PLUG-IN APPLICATIONS AND ARE FUNCTIONALLY THE DYNAMIC BUILDING BLOCKS WITHIN AN INTERCONNECT SYSTEM.

Mill-Max offers a variety of pins in a broad range of diameters as well as turret, slotted, bifurcated (forked), soldercup and wrapost style pins. They are commonly fastened to printed circuit boards or other housings by being press-fit, swaged (riveted) or soldered.

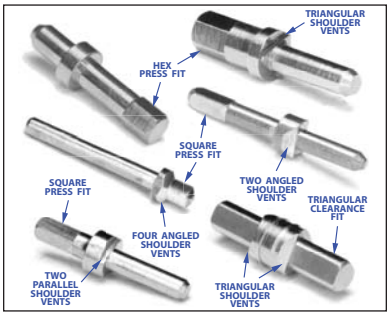


PCB pins serve not only as a conductive path for an electrical circuit, but provide strength to an assembly module as a mechanical interface. Mill-Max Mfg. Corp. has developed thousands of state-of-the-art "basic pin" designs, featuring pin barrel geometries for our customers who require outside-the-box solutions to their interconnect needs.



In addition to the products found on the following pages, Mill-Max offers the following stock materials and diameters available for manufacture:

BRASS Alloy 360, 1/2 hard: .062/.072/.078/.093/.125/.156/.187/.250 diameters
PHOSPHOR BRONZE Alloy 544: .062/.072/.078 diameters
TELLURIUM COPPER Alloy 145: .079/.093/.125/.156 diameters



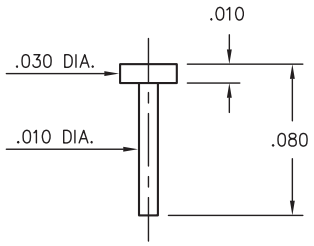
Mill-Max will gladly quote application specific products. Please complete the specification sheet on page **247** or send us your own drawings.
We assure you a fast response.



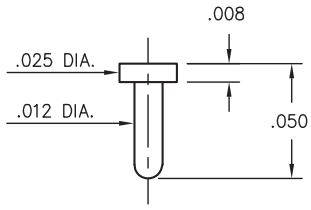
MALE PCB PINS

PRINTED CIRCUIT PINS • NAIL HEAD TYPE

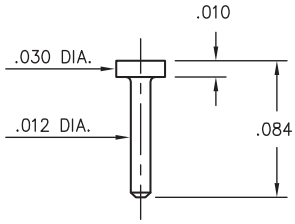
4184
4184-0-00-XX-00-00-33-0
Solder mount in .014 mounting hole



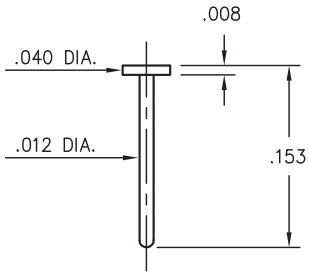
9050
9050-0-00-XX-00-00-33-0
Solder mount in .016 mounting hole



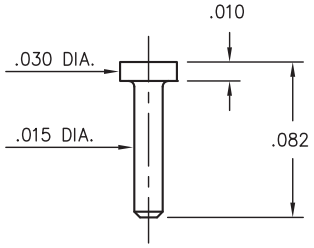
4353
4353-0-00-XX-00-00-33-0
Solder mount in .016 mounting hole



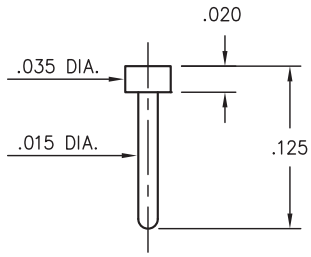
9083
9083-0-00-XX-00-00-38-0
Solder mount in .016 mounting hole



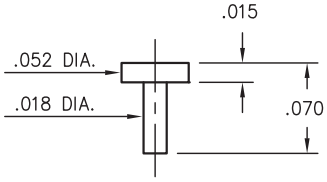
4825
4825-0-00-XX-00-00-33-0
Solder mount in .019 mounting hole



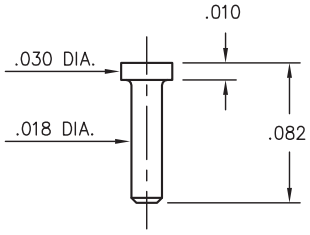
4689
4689-0-00-XX-00-00-33-0
Solder mount in .019 mounting hole



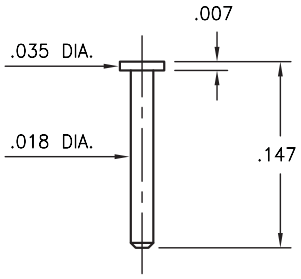
4361
4361-0-00-XX-00-00-33-0
Solder mount in .022 mounting hole



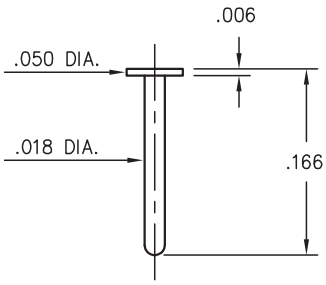
4288
4288-0-00-XX-00-00-33-0
Solder mount in .022 mounting hole



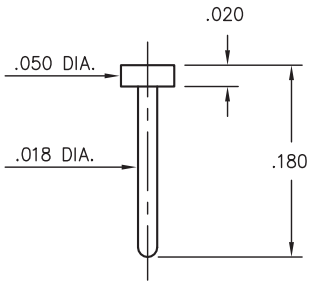
4068
4068-0-00-XX-00-00-33-0
Solder mount in .022 mounting hole



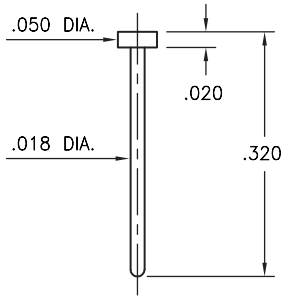
9113
9113-0-00-XX-00-00-38-0
Solder mount in .022 mounting hole



9137
9137-0-00-XX-00-00-38-0
Solder mount in .022 mounting hole



5137
5137-0-00-XX-00-00-38-0
Solder mount in .022 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

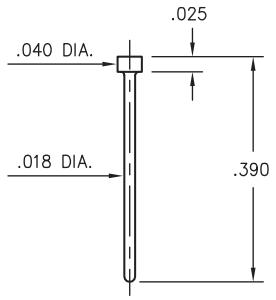
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

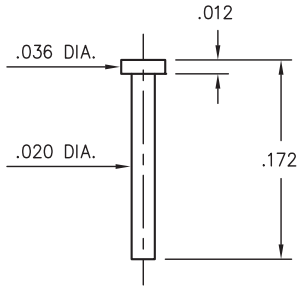
MALE PCB PINS

PRINTED CIRCUIT PINS • NAIL HEAD TYPE

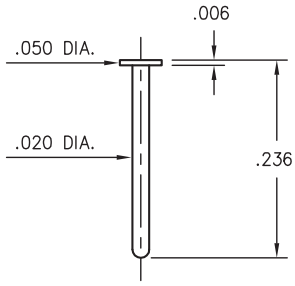
4209
4209-0-00-XX-00-00-33-0
Solder mount in .022 mounting hole



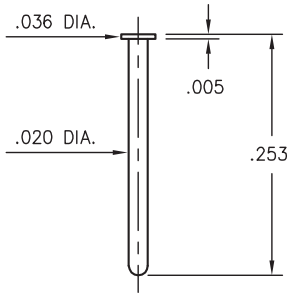
5063
5063-0-00-XX-00-00-33-0
Solder mount in .024 mounting hole



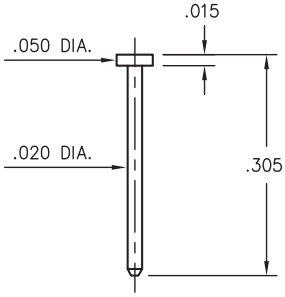
4965
4965-0-00-XX-00-00-33-0
Solder mount in .024 mounting hole



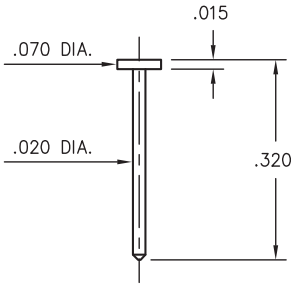
6547
6547-0-00-XX-00-00-33-0
Solder mount in .024 mounting hole



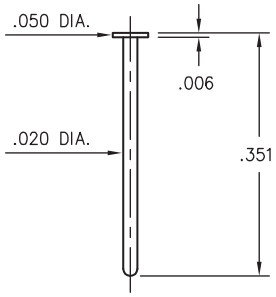
4071
4071-0-00-XX-00-00-33-0
Solder mount in .024 mounting hole



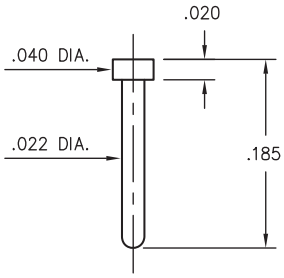
8808
8808-0-00-XX-00-00-33-0
Solder mount in .024 mounting hole



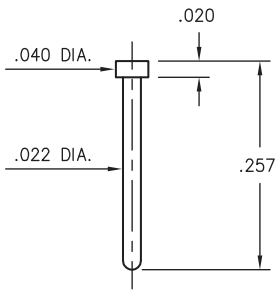
4964
4964-0-00-XX-00-00-33-0
Solder mount in .024 mounting hole



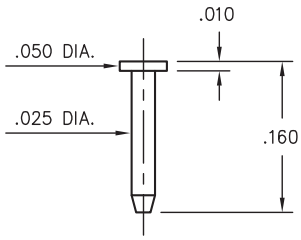
9185
9185-0-00-XX-00-00-33-0
Solder mount in .026 mounting hole



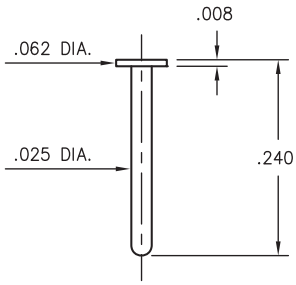
8257
8257-0-00-XX-00-00-33-0
Solder mount in .026 mounting hole



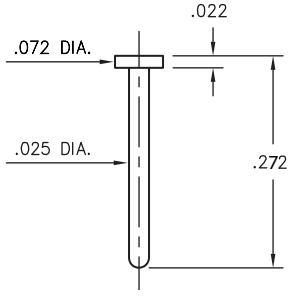
5035
5035-0-00-XX-00-00-33-0
Solder mount in .029 mounting hole



5240
5240-0-00-XX-00-00-33-0
Solder mount in .029 mounting hole



2650
2650-0-00-XX-00-00-33-0
Solder mount in .029 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

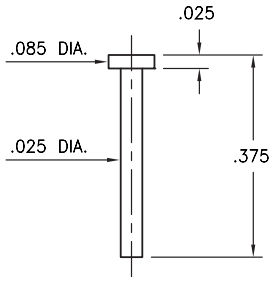
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

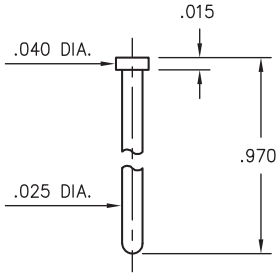
MALE PCB PINS

PRINTED CIRCUIT PINS • NAIL HEAD TYPE

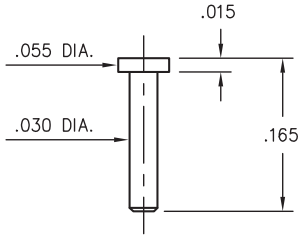
5062
5062-0-00-XX-00-00-33-0
Solder mount in .029 mounting hole



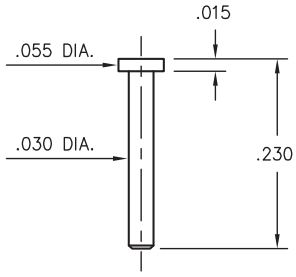
8451
8451-0-00-XX-00-00-33-0
Solder mount in .029 mounting hole



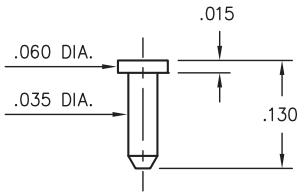
6477
6477-0-00-XX-00-00-38-0
Solder mount in .034 mounting hole



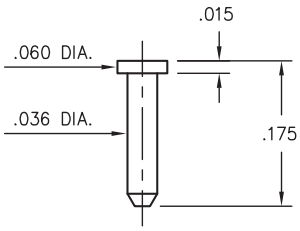
4477
4477-0-00-XX-00-00-33-0
Solder mount in .034 mounting hole



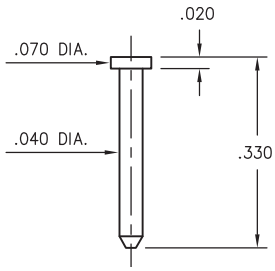
4268
4268-0-00-XX-00-00-33-0
Solder mount in .039 mounting hole



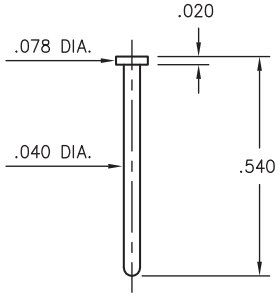
9086
9086-0-00-XX-00-00-33-0
Solder mount in .040 mounting hole



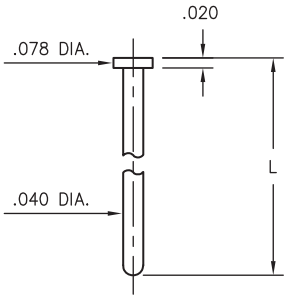
8330
8330-0-00-XX-00-00-38-0
Solder mount in .044 mounting hole



9228
9228-0-00-XX-00-00-38-0
Solder mount in .044 mounting hole

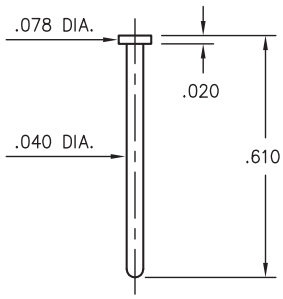


6095
6095-X-00-XX-00-00-38-0
Solder mount in .044 mounting hole



Basic Part Number	Length L
6095-0	.580
6095-1	.475

6092
6092-0-00-XX-00-00-33-0
Solder mount in .044 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

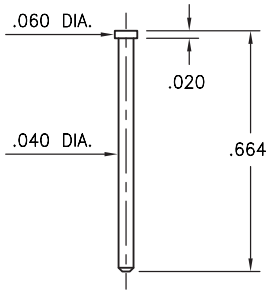
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

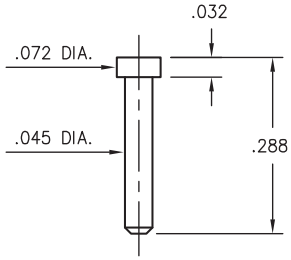
MALE PCB PINS

PRINTED CIRCUIT PINS • NAIL HEAD TYPE

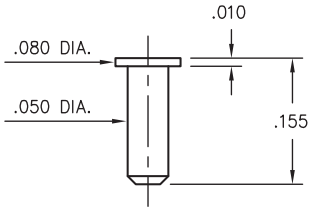
1179
1179-0-00-XX-00-00-33-0
Solder mount in .044 mounting hole



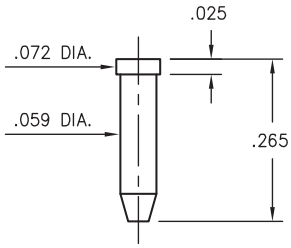
9872
9872-0-00-XX-00-00-33-0
Solder mount in .049 mounting hole



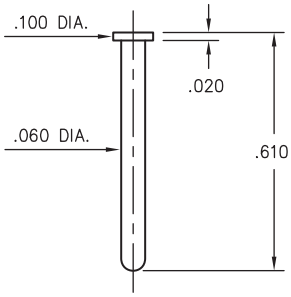
2381
2381-0-00-XX-00-00-33-0
Solder mount in .054 mounting hole



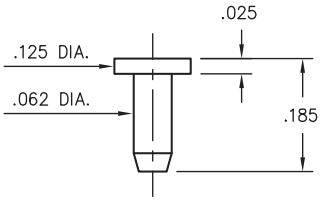
9265
9265-0-00-XX-00-00-38-0
Solder mount in .063 mounting hole



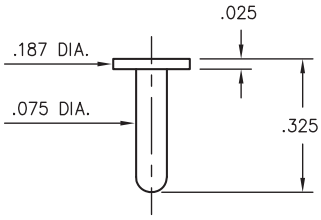
6142
6142-0-00-XX-00-00-33-0
Solder mount in .064 mounting hole



9022
9022-0-00-XX-00-00-33-0
Solder mount in .066 mounting hole
Also available on 24mm wide carrier tape:
1,500 parts per 13" reel.
Order as: 9022-0-57-XX-00-00-33-0



8086
8086-0-00-XX-00-00-33-0
Solder mount in .079 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - 0 - 00 - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

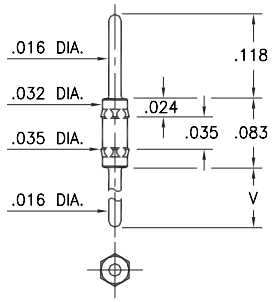
MALE PCB PINS

PRINTED CIRCUIT PINS

4006

4006-X-00-XX-00-00-03-0

Hex press-fit in .034 mounting hole

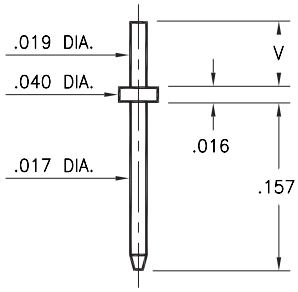


Basic Part Number	Length V
4006-0	.118
4006-1	.188
4006-2	.288

3121

3121-X-00-XX-00-00-08-0

Solder mount in .023 mounting hole
Material is annealed.

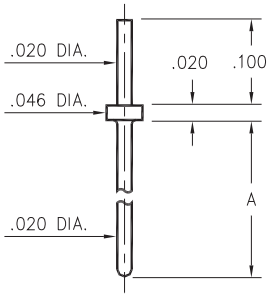


Basic Part Number	Substrate Thickness	Length V
3121-1	.025	.061
3121-2	.040	.075

3128

3128-X-00-XX-00-00-08-0

Solder mount in .024 min. mounting hole

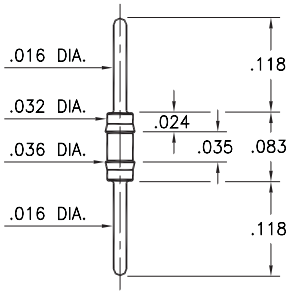


Basic Part Number	Length A
3128-1	.250
3128-2	.425
3128-3	.525
3128-4	.550
3128-5	.930

3006

3006-0-00-XX-00-00-03-0

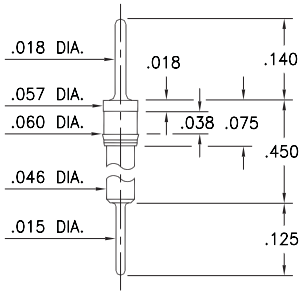
Press-fit in .034 mounting hole



8885

8885-0-00-XX-00-00-03-0

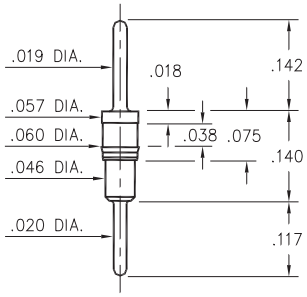
Press-fit in .057 mounting hole



6218

6218-0-00-XX-00-00-03-0

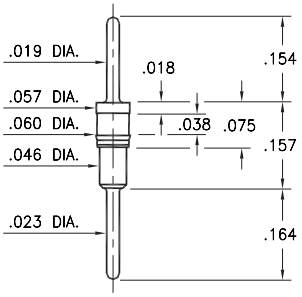
Press-fit in .057 mounting hole



5012

5012-0-00-XX-00-00-03-0

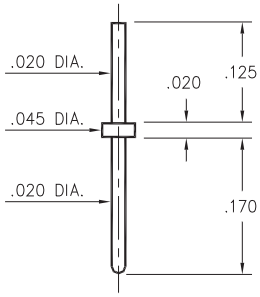
Press-fit in .057 mounting hole



9081

9081-0-00-XX-00-00-08-0

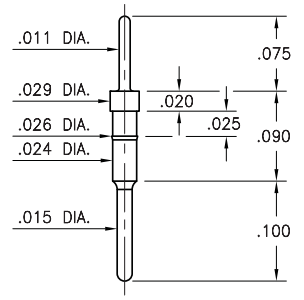
Solder mount in .024 mounting hole



3039

3039-0-00-15-00-00-03-0

Press-fit in .025 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

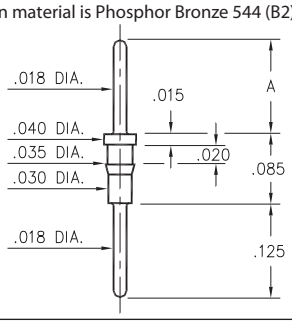
MALE PCB PINS

PRINTED CIRCUIT PINS

8685/9036

XXXX-0-00-XX-00-00-03-0

Press-fit in .033 mounting hole
Pin material is Phosphor Bronze 544 (B2)

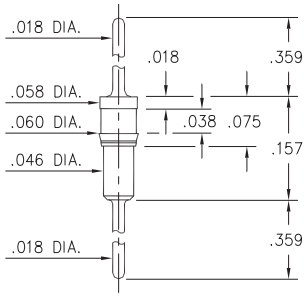


Basic Part Number	Length A
8685-0	.125
9036-0	.175

9051

9051-0-00-XX-00-00-03-0

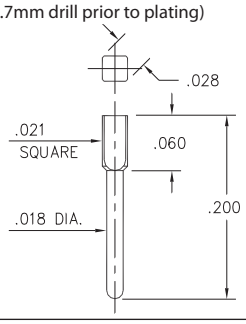
Press-fit in .057 mounting hole



8969

8969-0-05-XX-00-00-03-0

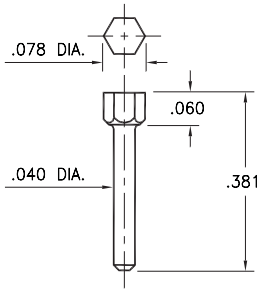
Square press-fit in .023 plated through-hole
(Use .7mm drill prior to plating)



8979

8979-0-00-XX-00-00-03-0

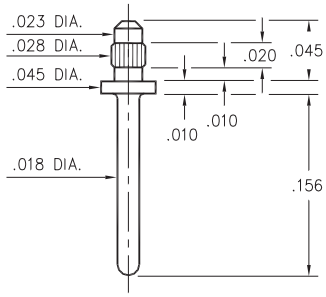
Hex press-fit in .074 plated through-hole



9159

9159-0-00-XX-00-00-03-0

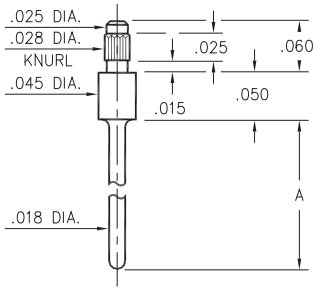
Press-fit in .026 mounting hole



3155/5155

X155-0-00-XX-00-00-03-0

Press-fit in .026 mounting hole
Pin material is Phosphor Bronze 544 (B2)

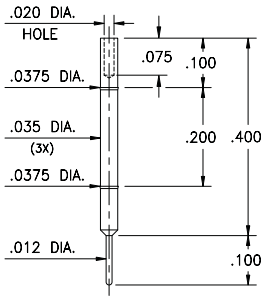


Basic Part Number	Length A
3155-0	.180
5155-0	.130

4194

4194-0-00-XX-00-00-08-0

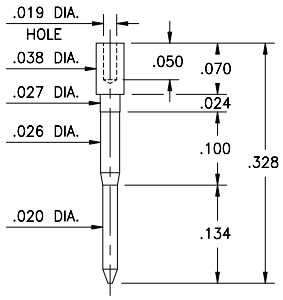
Wire termination and press-fit in .036 hole



5556

5556-0-00-XX-00-00-38-0

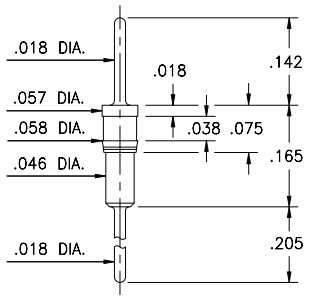
Wire termination



3790

3790-0-00-XX-00-00-03-0

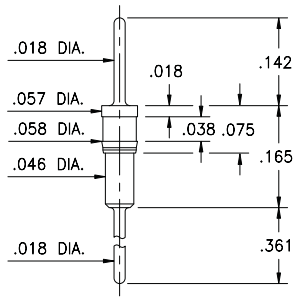
Press-fit in .057 mounting hole



3796

3796-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

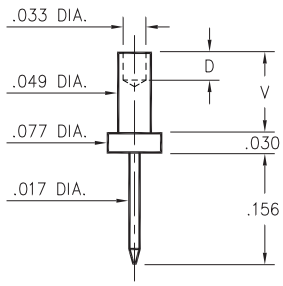
MALE PCB PINS

PRINTED CIRCUIT PINS

3116

3116-X-00-XX-00-00-08-0

Swage mount in .052 hole

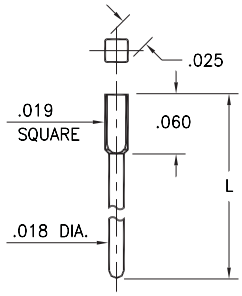


Basic Part Number	Board Thickness	Length V	Depth D
3116-1	.031	.051	.035
3116-2	.062	.082	.062
3116-3	.094	.113	.062
3116-4	.125	.145	.062

5435

5435-X-05-XX-00-00-03-0

Square press-fit in .022 plated through-hole

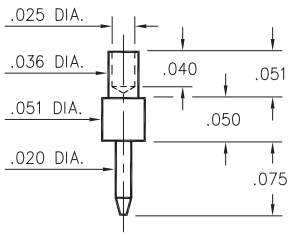


Basic Part Number	Length L
5435-0	.303
5435-1	.200
5435-2	.413

3135

3135-1-00-XX-00-00-08-0

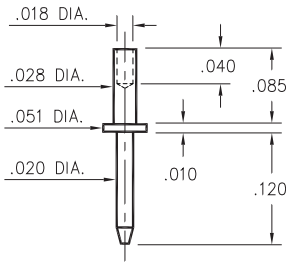
Swage mount in .040 hole
For .031 thick board



3210

3210-2-00-XX-00-00-08-0

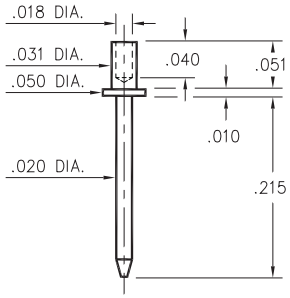
Swage mount in .031 hole
For .062 thick board



3129

3129-1-00-XX-00-00-08-0

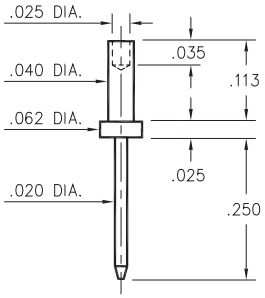
Swage mount in .035 hole
For .031 thick board



3147

3147-3-00-XX-00-00-08-0

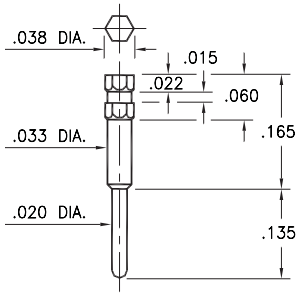
Swage mount in .043 hole
For .094 thick board



4366

4366-0-00-XX-00-00-03-0

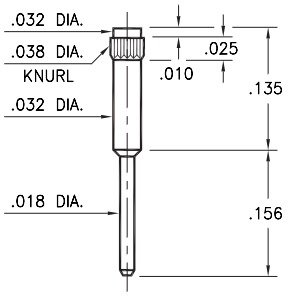
Hex press-fit in .034 plated through-hole



1267

1267-0-00-XX-00-00-03-0

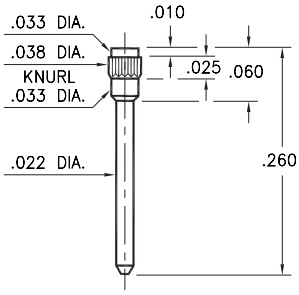
Press-fit in .035 mounting hole



7827

7827-0-00-XX-00-00-03-0

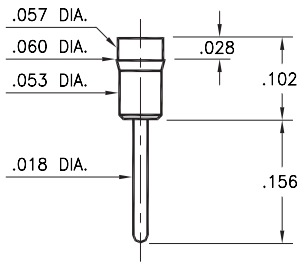
Press-fit in .035 mounting hole



1130

1130-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole
Pin material is Phosphor Bronze 544 (B2)



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

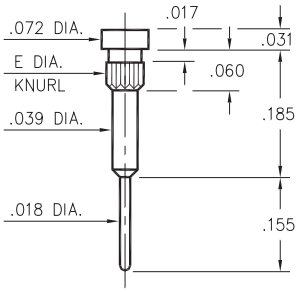
MALE PCB PINS

PRINTED CIRCUIT PINS

1067

1067-X-00-XX-00-00-03-0

Press-fit in .042/.055 mounting hole

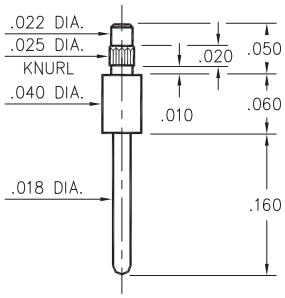


Basic Part Number	Knurl Dia. E	Mounting Hole
1067-1	.058	.055
1067-2	.045	.042

3158

3158-0-00-XX-00-00-03-0

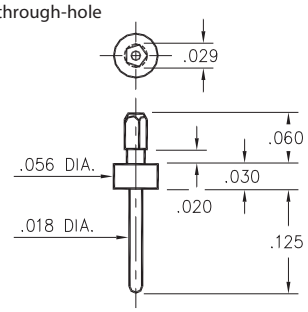
Press-fit in .023 mounting hole



9000

9000-0-00-XX-00-00-03-0

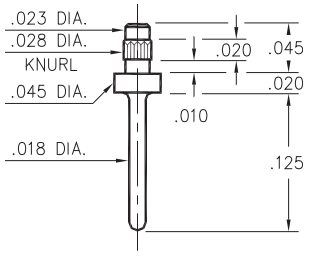
Pentagonal press-fit in .025 plated through-hole



3157

3157-0-00-XX-00-00-03-0

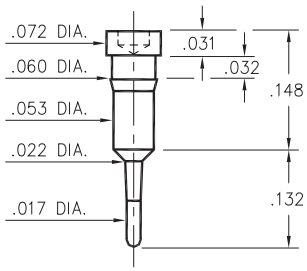
Press-fit in .026 mounting hole



0915

0915-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole

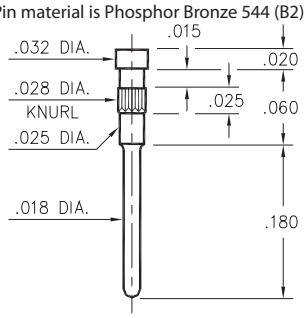


3154

3154-0-00-XX-00-00-03-0

Press-fit in .026 mounting hole

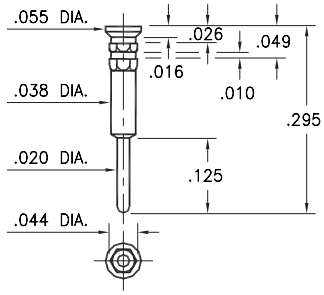
Pin material is Phosphor Bronze 544 (B2)



0542

0542-0-00-XX-00-00-03-0

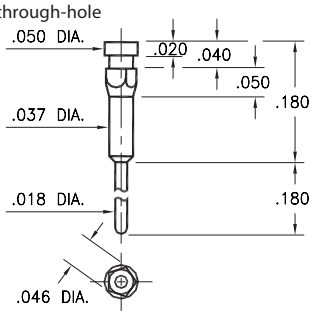
Hex press-fit in .039 plated through-hole



0522

0522-0-00-XX-00-00-03-0

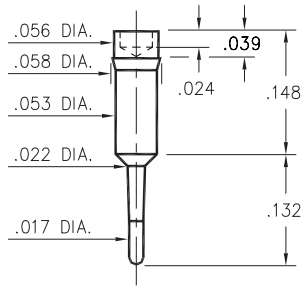
Pentagonal press-fit in .042 plated through-hole



0952

0952-0-00-XX-00-00-03-0

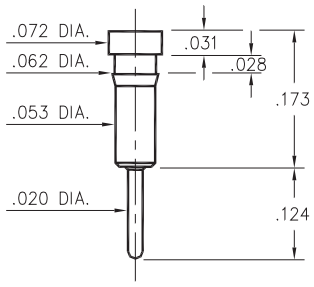
Press-fit in .056 mounting hole



0257

0257-0-00-XX-00-00-03-0

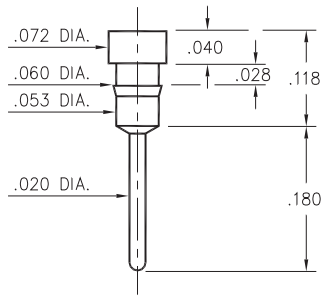
Press-fit in .059 mounting hole



8940

8940-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

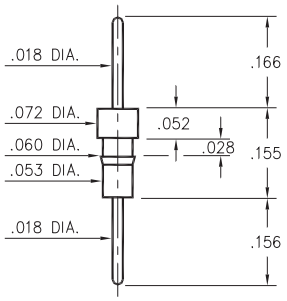
MALE PCB PINS

PRINTED CIRCUIT PINS

0504/0505

050X-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole

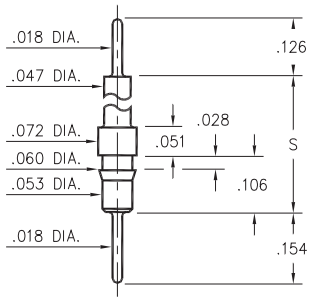


Basic Part Number	Pin Material
0504-0	Phosphor Bronze 544
0505-0	Brass 360

5510/5511

551X-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole

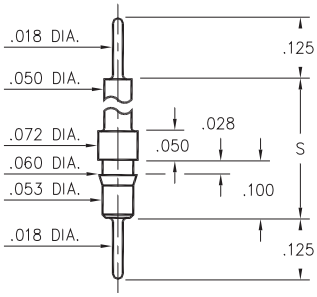


Basic Part Number	Standoff Height S
5510-0	.331
5511-0	.606

4259

4259-X-00-XX-00-00-03-0

Press-fit in .057 mounting hole

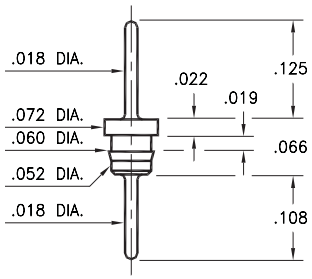


Basic Part Number	Standoff Height S
4259-1	.210
4259-2	.335
4259-3	.585
4259-4	.835

3516

3516-0-00-XX-00-00-03-0

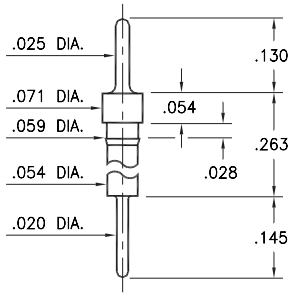
Press-fit in .057 mounting hole



8859

8859-0-00-XX-00-00-03-0

Press-fit in .056 mounting hole

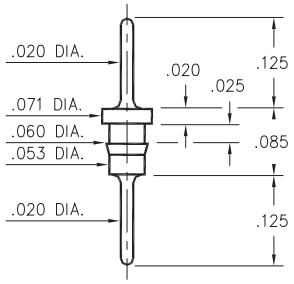


6585

6585-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole

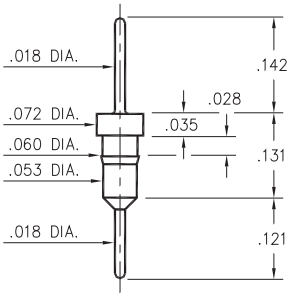
Pin material is Phosphor Bronze 544 (B2)



3404

3404-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole

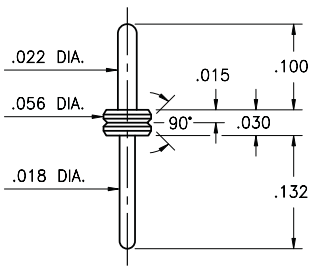


3169

3169-0-00-15-00-00-03-0

V-Groove Header Pin

Also available on Kapton Tape



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

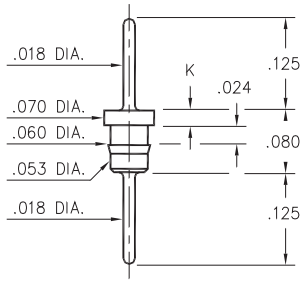
MALE PCB PINS

PRINTED CIRCUIT PINS

1752/6458

XXXX-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole

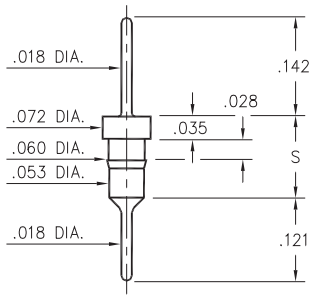


Basic Part Number	Length K
1752-0	.020
6458-0	.035

3413/8404

X4XX-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole

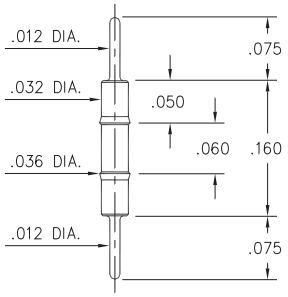


Basic Part Number	Length S
3413-0	.118
8404-0	.131

9075

9075-0-00-XX-00-00-03-0

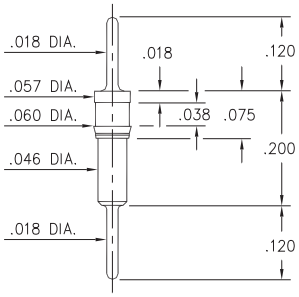
Press-fit in .034 mounting hole



9218

9218-0-00-XX-00-00-03-0

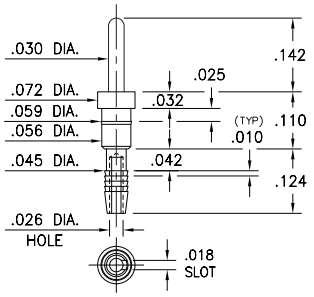
Press-fit in .057 mounting hole



5607

5607-0-01-XX-00-00-03-0

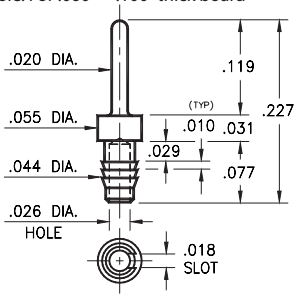
Compliant press-fit in .040 ± .003 plated hole. For .060" →.100" thick board



2617

2617-0-01-XX-00-00-03-0

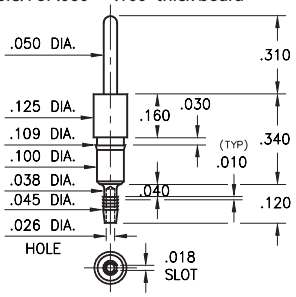
Compliant press-fit in .040 ± .003 plated hole. For .060" →.100" thick board



8995

8995-0-01-XX-00-00-03-0

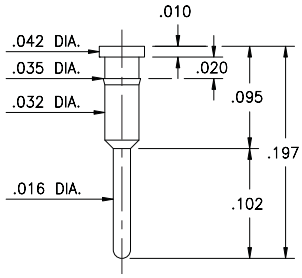
Compliant press-fit in .040 ± .003 plated hole. For .060" →.100" thick board



1933

1933-0-00-XX-00-00-03-0

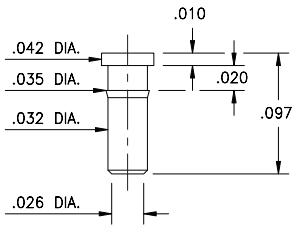
Press-fit in .034 mounting hole



1935

1935-0-00-XX-00-00-03-0

Press-fit in .034 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

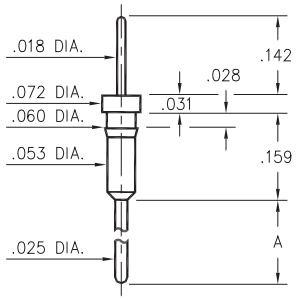
MALE PCB PINS

PRINTED CIRCUIT PINS

3409

3409-X-00-XX-00-00-03-0

Press-fit in .057 mounting hole



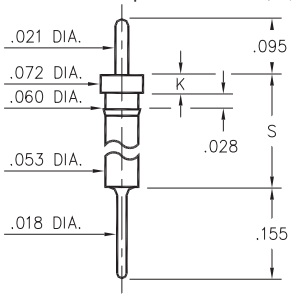
Basic Part Number	Pin Length A
3409-1	.210
3409-2	.420

0315

0315-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole

Pin material is Phosphor Bronze 544 (B2)

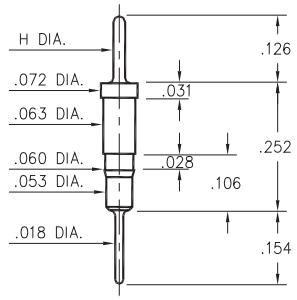


Basic Part Number	Head Height K	Standoff Height S
0315-0	.030	.190
0315-1	.040	.430

5503/5509

550X-X-00-XX-00-00-03-0

Press-fit in .057 mounting hole

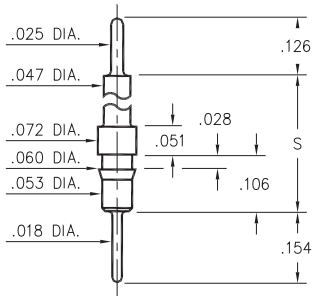


Basic Part Number	Pin Diameter H
5503-0	.025
5509-0	.018

5504/5505

550X-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole

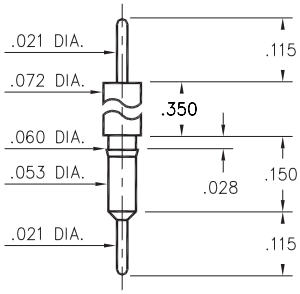


Basic Part Number	Standoff Height S
5504-0	.331
5505-0	.606

3406

3406-0-00-XX-00-00-03-0

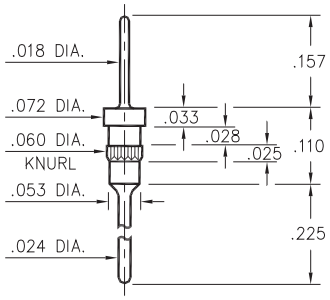
Press-fit in .057 mounting hole



5011

5011-0-00-XX-00-00-03-0

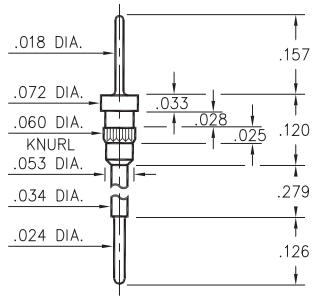
Press-fit in .057 mounting hole



5113

5113-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

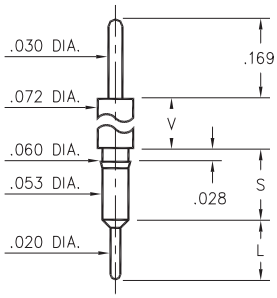
MALE PCB PINS

PRINTED CIRCUIT PINS

3400⇨3402/3405/3410

34XX-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole

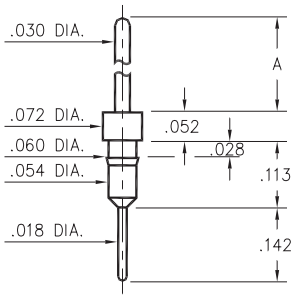


Basic Part Number	Shoulder Height V	Length S	Length L
3402-0	.052	.138	.121
3401-0	.100	.136	.125
3405-0	.169	.146	.115
3400-0	.461	.145	.115
3410-0	.934	.136	.124

3411

3411-X-00-XX-00-00-03-0

Press-fit in .057 mounting hole

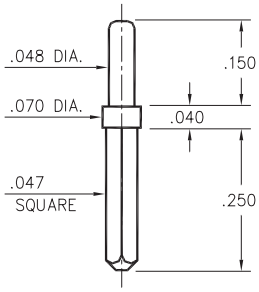


Basic Part Number	Pin Length A
3411-0	.417
3411-1	.217

0600

0600-0-05-XX-00-00-01-0

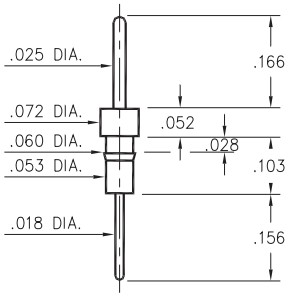
Solder mount .052 mounting hole



0290

0290-0-00-XX-00-00-03-0

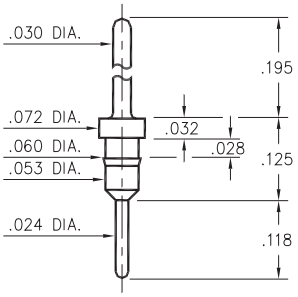
Press-fit in .057 mounting hole



7007

7007-0-00-XX-00-00-03-0

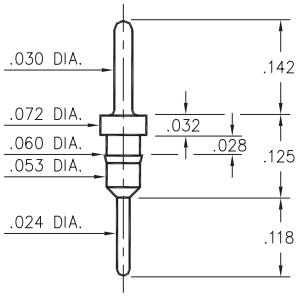
Press-fit in .057 mounting hole



5016

5016-0-00-XX-00-00-03-0

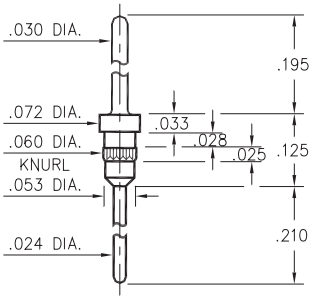
Press-fit in .057 mounting hole



5005

5005-0-00-XX-00-00-03-0

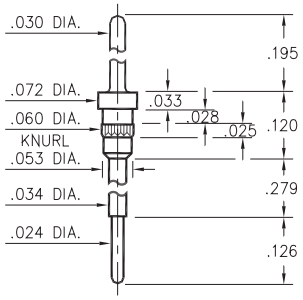
Press-fit in .057 mounting hole



5107

5107-0-00-XX-00-00-03-0

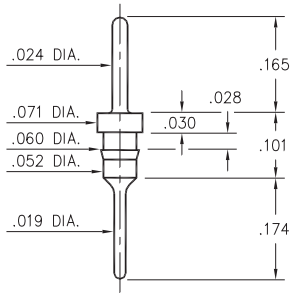
Press-fit in .057 mounting hole



8919

8919-0-00-XX-00-00-03-0

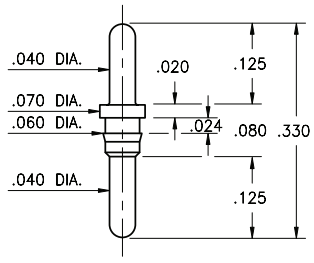
Press-fit in .057 mounting hole



3077

3077-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

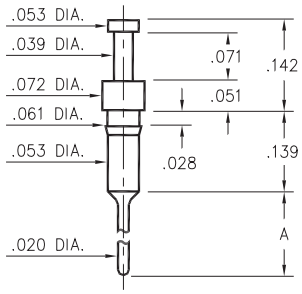
MALE PCB PINS

PRINTED CIRCUIT PINS

3408

3408-X-00-XX-00-00-03-0

Press-fit in .057 mounting hole

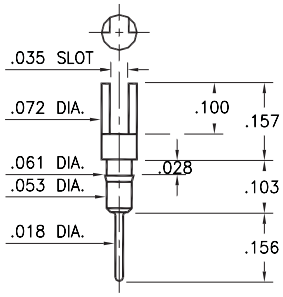


Basic Part Number	Pin Length A
3408-1	.121
3408-2	.181

0270/0282

02XX-0-01-XX-00-00-03-0

Press-fit in .057 mounting hole

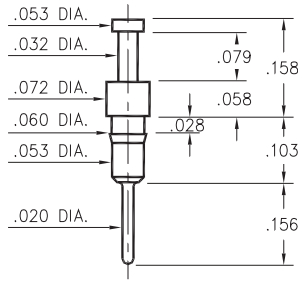


Basic Part Number	Pin Material
0270-0	Phosphor Bronze 544
0282-0	Brass 360

0700

0700-0-00-XX-00-00-03-0

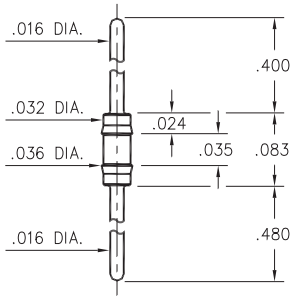
Press-fit in .057 mounting hole



8006

8006-0-00-XX-00-00-03-0

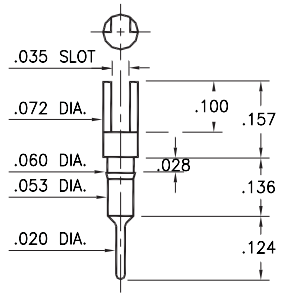
Press-fit in .034 mounting hole



0265

0265-0-01-XX-00-00-03-0

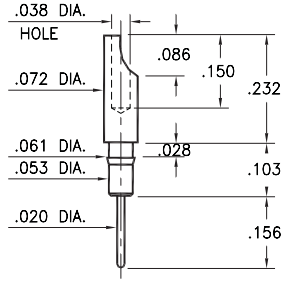
Press-fit in .057 mounting hole



0275

0275-0-01-XX-00-00-03-0

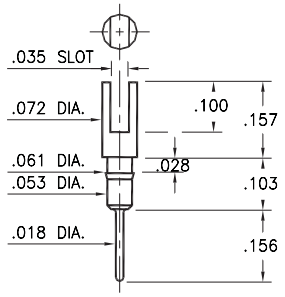
Press-fit in .057 mounting hole
Pin material is Phosphor Bronze 544 (B2)
Accepts wire sizes up to .028" dia.



0272

0272-0-01-XX-00-00-03-0

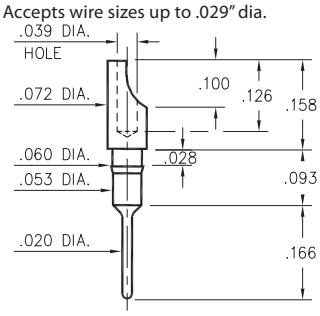
Press-fit in .057 mounting hole



8000

8000-0-01-XX-00-00-03-0

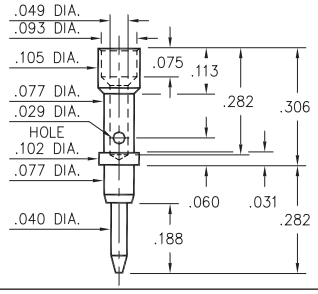
Press-fit in .057 mounting hole
Accepts wire sizes up to .029" dia.



3603

3603-0-07-XX-00-00-08-0

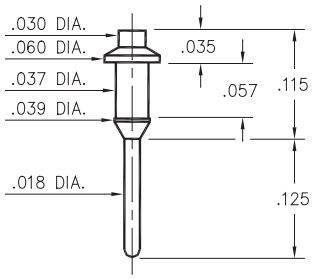
Annealed
Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.



9976

9976-0-00-XX-00-00-03-0

Press-fit in .038 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

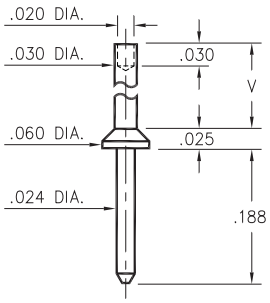
MALE PCB PINS

PRINTED CIRCUIT PINS

3117

3117-X-00-XX-00-00-08-0

Swage mount in .035 hole

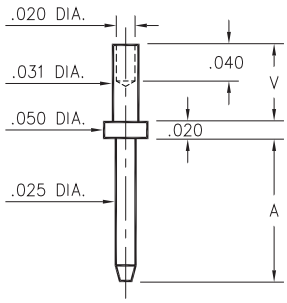


Basic Part Number	Board Thickness	Length V
3117-1	.031	.047
3117-2	.062	.078
3117-3	.094	.110
3117-4	.125	.141

3114/3115

311X-X-00-XX-00-00-08-0

Swage mount in .035 mounting hole

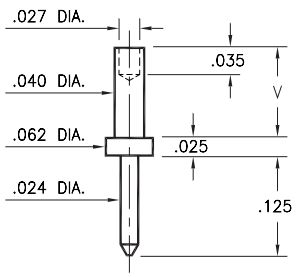


Basic Part Number	Board Thick-ness	Length A	Length V
3114-1	.031	.150	.051
3114-2	.062	.150	.082
3115-1	.031	.300	.051
3115-2	.062	.300	.082

3112

3112-X-00-XX-00-00-08-0

Swage mount in .043 hole

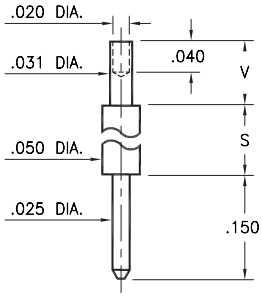


Basic Part Number	Board Thickness	Length V
3112-1	.031	.051
3112-2	.062	.082
3112-3	.094	.113

3118/3119

311X-X-00-XX-00-00-08-0

Swage mount in .035 hole

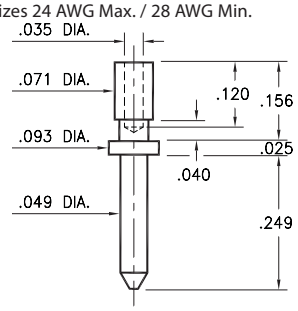


Basic Part Number	Board Thick-ness	Length S	Length V
3118-1	.031	.170	.051
3118-2	.062	.170	.082
3119-1	.031	.420	.051
3119-2	.062	.420	.082

3139

3139-0-00-XX-00-00-08-0

Wire crimp termination. Accepts wire sizes 24 AWG Max. / 28 AWG Min.

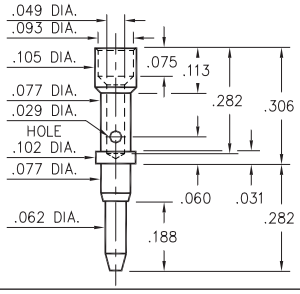


3602

3602-0-07-XX-00-00-08-0

Annealed

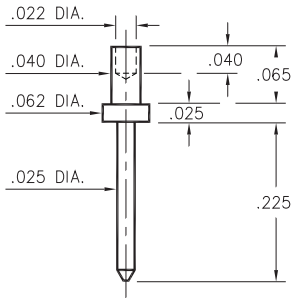
Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.



3131

3131-1-00-XX-00-00-08-0

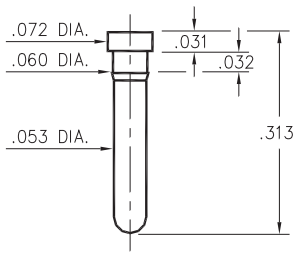
Swage mount in .043 hole



0912

0912-0-00-XX-00-00-03-0

Press-fit in .057 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except swage pins which are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

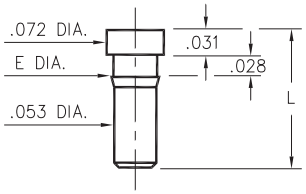
MALE PCB PINS

PRINTED CIRCUIT PINS

0259/0286/1941

XXXX-0-00-XX-00-00-03-0

Press-fit in .057/.059 mounting hole

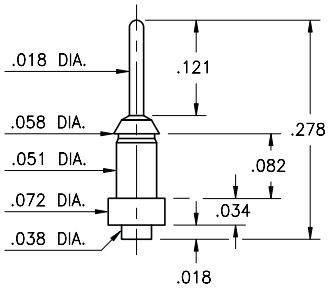


Basic Part Number	Length L	Barb Dia. E	Mounting Hole
0259-0	.173	.062	.059
0286-0	.115	.060	.057
1941-0	.169	.058	.056

2956-0

2956-0-00-XX-00-00-03-0

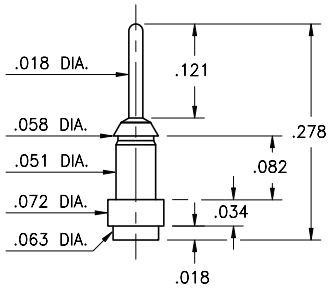
Surface mount



2956-1

2956-1-00-XX-00-00-03-0

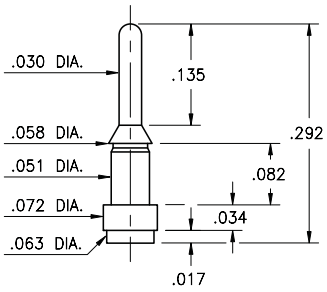
Surface mount



4956-1

4956-1-00-XX-00-00-33-0

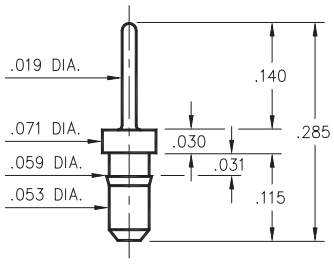
Surface mount



8876

8876-0-00-XX-00-00-03-0

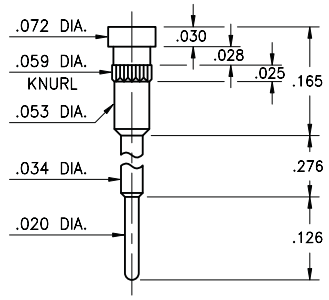
Press-fit in .057 mounting hole



1938

1938-0-00-XX-00-00-03-0

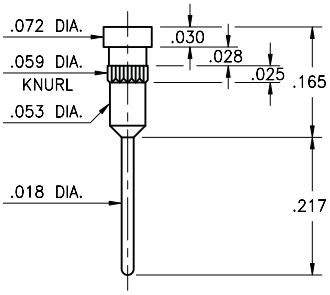
Press-fit in .057 mounting hole



1940

1940-0-00-XX-00-00-03-0

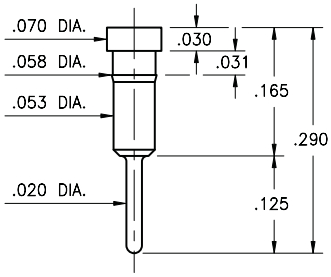
Press-fit in .057 mounting hole



1942

1942-0-00-XX-00-00-03-0

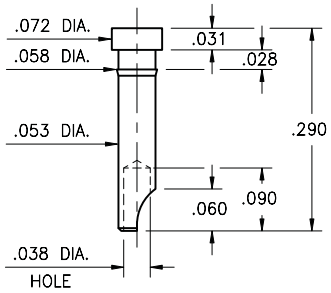
Press-fit in .057 mounting hole



3024

3024-0-01-XX-00-00-03-0

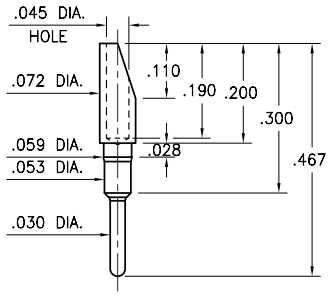
Press-fit in .057 mounting hole
Accepts wire sizes up to .028" dia.



1107

1107-0-01-15-00-00-03-0

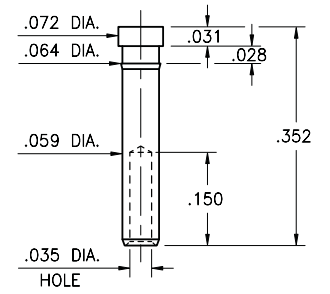
Press-fit in .057 mounting hole
Accepts wire sizes up to .035" dia.



3000

3000-0-00-XX-00-00-03-0

Press-fit in .061 mounting hole. Accepts wire sizes 24 AWG Max. / 28 AWG Min.



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except swage pins which are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

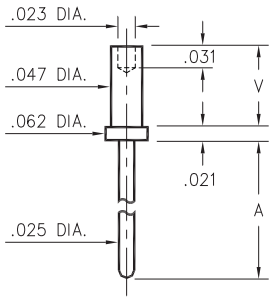
MALE PCB PINS

PRINTED CIRCUIT PINS

3130/3134

31XX-X-00-XX-00-00-08-0

Swage mount in .052 hole

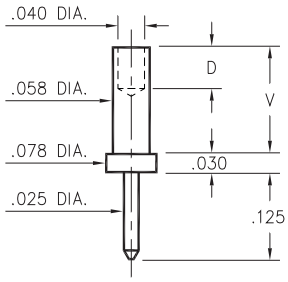


Basic Part Number	Board Thickness	Length A	Length V
3134-1	.031	.079	.051
3134-2	.062	.079	.082
3134-3	.094	.079	.113
3134-4	.125	.079	.145
3130-1	.031	.179	.051
3130-2	.062	.179	.082
3130-3	.094	.179	.113
3130-4	.125	.179	.145

3113

3113-X-00-XX-00-00-08-0

Swage mount in .062 hole

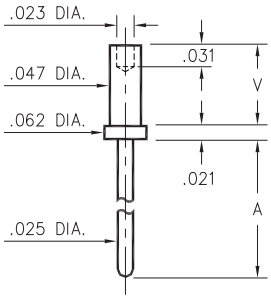


Basic Part Number	Board Thickness	Length V	Depth D
3113-1	.031	.062	.040
3113-2	.062	.094	.062
3113-3	.094	.125	.062
3113-4	.125	.156	.062

3151

3151-X-00-XX-00-00-08-0

Swage mount in .052 hole



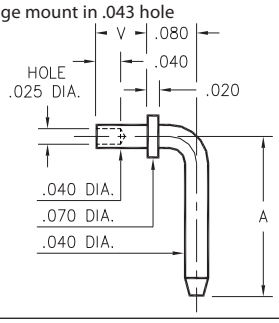
Basic Part Number	Board Thickness	Length A	Length V
3151-1	.031	.479	.051
3151-2	.062	.479	.082
3151-3	.094	.479	.113
3151-4	.125	.479	.145

3301⇨3304

330X-X-14-XX-00-00-08-0

Specify board thickness

Swage mount in .043 hole



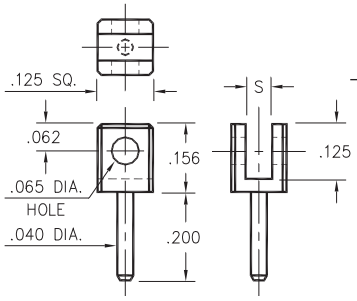
Basic Part Number	Pin Centers A
3301-X	.257
3302-X	.357
3303-X	.375
3304-X	.562

-X-	Board Thickness	Length V
1	.031	.051
2	.062	.082
3	.094	.113

3620

3620-X-32-XX-00-00-08-0

Board edge rivet mount.

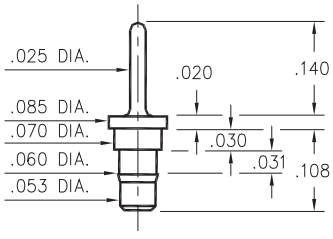


Basic Part Number	Board Thickness	Slot S
3620-1	.031	.047
3620-2	.062	.075

0940

0940-0-00-XX-00-00-03-0

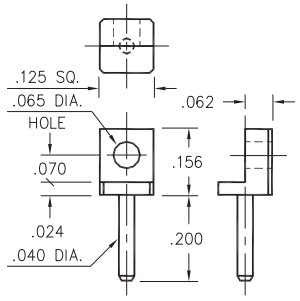
Press-fit in .057 mounting hole



3621

3621-0-32-XX-00-00-08-0

Board edge rivet mount



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except swage pins which are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

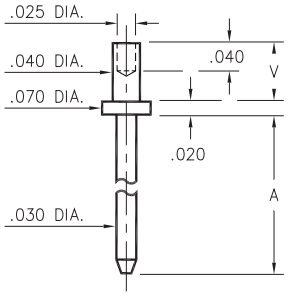
MALE PCB PINS

PRINTED CIRCUIT PINS

3110/3111

311X-X-00-XX-00-00-08-0

Swage mount in .043 hole

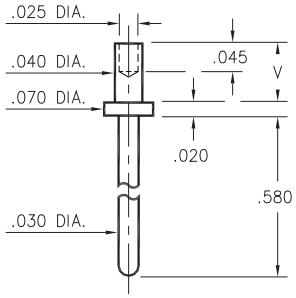


Basic Part Number	Board Thickness	Length A	Length V
3110-1	.031	.150	.051
3110-2	.062	.150	.082
3110-3	.094	.150	.113
3111-1	.031	.300	.051
3111-2	.062	.300	.082
3111-3	.094	.300	.113

3150

3150-X-00-XX-00-00-08-0

Swage mount in .043 mounting hole

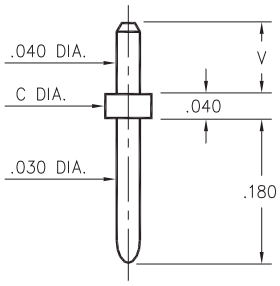


Basic Part Number	Board Thickness	Length V
3150-1	.031	.051
3150-2	.062	.082

3136/3137

313X-X-00-XX-00-00-08-0

Solder mount in .043 mounting hole

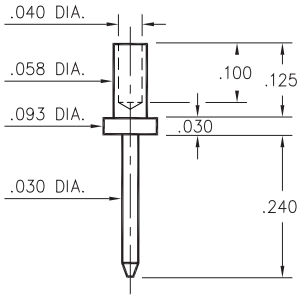


Basic Part Number	Board Thickness	Length V	Flange Dia. C
3136-1	.062	.082	.078
3136-2	.094	.110	
3136-3	.125	.145	
3137-1	.062	.082	.062
3137-2	.094	.110	
3137-3	.125	.145	
3137-4	.156	.185	

3148

3148-3-00-XX-00-00-08-0

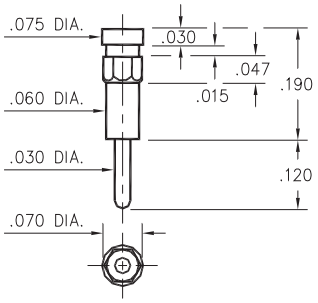
Swage mount in .062 hole
For a .094 thick board



8815

8815-0-00-XX-00-00-03-0

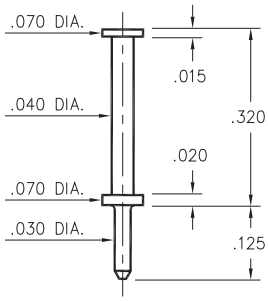
Hex press-fit in .066 plated through-hole



6821

6821-0-00-XX-00-00-08-0

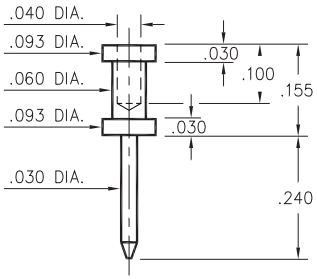
Wire termination



3132

3132-0-00-XX-00-00-08-0

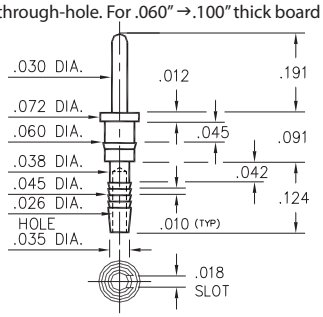
Wire termination, Material is annealed



5601

5601-0-01-XX-00-00-03-0

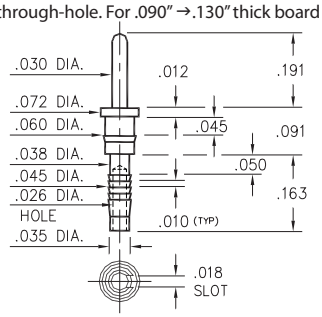
Compliant press-fit in .040 ± .003 plated through-hole. For .060" →.100" thick board



5602

5602-0-01-XX-00-00-03-0

Compliant press-fit in .040 ± .003 plated through-hole. For .090" →.130" thick board



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except swage pins which are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

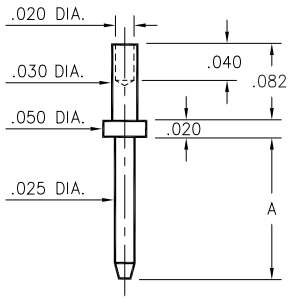
MALE PCB PINS

PRINTED CIRCUIT PINS

3120

3120-X-00-XX-00-00-08-0

Swage mount in .034 hole

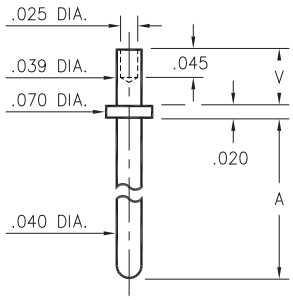


Basic Part Number	Pin Length A
3120-1	.205
3120-2	.250

3122⇨3153

31XX-X-00-XX-00-00-08-0

Swage mount in .043 hole



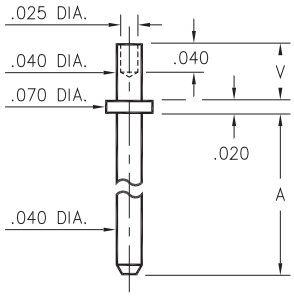
Basic Part Number	Pin Length A
3153-X	.180
3141-X	.230
3122-X	.280
3149-X	.380
3123-X	.580
3140-X	.780
3124-X	.880

-X-	Board Thickness	Length V
1	.031	.051
2	.062	.082

3101⇨3106

310X-X-00-XX-00-00-08-0

Swage mount in .043 hole



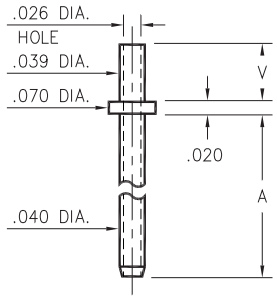
Basic Part Number	Pin Length A
3101-X	.150
3102-X	.188
3103-X	.300
3104-X	.500
3105-X	.750
3106-X	1.000

-X-	Board Thickness	Length V
1	.031	.051
2	.062	.082
3	.094	.113

3221⇨3223

322X-0-00-XX-00-00-08-0

Swage mount in .043 hole



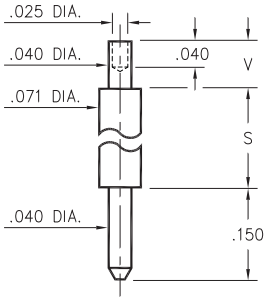
Basic Part Number	Pin Length A
3221-X	.100
3222-X	.150
3223-X	.300

-X-	Board Thickness	Length V
1	.031	.051
2	.062	.082
3	.094	.113

3125/3126

312X-X-00-XX-00-00-08-0

Swage mount in .043 hole



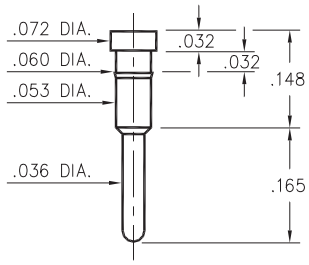
Basic Part Number	Pin Length S
3125-X	.170
3126-X	.420

-X-	Board Thickness	Length V
1	.031	.051
2	.062	.082
3	.094	.113

0995

0995-0-00-XX-00-00-03-0

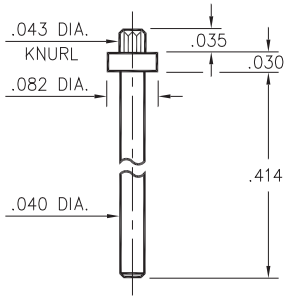
Press-fit in .057 mounting hole



4526

4526-0-00-XX-00-00-03-0

Press-fit in .040 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except swage pins which are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

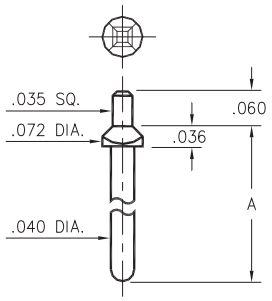
MALE PCB PINS

PRINTED CIRCUIT PINS

8600/8954/8955

8XXX-X-05-XX-00-00-03-0

Square press-fit in .043 plated through-hole

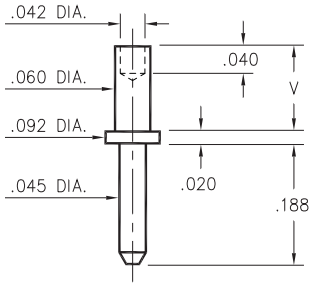


Basic Part Number	Pin Length A
8600-0	.400
8600-1	.850
8600-2	1.200
8954-0	.136
8955-0	.655

3159

3159-X-00-XX-00-00-08-0

Swage mount in .064 hole

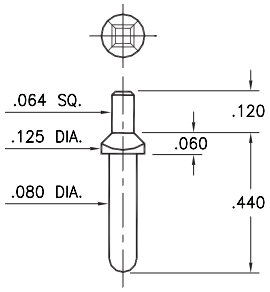


Basic Part Number	Board Thickness	Length V
3159-1	.031	.062
3159-2	.062	.094
3159-3	.094	.125
3159-4	.125	.156

8952

8952-0-05-XX-00-00-03-0

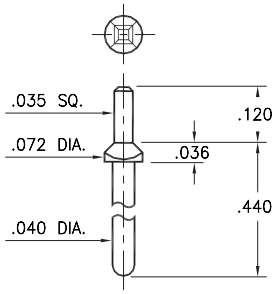
Square press-fit in .087 plated through-hole



8953

8953-0-05-XX-00-00-03-0

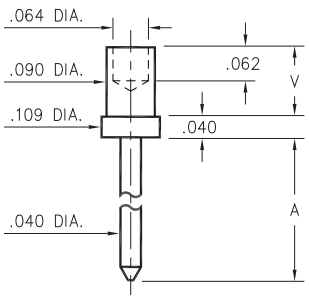
Square press-fit in .047 plated through-hole



3230

3230-X-00-XX-00-00-08-0

Swage mount in .094 hole

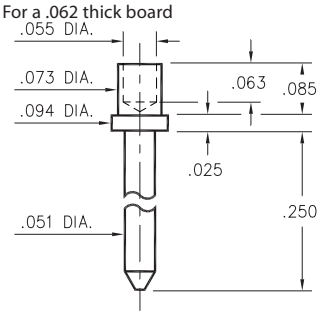


Basic Part Number	Board Thick-ness	Length A	Length V
3230-1	.031	.202	.065
3230-2	.062	.228	.095
3230-3	.094	.258	.125
3230-4	.125	.288	.155

3146

3146-2-00-XX-00-00-08-0

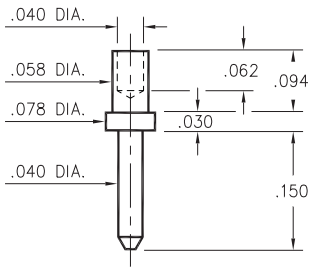
Swage mount in .076 hole
For a .062 thick board



3142

3142-2-00-XX-00-00-08-0

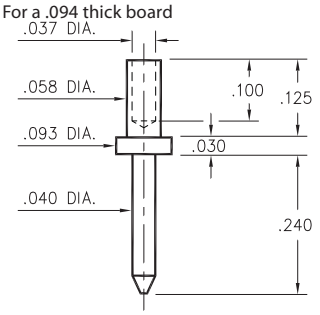
Swage mount in .062 hole
For a .062 thick board



3232

3232-3-00-XX-00-00-08-0

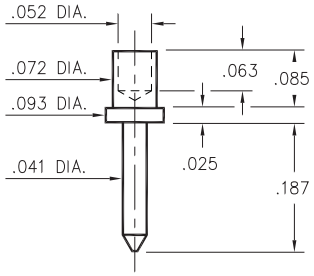
Swage mount in .062 hole
For a .094 thick board



3145

3145-2-00-XX-00-00-08-0

Swage mount in .076 hole
For a .062 thick board



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except swage pins which are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

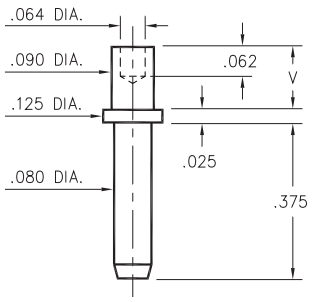
MALE PCB PINS

PRINTED CIRCUIT PINS

3231

3231-X-00-XX-00-00-08-0

Swage mount in .094 hole

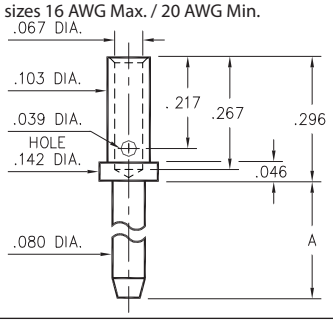


Basic Part Number	Board Thickness	Length V
3231-2	.062	.094
3231-3	.094	.125
3231-4	.125	.156

3609

3609-X-07-XX-00-00-08-0

Wire crimp termination. Accepts wire sizes 16 AWG Max. / 20 AWG Min.

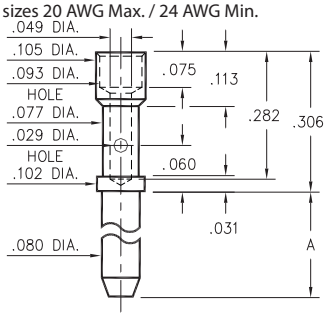


Basic Part Number	Pin Length A
3609-1	.200
3609-2	.375
3609-3	.500

3601

3601-X-07-XX-00-00-08-0

Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.



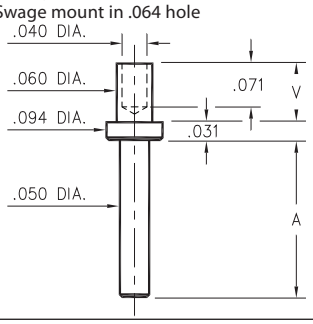
Basic Part Number	Pin Length A
3601-1	.200
3601-2	.375
3601-3	.500

3133/3138/3152

31XX-X-00-XX-00-00-08-0

Specify board thickness

Swage mount in .064 hole



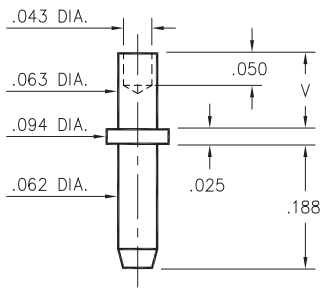
Basic Part Number	Pin Length A
3152-X	.094
3133-X	.219
3138-X	.282

- X -	Board Thickness	Length V
1	.031	.063
2	.062	.094
3	.094	.125
4	.125	.156

3144

3144-X-00-XX-00-00-08-0

Swage mount in .067 hole



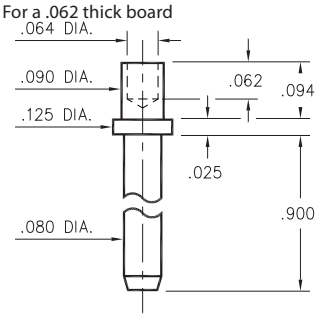
Basic Part Number	Board Thickness	Length V
3144-1	.031	.053
3144-2	.062	.084
3144-3	.094	.115

3233

3233-2-00-XX-00-00-08-0

Swage mount in .094 hole

For a .062 thick board

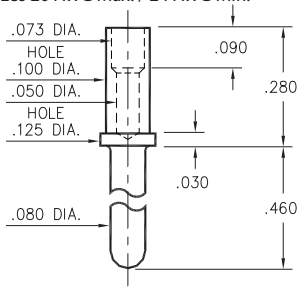


0520

0520-0-00-XX-00-00-03-0

Annealed

Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except swage pins which are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

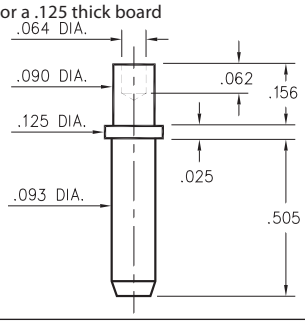
SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

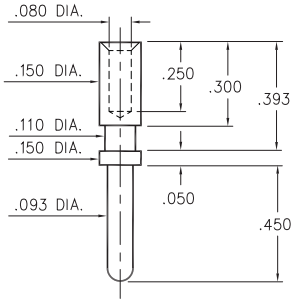
MALE PCB PINS

PRINTED CIRCUIT PINS

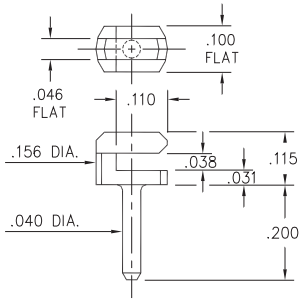
5231
5231-0-00-XX-00-00-38-0
Swage mount in .094 hole
For a .125 thick board



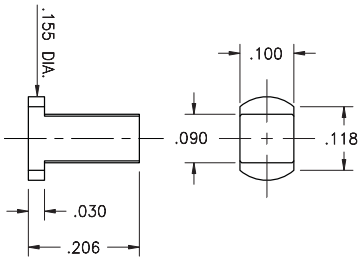
9092
9092-0-00-XX-00-00-38-0
Wire termination up to 14 AWG



7310
7310-0-01-XX-00-00-08-0
Board edge press-fit

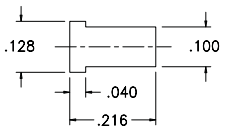


7937
7937-0-00-15-00-00-03-0
Target contact, horizontal surface mount
Also available on 16mm wide carrier tape:
2,400 parts per 13" reel.
Order as: 7937-0-58-15-00-00-03-0

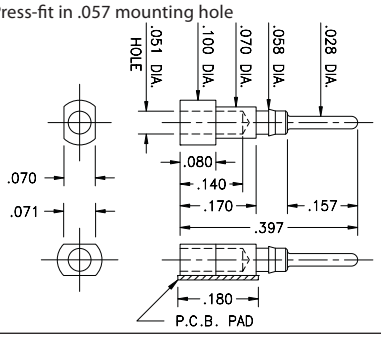




P.C.B. Layout

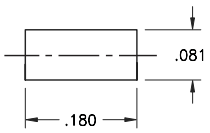


1502
1502-0-00-XX-00-00-33-0
Press-fit in .057 mounting hole

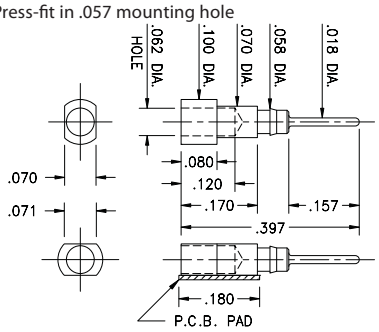




P.C.B. Layout

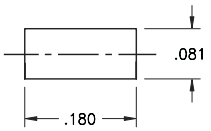


5102
5102-0-00-XX-00-00-33-0
Press-fit in .057 mounting hole

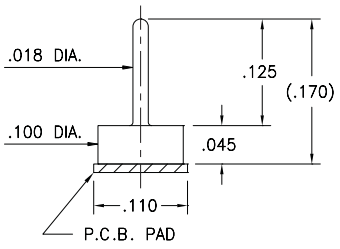




P.C.B. Layout

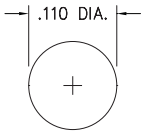


1508
1508-0-00-15-00-00-03-0
Test point, surface mount
Also available on 16mm wide carrier tape:
1,600 parts per 13" reel.
Order as: 1508-0-57-15-00-00-03-0





P.C.B. Layout



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except swage pins which are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 0X - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:
- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)
- **34** 50 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

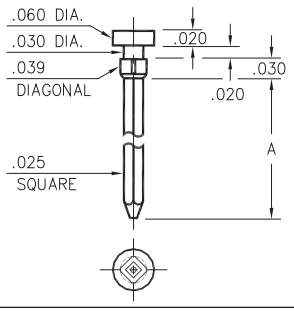
MALE PCB PINS

WRAPOST TERMINALS

5275

5275-X-05-XX-00-00-01-0

Square press-fit in .035 plated through-hole

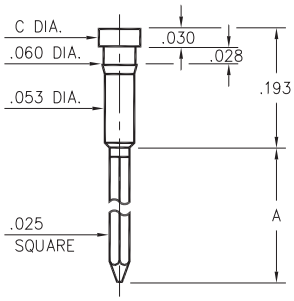


Basic Part Number	# of Wraps	Length A
5275-1	1	.370
5275-2	2	.470
5275-3	3	.610

1010⇨1012/1020⇨1022

10XX-X-05-XX-00-00-01-0

Press-fit in .057 mounting hole

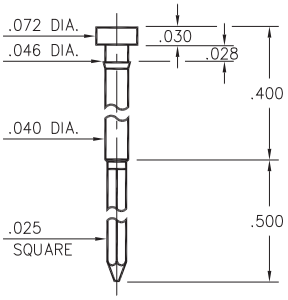


Basic Part Number	# of Wraps	Wrapost Length A	Head Dia. C
1012-1	1	.260	.072
1011-2	2	.360	
1010-3	3	.500	
1022-1	1	.260	.062
1021-2	2	.360	
1020-3	3	.500	

1215

1215-3-05-XX-00-00-01-0

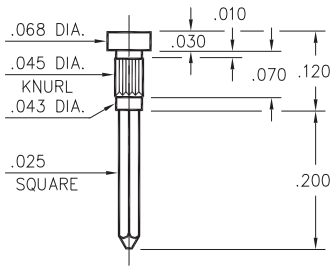
Press-fit in .043 mounting hole



1124

1124-0-05-XX-00-00-01-0

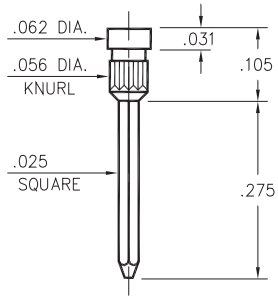
Press-fit in .043 mounting hole



1210

1210-0-05-XX-00-00-01-0

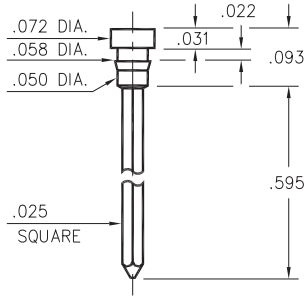
Press-fit in .053 mounting hole



1222

1222-0-05-XX-00-00-01-0

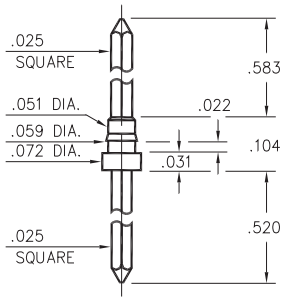
Press-fit in .055 mounting hole



1221

1221-0-05-XX-00-00-01-0

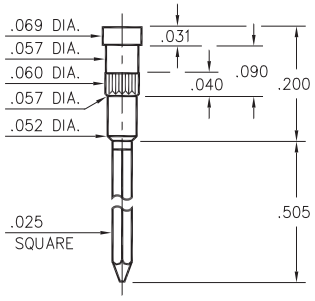
Press-fit in .056 mounting hole



1110

1110-3-05-XX-00-00-01-0

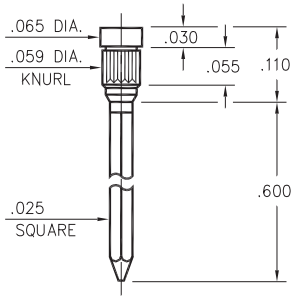
Press-fit in .057 mounting hole



1094

1094-0-05-XX-00-00-01-0

Press-fit in .056 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 05 - XX - 00 - 00 - 01 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

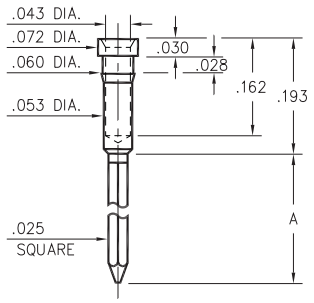
MALE PCB PINS

WRAPOST TERMINALS

1030⇨1032

103X-X-05-XX-00-00-01-0

Press-fit in .057 mounting hole

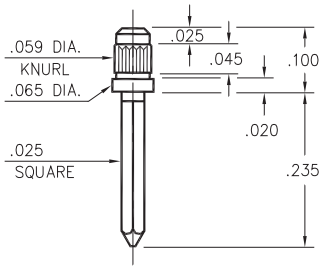


Basic Part Number	# of Wraps	Length A
1032-1	1	.260
1031-2	2	.360
1030-3	3	.500

1216

1216-0-05-XX-00-00-01-0

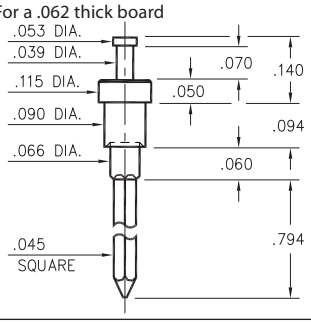
Press-fit in .056 mounting hole



1095

1095-0-05-XX-00-00-01-0

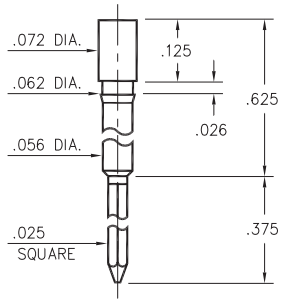
Swage mount in .094 hole
For a .062 thick board



1214

1214-0-05-XX-00-00-01-0

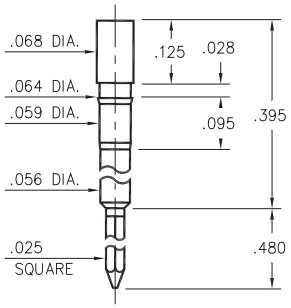
Press-fit in .059 mounting hole



1212

1212-0-05-XX-00-00-01-0

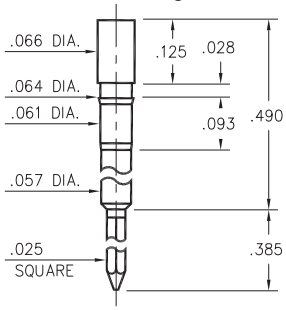
Press-fit in .061 mounting hole



1213

1213-0-05-XX-00-00-01-0

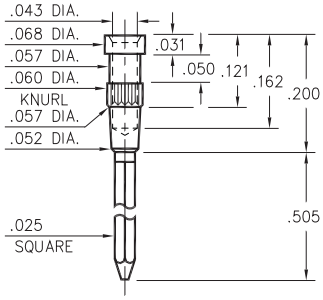
Press-fit in .061 mounting hole



0318

0318-3-05-XX-00-00-01-0

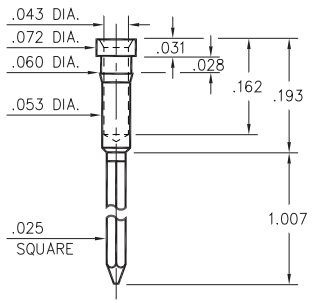
Press-fit in .057 mounting hole



1302

1302-0-05-XX-00-00-01-0

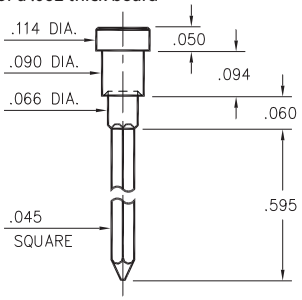
Press-fit in .057 mounting hole



1097

1097-0-05-XX-00-00-01-0

Swage mount in .094 hole
For a .062 thick board



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except swage pins which are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 05 - XX - 00 - 00 - 01 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

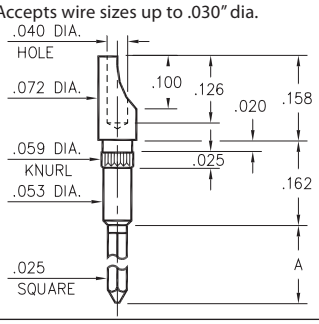
MALE PCB PINS

WRAPOST TERMINALS

8301

8301-X-24-XX-00-00-01-0

Press-fit in .057 mounting hole
Accepts wire sizes up to .030" dia.

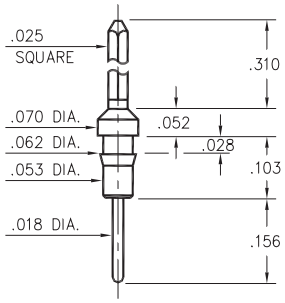


Basic Part Number	# of Wraps	Length A
8301-2	2	.370
8301-3	3	.510

1083

1083-0-05-XX-00-00-01-0

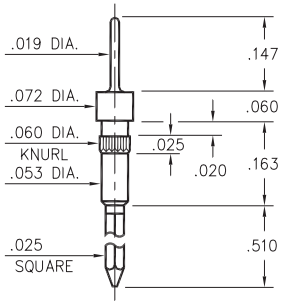
Press-fit in .059 mounting hole



5301

5301-0-05-XX-00-00-01-0

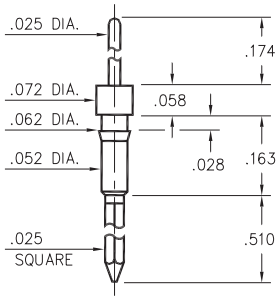
Press-fit in .057 mounting hole



1090

1090-0-05-XX-00-00-01-0

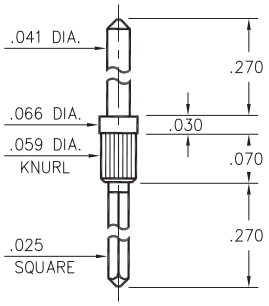
Press-fit in .059 mounting hole



8608

8608-0-05-XX-00-00-01-0

Press-fit in .056 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - XX - XX - 00 - 00 - 01 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

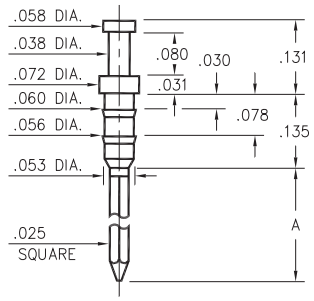
MALE PCB PINS

WRAPOST TERMINALS

1096

1096-X-05-XX-00-00-01-0

Press-fit in .057 mounting hole

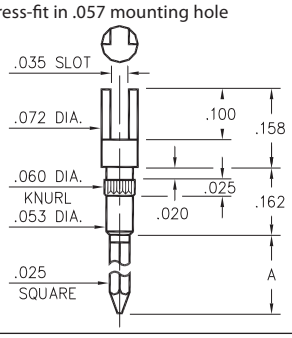


Basic Part Number	# of Wraps	Length A
1096-2	2	.381
1096-3	3	.527

1106

1106-X-23-XX-00-00-01-0

Press-fit in .057 mounting hole

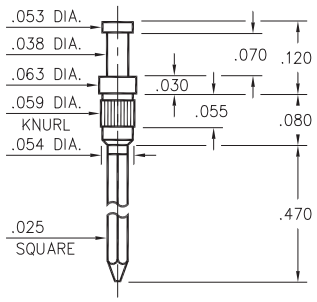


Basic Part Number	# of Wraps	Length A
1106-2	2	.370
1106-3	3	.510

1093

1093-0-05-XX-00-00-01-0

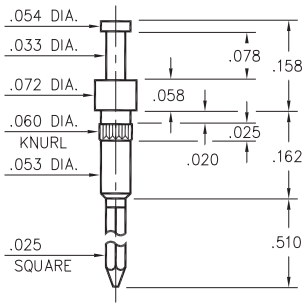
Press-fit in .056 mounting hole



0730

0730-3-05-XX-00-00-01-0

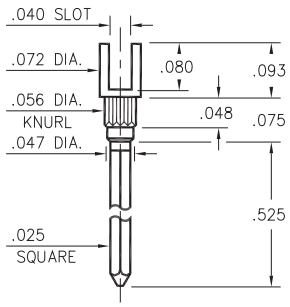
Press-fit in .057 mounting hole



1122

1122-0-22-XX-00-00-01-0

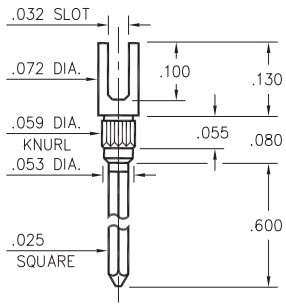
Press-fit in .053 mounting hole



1064

1064-0-23-XX-00-00-01-0

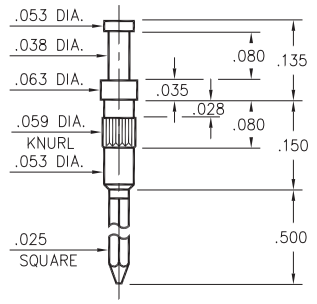
Press-fit in .056 mounting hole



1092

1092-0-05-XX-00-00-01-0

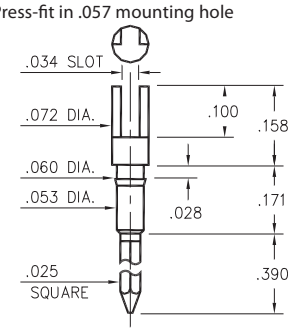
Press-fit in .056 mounting hole



1068

1068-0-23-XX-00-00-01-0

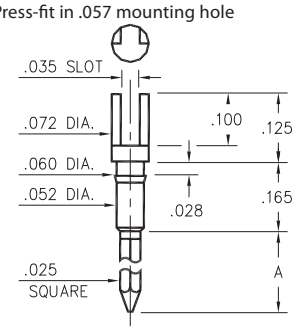
Press-fit in .057 mounting hole



1070⇨1072

107X-X-23-XX-00-00-01-0

Press-fit in .057 mounting hole



Basic Part Number	# of Wraps	Length A
1072-1	1	.260
1071-2	2	.370
1070-3	3	.510

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Except where noted)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - XX - XX - 00 - 00 - 01 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- **80** 200 µ" TIN OVER NICKEL (RoHS)
- **15** 10 µ" GOLD OVER NICKEL (RoHS)
- **21** 20 µ" GOLD OVER NICKEL (RoHS)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

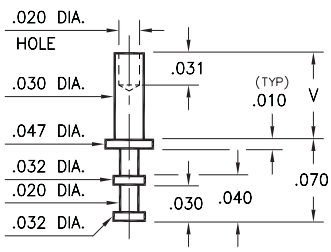
MALE PCB PINS

SOLDER TERMINAL TURRETS

2111

2111-X-00-XX-00-00-07-0

Swage mount in .033 hole

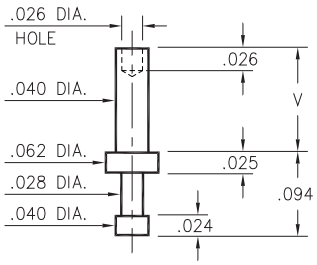


Basic Part Number	Board Thickness	Length V
2111-1	.031	.053
2111-2	.062	.084
2111-3	.094	.115

2113

2113-X-00-XX-00-00-07-0

Swage mount in .043 hole

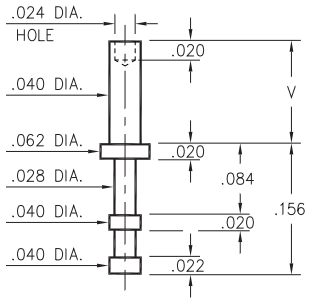


Basic Part Number	Board Thickness	Length V
2113-1	.031	.053
2113-2	.062	.084
2113-3	.094	.115
2113-4	.125	.147

2108

2108-X-00-XX-00-00-07-0

Swage mount in .043 hole

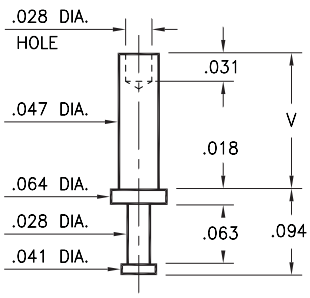


Basic Part Number	Board Thickness	Length V
2108-1	.031	.053
2108-2	.062	.084
2108-3	.094	.115
2108-4	.125	.147

2102

2102-X-00-XX-00-00-07-0

Swage mount in .052 hole

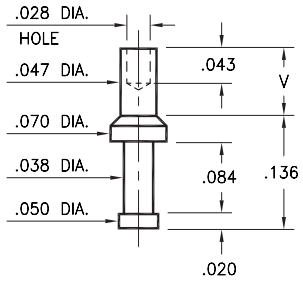


Basic Part Number	Board Thickness	Length V
2102-5	.016	.035
2102-1	.031	.054
2102-2	.062	.084
2102-3	.094	.115
2102-4	.125	.147

2109

2109-X-00-XX-00-00-07-0

Swage mount in .052 hole

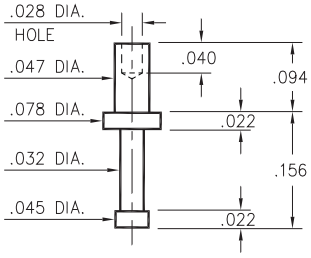


Basic Part Number	Board Thickness	Length V
2109-1	.031	.052
2109-2	.062	.085

2324

2324-2-00-XX-00-00-07-0

Swage mount in .052 hole
For a .062 thick board



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

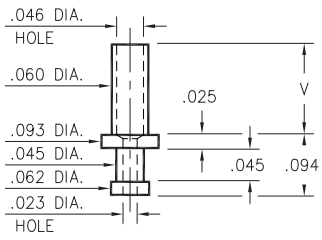
MALE PCB PINS

SOLDER TERMINAL TURRETS

2312

2312-X-00-XX-00-00-07-0

Swage mount in .064 hole

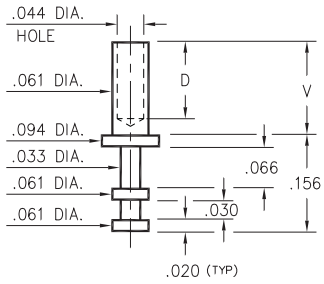


Basic Part Number	Board Thickness	Length V
2312-1	.031	.053
2312-2	.062	.094
2312-3	.094	.115
2312-4	.125	.147

2308

2308-X-00-XX-00-00-07-0

Swage mount in .064 hole

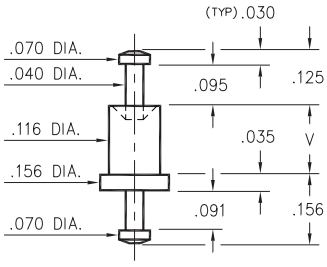


Basic Part Number	Board Thickness	Length V	Depth D
2308-1	.031	.054	.036
2308-2	.062	.084	.066
2308-3	.094	.115	.096
2308-4	.125	.147	.126

2707

2707-X-00-XX-00-00-07-0

Swage mount in .120 hole

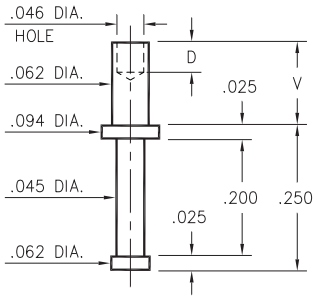


Basic Part Number	Board Thickness	Length V
2707-1	.031	.062
2707-2	.062	.094
2707-3	.094	.125
2707-4	.125	.156

2329

2329-X-00-XX-00-00-07-0

Swage mount in .067 hole

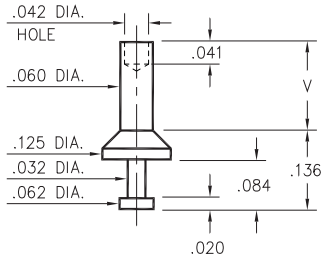


Basic Part Number	Board Thickness	Length V	Depth D
2329-1	.031	.045	.045
2329-2	.062	.094	.062
2329-3	.094	.125	.062
2329-4	.125	.156	.062

2510

2510-X-00-XX-00-00-07-0

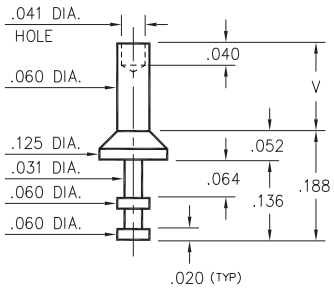
Swage mount in .064 hole



2513

2513-X-00-XX-00-00-07-0

Swage mount in .064 hole



Basic Part Number	Board Thickness	Length V
251X-1	.031	.062
251X-2	.062	.094
251X-3	.094	.125
251X-4	.125	.156

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

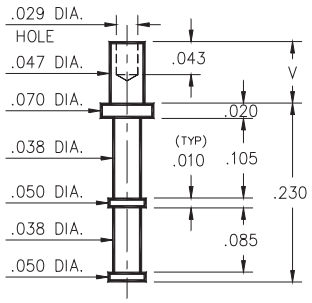
MALE PCB PINS

SOLDER TERMINAL TURRETS

2110

2110-X-00-XX-00-00-07-0

Swage mount in .052 hole

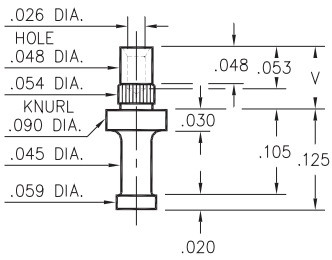


Basic Part Number	Board Thickness	Length V
2110-1	.031	.049
2110-2	.062	.082

2333

2333-X-00-XX-00-00-07-0

Press-fit & swage in .052 mounting hole

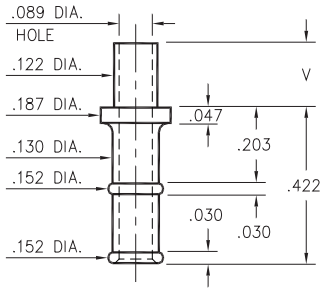


Basic Part Number	Board Thickness	Length V
2333-1	.078	.103
2333-2	.062	.087
2333-3	.047	.072

2821

2821-X-00-XX-00-00-07-0

Swage mount in .125 hole

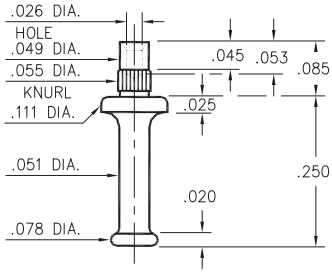


Basic Part Number	Board Thickness	Length V
2821-2	.062	.109
2821-3	.094	.141
2821-4	.125	.172

2533

2533-0-00-XX-00-00-07-0

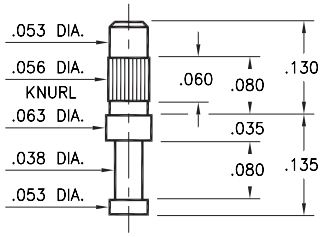
Press-fit & swage in .052 mounting hole
For a .062 thick board



2101

2101-3-00-XX-00-00-07-0

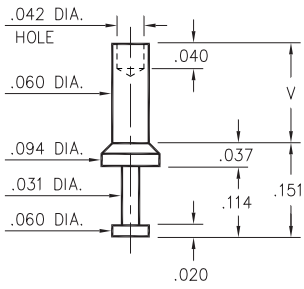
Press-fit in .053 mounting hole
For a .062 to .094 thick board



2316

2316-X-00-XX-00-00-07-0

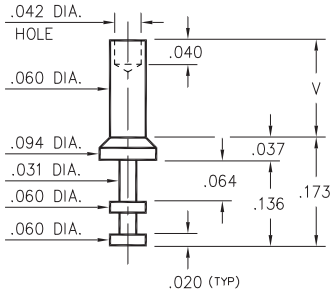
Swage mount in .064 hole



2317

2317-X-00-XX-00-00-07-0

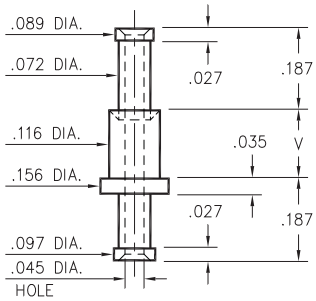
Swage mount in .064 hole



2708

2708-X-00-XX-00-00-07-0

Swage mount in .120 hole



Basic Part Number	Board Thickness	Length V
2XXX-1	.031	.062
2XXX-2	.062	.094
2XXX-3	.094	.125
2XXX-4	.125	.156

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

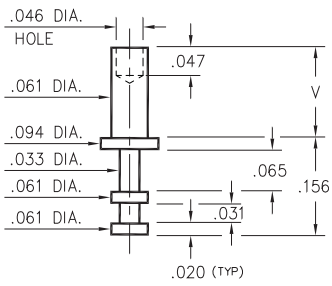
MALE PCB PINS

SOLDER TERMINAL TURRETS

2348

2348-X-00-XX-00-00-07-0

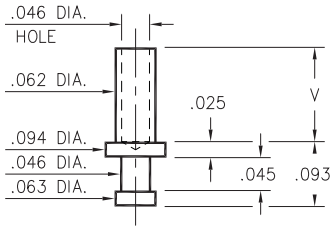
Swage mount in .064 hole



2301

2301-X-00-XX-00-00-07-0

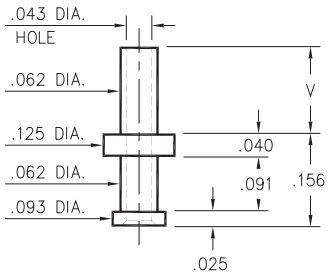
Swage mount in .067 hole



2506

2506-X-00-XX-00-00-07-0

Swage mount in .067 hole

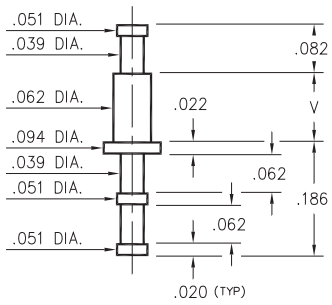


Basic Part Number	Board Thickness	Length V
2XXX-1	.031	.053
2XXX-2	.062	.084
2XXX-3	.094	.115
2XXX-4	.125	.147

2310

2310-X-00-XX-00-00-07-0

Swage mount in .067 hole

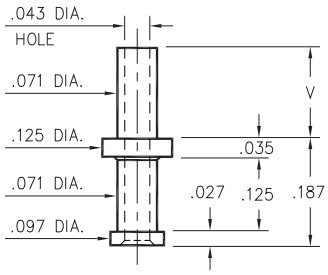


Basic Part Number	Board Thickness	Length V
2310-1	.031	.053
2310-2	.062	.082
2310-3	.094	.113
2310-4	.125	.145

2505

2505-X-00-XX-00-00-07-0

Swage mount in .076 hole

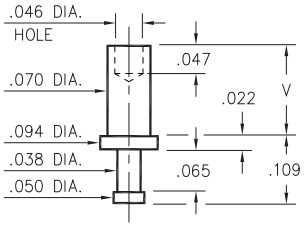


Basic Part Number	Board Thickness	Length V
2505-1	.031	.062
2505-2	.062	.093
2505-3	.094	.125
2505-4	.125	.156

2325

2325-X-00-XX-00-00-07-0

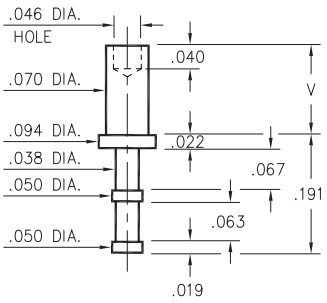
Swage mount in .073 hole



2355

2355-X-00-XX-00-00-07-0

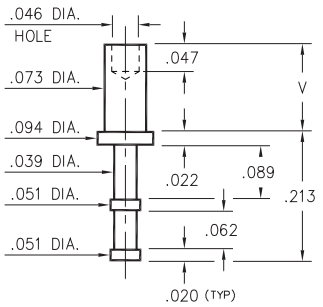
Swage mount in .073 hole



2365

2365-X-00-XX-00-00-07-0

Swage mount in .076 hole



Basic Part Number	Board Thickness	Length V
23X5-1	.031	.053
23X5-2	.062	.084
23X5-3	.094	.115
23X5-4	.125	.147

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

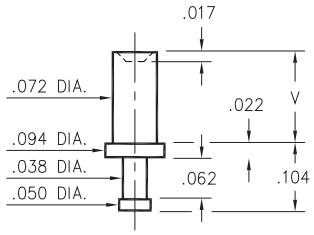
MALE PCB PINS

SOLDER TERMINAL TURRETS

2304

2304-X-00-XX-00-00-07-0

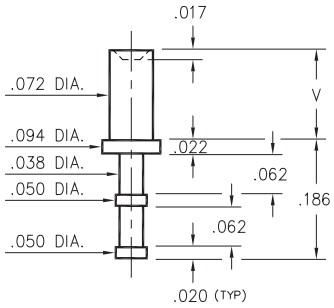
Swage mount in .076 hole



2305

2305-X-00-XX-00-00-07-0

Swage mount in .076 hole

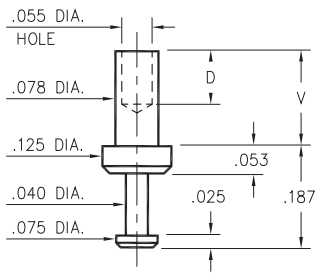


Basic Part Number	Board Thickness	Length V
230X-1	.031	.051
230X-2	.062	.082
230X-3	.094	.113
230X-4	.125	.145

2503

2503-X-00-XX-00-00-07-0

Swage mount in .082 hole

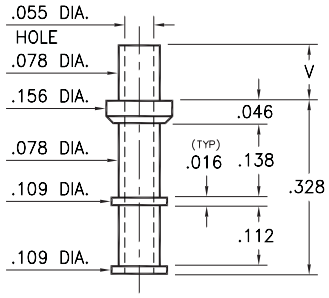


Basic Part Number	Board Thick-ness	Length V	Depth D
2503-1	.031	.078	.068
2503-2	.062	.109	.098
2503-3	.094	.141	.098
2503-4	.125	.172	.098

2704

2704-X-00-XX-00-00-07-0

Swage mount in .082 hole

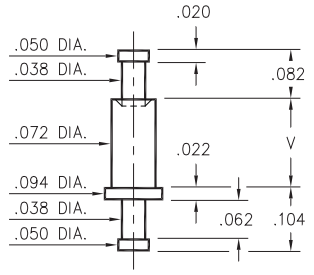


Basic Part Number	Board Thickness	Length V
2704-1	.031	.075
2704-2	.062	.105
2704-3	.094	.135
2704-4	.125	.165

2306

2306-X-00-XX-00-00-07-0

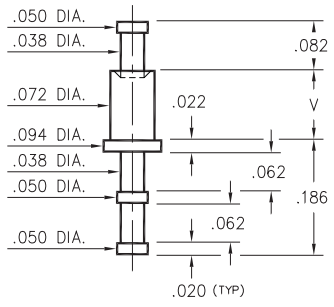
Swage mount in .076 hole



2307

2307-X-00-XX-00-00-07-0

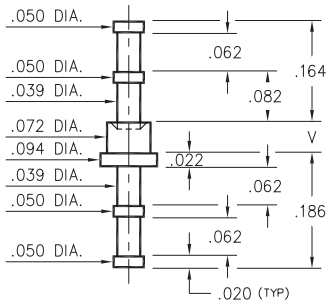
Swage mount in .076 hole



2311

2311-X-00-XX-00-00-07-0

Swage mount in .076 hole



Basic Part Number	Board Thickness	Length V
23XX-1	.031	.051
23XX-2	.062	.082
23XX-3	.094	.113
23XX-4	.125	.145

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

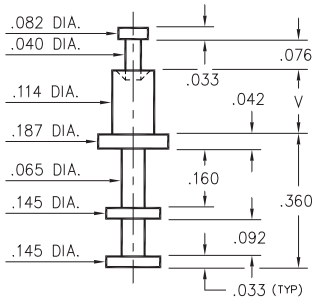
MALE PCB PINS

SOLDER TERMINAL TURRETS

2810

2810-X-00-XX-00-00-07-0

Swage mount in .118 hole

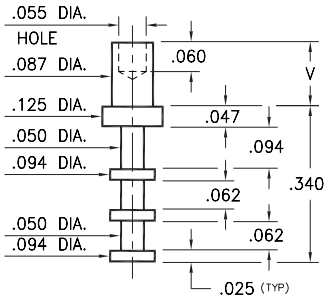


Basic Part Number	Board Thickness	Length V
2810-2	.062	.105
2810-3	.094	.135
2810-4	.125	.165

2524

2524-X-00-XX-00-00-07-0

Swage mount in .092 hole

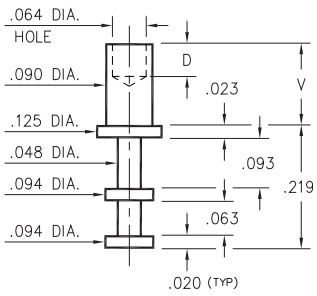


Basic Part Number	Board Thickness	Length V
2524-1	.031	.075
2524-2	.062	.105
2524-3	.094	.135
2524-4	.125	.165

2561

2561-X-00-XX-00-00-07-0

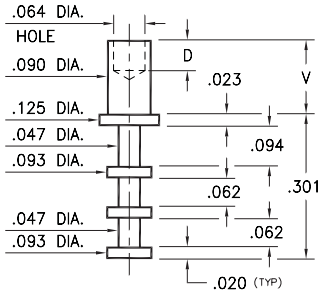
Swage mount in .094 hole



2508

2508-X-00-XX-00-00-07-0

Swage mount in .094 hole

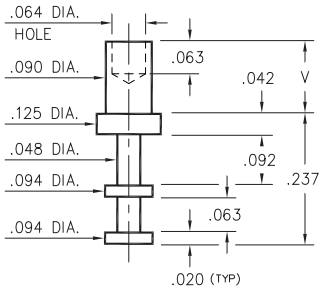


Basic Part Number	Board Thick-ness	Length V	Depth D
25XX-1	.031	.063	.047
25XX-2	.062	.094	.062
25XX-3	.094	.125	.062
25XX-4	.125	.156	.062

2551

2551-X-00-XX-00-00-07-0

Swage mount in .094 hole

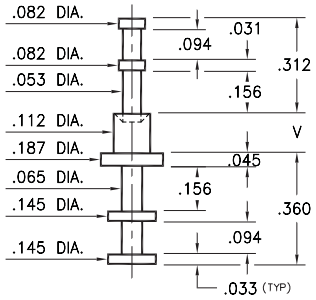


Basic Part Number	Board Thickness	Length V
2551-1	.031	.075
2551-2	.062	.105
2551-3	.094	.135
2551-4	.125	.165

2812

2812-X-00-XX-00-00-07-0

Swage mount in .116 hole



Basic Part Number	Board Thickness	Length V
2812-1	.062	.105
2812-2	.094	.135
2812-3	.125	.165
2812-4	.188	.230

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

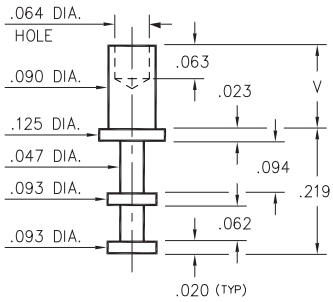
MALE PCB PINS

SOLDER TERMINAL TURRETS

2501

2501-X-00-XX-00-00-07-0

Swage mount in .094 hole

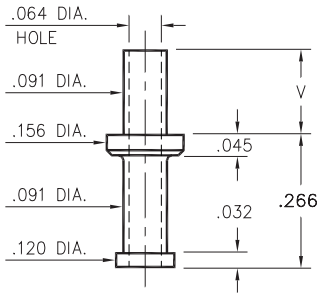


Basic Part Number	Board Thickness	Length V
2501-1	.031	.078
2501-2	.062	.109
2501-3	.094	.140
2501-4	.125	.171

2703

2703-X-00-XX-00-00-07-0

Swage mount in .094 hole

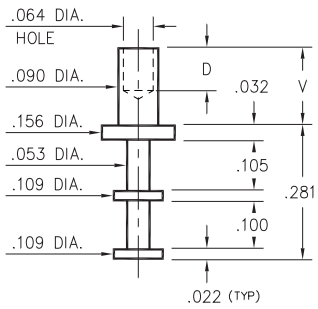


Basic Part Number	Board Thickness	Length V
2703-1	.031	.077
2703-2	.062	.107
2703-3	.094	.137
2703-4	.125	.167

2702

2702-X-00-XX-00-00-07-0

Swage mount in .094 hole

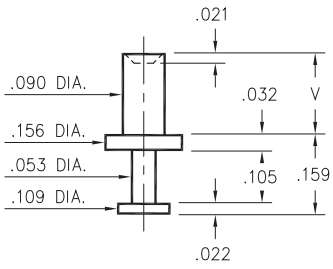


Basic Part Number	Board Thick-ness	Length V	Depth D
2702-1	.031	.075	.063
2702-2	.062	.105	.093
2702-3	.094	.135	.093
2702-4	.125	.165	.093

2710

2710-X-00-XX-00-00-07-0

Swage mount in .094 hole

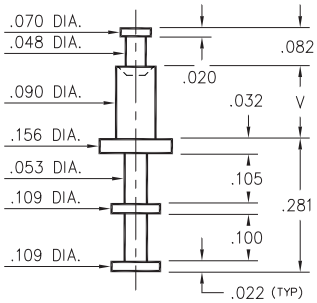


Basic Part Number	Board Thickness	Length V
2710-1	.031	.062
2710-2	.062	.094
2710-3	.094	.125
2710-4	.125	.156

2717

2717-X-00-XX-00-00-07-0

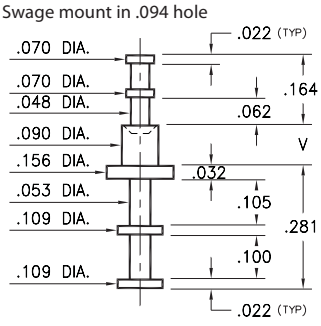
Swage mount in .094 hole



2713

2713-X-00-XX-00-00-07-0

Swage mount in .094 hole



Basic Part Number	Board Thickness	Length V
271X-1	.031	.062
271X-2	.062	.094
271X-3	.094	.125
271X-4	.125	.156

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

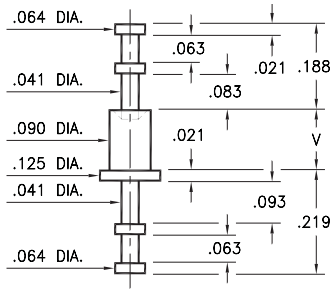
MALE PCB PINS

SOLDER TERMINAL TURRETS

2512

2512-X-00-XX-00-00-07-0

Swage mount in .094 hole

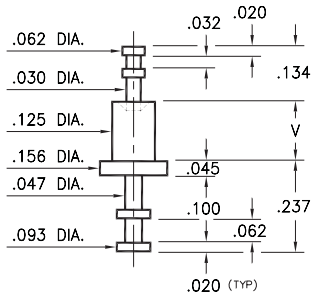


Basic Part Number	Board Thickness	Length V
2512-1	.031	.062
2512-2	.062	.094
2512-3	.094	.125
2512-4	.125	.156

2705

2705-X-00-XX-00-00-07-0

Swage mount in .129 hole

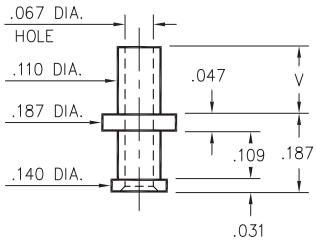


Basic Part Number	Board Thickness	Length V
2705-1	.031	.075
2705-2	.062	.105
2705-3	.094	.135
2705-4	.125	.165

2803

2803-X-00-XX-00-00-07-0

Swage mount in .113 hole

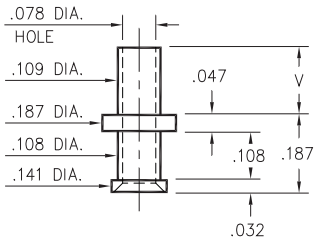


Basic Part Number	Board Thickness	Length V
2803-1	.031	.078
2803-2	.062	.109
2803-3	.094	.140
2803-4	.125	.171

2815

2815-X-00-XX-00-00-07-0

Swage mount in .113 hole

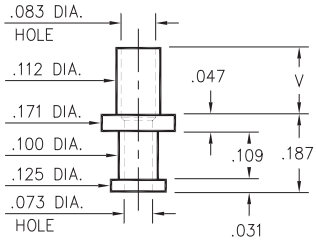


Basic Part Number	Board Thickness	Length V
2815-1	.031	.075
2815-2	.062	.105
2815-3	.094	.135
2815-4	.125	.165

2816

2816-X-00-XX-00-00-07-0

Swage mount in .116 hole

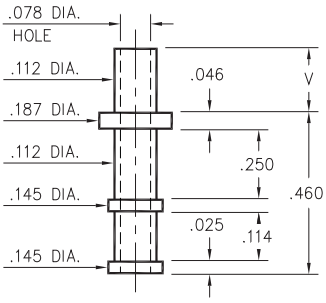


Basic Part Number	Board Thickness	Length V
2816-1	.031	.078
2816-2	.062	.109
2816-3	.094	.141
2816-4	.125	.172

2817

2817-X-00-XX-00-00-07-0

Swage mount in .116 hole



Basic Part Number	Board Thickness	Length V
2817-1	.031	.075
2817-2	.062	.105
2817-3	.094	.135
2817-4	.125	.165

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

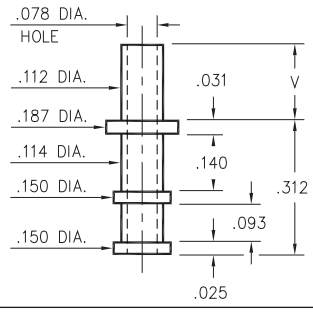
MALE PCB PINS

SOLDER TERMINAL TURRETS

2802

2802-X-00-XX-00-00-07-0

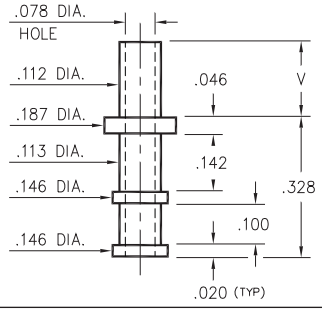
Swage mount in .118 hole



2804

2804-X-00-XX-00-00-07-0

Swage mount in .118 hole

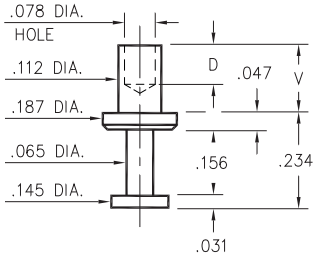


Basic Part Number	Board Thickness	Length V
280X-1	.031	.078
280X-2	.062	.109
280X-3	.094	.140
280X-4	.125	.171

2805

2805-X-00-XX-00-00-07-0

Swage mount in .116 hole

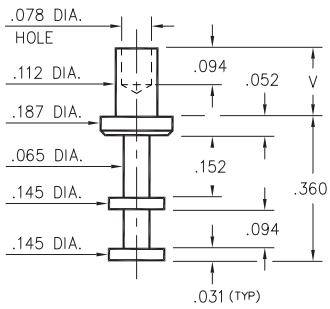


Basic Part Number	Board Thick-ness	Length V	Depth D
2805-1	.031	.074	.068
2805-2	.062	.105	.098
2805-3	.094	.135	.098
2805-4	.125	.165	.098

2801

2801-X-00-XX-00-00-07-0

Swage mount in .116 hole

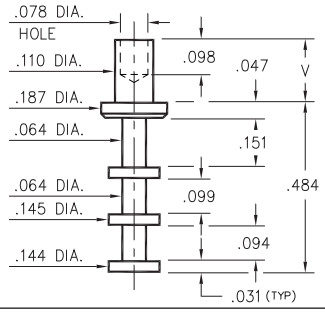


Basic Part Number	Board Thickness	Length V
2801-1	.031	.078
2801-2	.062	.109
2801-3	.094	.141
2801-4	.125	.172
2801-5	.188	.234

2806

2806-X-00-XX-00-00-07-0

Swage mount in .116 hole

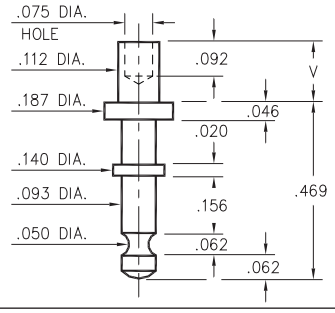


Basic Part Number	Board Thickness	Length V
2806-1	.031	.078
2806-2	.062	.109
2806-3	.094	.141
2806-4	.125	.172

2811

2811-X-00-XX-00-00-07-0

Swage mount in .116 hole



Basic Part Number	Board Thickness	Length V
2811-1	.031	.075
2811-2	.062	.105
2811-3	.094	.135
2811-4	.125	.165

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

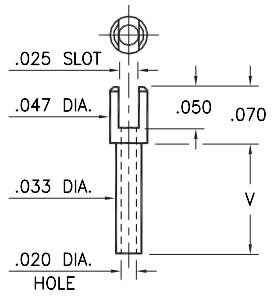
MALE PCB PINS

SOLDER TERMINALS SLOTTED

2104

2104-X-01-XX-00-00-07-0

Swage mount in .036 hole

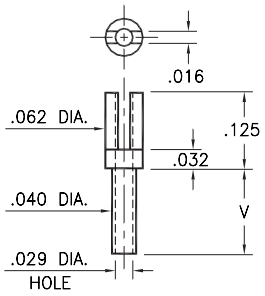


Basic Part Number	Board Thickness	Length V
2104-1	.031	.055
2104-2	.062	.086
2104-3	.094	.117
2104-4	.125	.148

2112

2112-X-01-XX-00-00-07-0

Swage mount in .043 hole

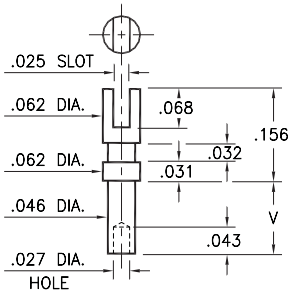


Basic Part Number	Board Thickness	Length V
2112-5	.016	.037
2112-1	.031	.053
2112-2	.062	.084
2112-3	.094	.115
2112-4	.125	.147

2105

2105-X-01-XX-00-00-07-0

Swage mount in .052 hole

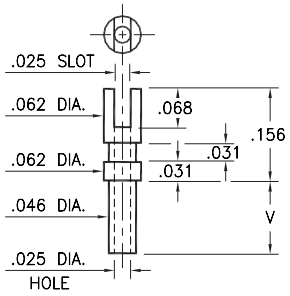


Basic Part Number	Board Thickness	Length V
2105-1	.031	.055
2105-2	.062	.086
2105-3	.094	.117
2105-4	.125	.149

2103

2103-X-01-XX-00-00-07-0

Swage mount in .052 hole

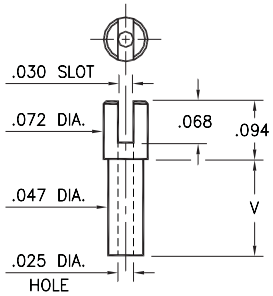


Basic Part Number	Board Thickness	Length V
2103-1	.031	.055
2103-2	.062	.086
2103-3	.094	.117
2103-4	.125	.149

2106

2106-X-01-XX-00-00-07-0

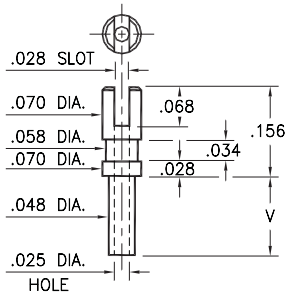
Swage mount in .052 hole



2107

2107-X-01-XX-00-00-07-0

Swage mount in .052 hole



Basic Part Number	Board Thickness	Length V
210X-1	.031	.051
210X-2	.062	.082
210X-3	.094	.113
210X-4	.125	.145

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 01 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

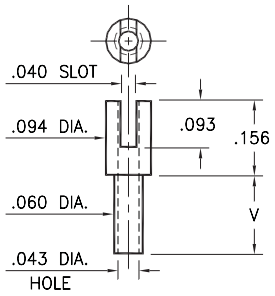
MALE PCB PINS

SOLDER TERMINALS SLOTTED

2303

2303-X-01-XX-00-00-07-0

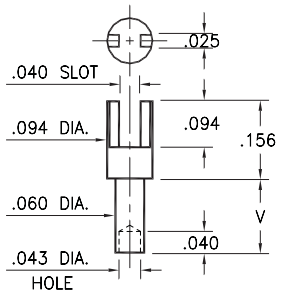
Swage mount in .064 hole



2323

2323-X-01-XX-00-00-07-0

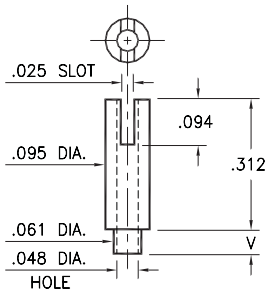
Swage mount in .064 hole



2322

2322-X-01-XX-00-00-07-0

Swage mount in .064 hole

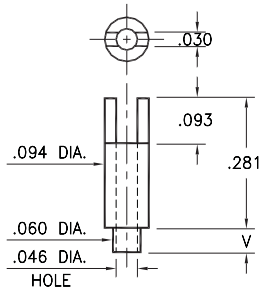


Basic Part Number	Board Thickness	Length V
23XX-1	.031	.053
23XX-2	.062	.084
23XX-3	.094	.115
23XX-4	.125	.147

2320

2320-X-01-XX-00-00-07-0

Swage mount in .064 hole

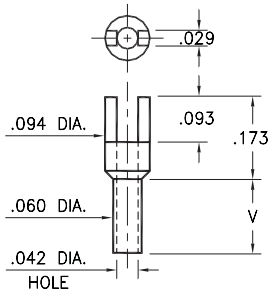


Basic Part Number	Board Thickness	Length V
2320-1	.031	.053
2320-2	.062	.084
2320-3	.094	.115

2328

2328-X-01-XX-00-00-07-0

Swage mount in .064 hole

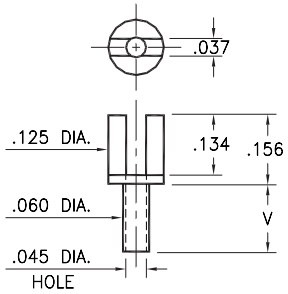


Basic Part Number	Board Thickness	Length V
2328-1	.031	.062
2328-2	.062	.094
2328-3	.094	.125
2328-4	.125	.156

2520

2520-X-01-XX-00-00-07-0

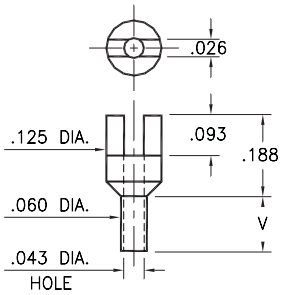
Swage mount in .064 hole



2517

2517-X-01-XX-00-00-07-0

Swage mount in .064 hole



Basic Part Number	Board Thickness	Length V
25XX-1	.031	.062
25XX-2	.062	.094
25XX-3	.094	.125
25XX-4	.125	.156

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 01 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

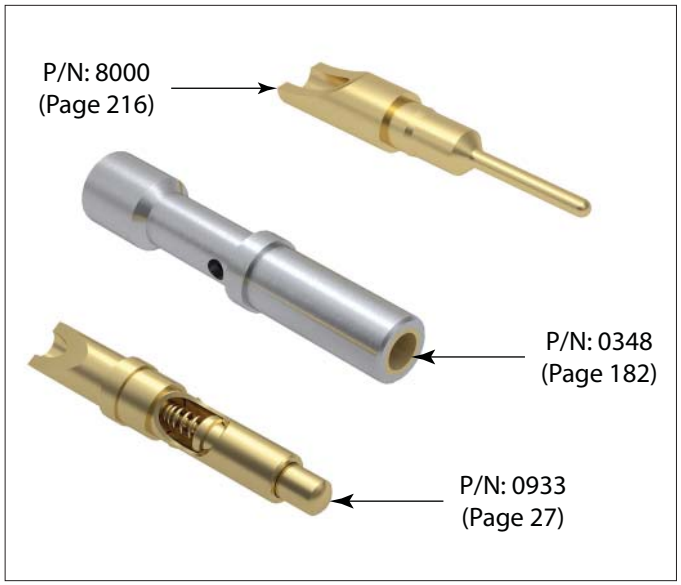
- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

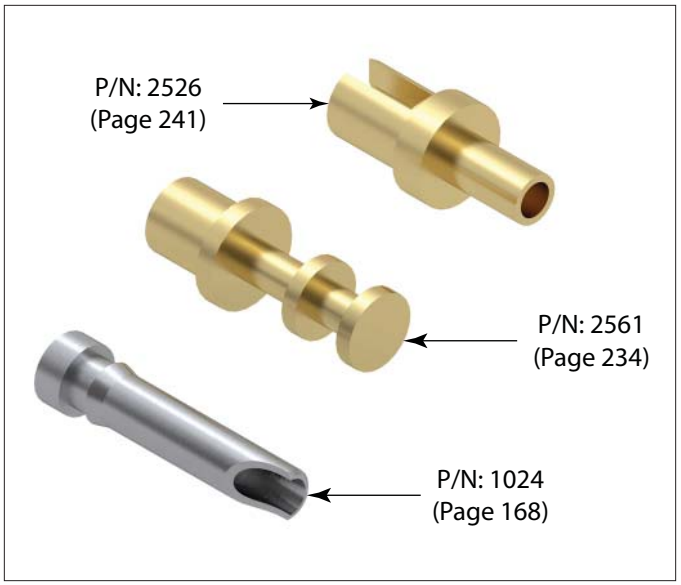
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

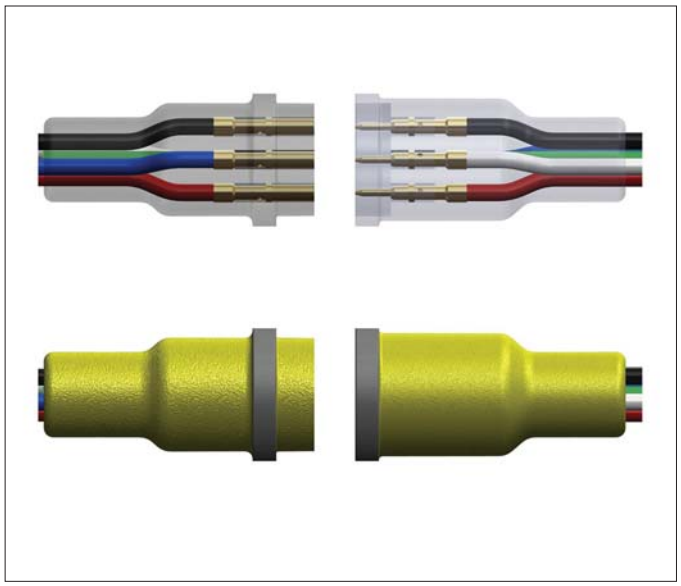
WIRE TERMINATION

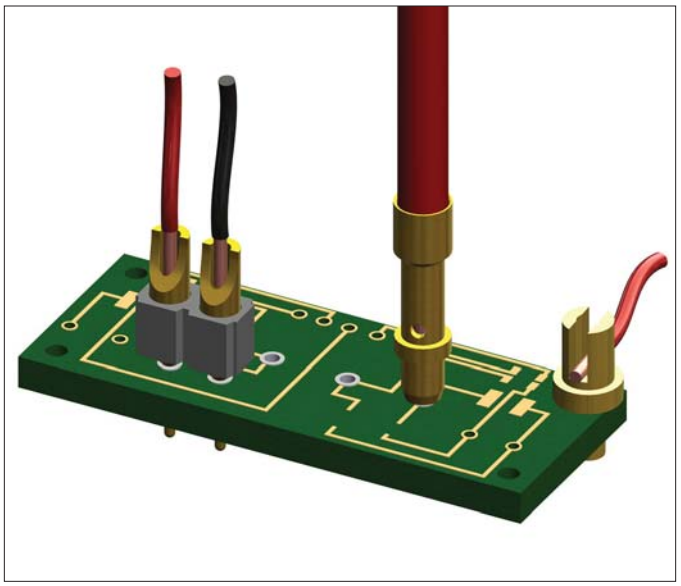
LOOSE PINS, RECEPTACLES AND SPRING PINS

Mill-Max manufactures many different types of pins and receptacles for terminating wires. There are solder cup and crimp barrel styles for terminating discrete wires to boards, making up cable assemblies or converting device wires to pluggable pins. We have slotted and turret styles for connecting power and ground wires or for test and jumper applications. Wrapost termination styles are also available for prototyping and test. Along with our wide selection of standard products, custom designs are available by contacting Mill-Max Technical Services.









Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

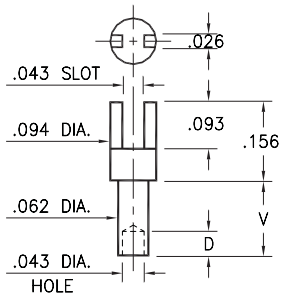
MALE PCB PINS

SOLDER TERMINALS SLOTTED

2315

2315-X-01-XX-00-00-07-0

Swage mount in .067 hole

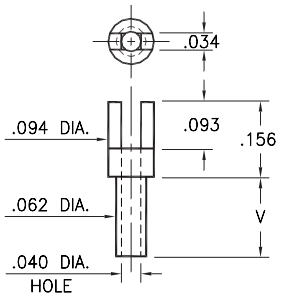


Basic Part Number	Board Thick-ness	Length V	Depth D
2315-1	.031	.045	.040
2315-2	.062	.094	.062
2315-3	.094	.125	.062
2315-4	.125	.156	.062

2302

2302-X-01-XX-00-00-07-0

Swage mount in .067 hole

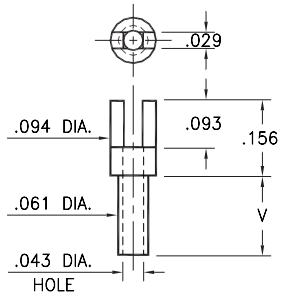


Basic Part Number	Board Thickness	Length V
2302-1	.031	.053
2302-2	.062	.084
2302-3	.094	.115
2302-4	.125	.147

2352

2352-X-01-XX-00-00-07-0

Swage mount in .067 hole

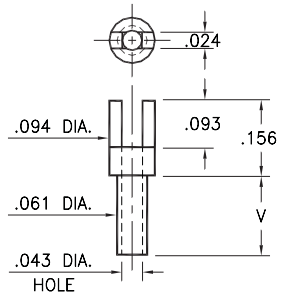


Basic Part Number	Board Thickness	Length V
2352-1	.031	.045
2352-2	.062	.094
2352-3	.094	.125
2352-4	.125	.156

2362

2362-X-01-XX-00-00-07-0

Swage mount in .067 hole

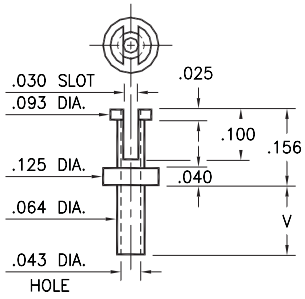


Basic Part Number	Board Thickness	Length V
2362-5	.016	.037
2362-1	.031	.053
2362-2	.062	.084
2362-3	.094	.115
2362-4	.125	.147

2507

2507-X-01-XX-00-00-07-0

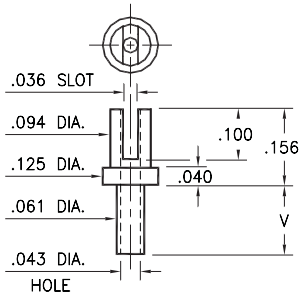
Swage mount in .067 hole



2526

2526-X-01-XX-00-00-07-0

Swage mount in .064 hole



Basic Part Number	Board Thickness	Length V
25XX-1	.031	.053
25XX-2	.062	.084
25XX-3	.094	.115
25XX-4	.125	.147

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 01 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

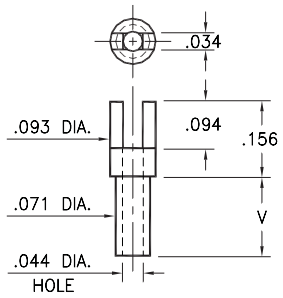
MALE PCB PINS

SOLDER TERMINALS SLOTTED

2314

2314-X-01-XX-00-00-07-0

Swage mount in .076 hole

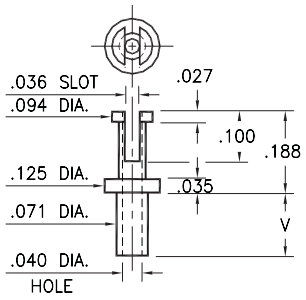


Basic Part Number	Board Thickness	Length V
2314-1	.031	.045
2314-2	.062	.094
2314-3	.094	.125
2314-4	.125	.156

2511

2511-X-01-XX-00-00-07-0

Swage mount in .076 hole

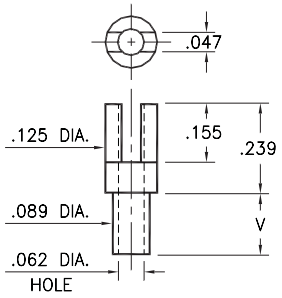


Basic Part Number	Board Thickness	Length V
2511-1	.031	.063
2511-2	.062	.094
2511-3	.094	.125
2511-4	.125	.156

2515

2515-X-01-XX-00-00-07-0

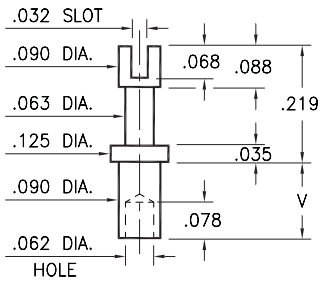
Swage mount in .094 hole



2516

2516-X-01-XX-00-00-07-0

Swage mount in .094 hole

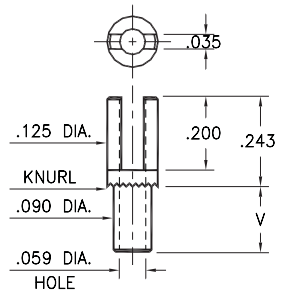


Basic Part Number	Board Thickness	Length V
251X-1	.031	.075
251X-2	.062	.105
251X-3	.094	.135
251X-4	.125	.147

2502

2502-X-01-XX-00-00-07-0

Swage mount in .094 hole



Basic Part Number	Board Thickness	Length V
2502-1	.031	.080
2502-2	.062	.111
2502-3	.094	.143
2502-4	.125	.174

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 01 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

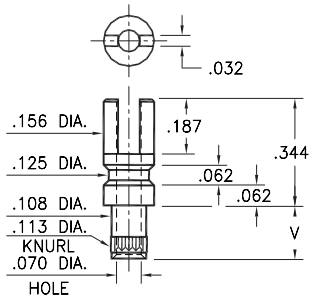
MALE PCB PINS

SOLDER TERMINALS SLOTTED

2715

2715-X-01-XX-00-00-07-0

Swage mount in .116 hole

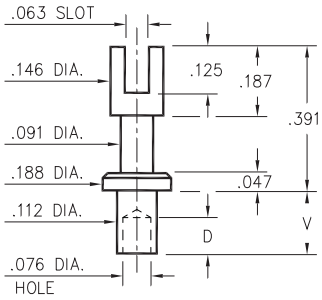


Basic Part Number	Board Thickness	Length V
2715-2	.062	.109
2715-3	.094	.141
2715-4	.125	.172

2809

2809-X-01-XX-00-00-07-0

Swage mount in .116 hole

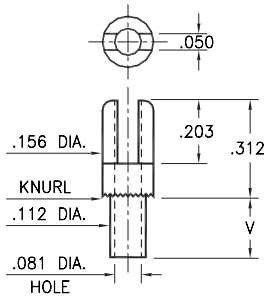


Basic Part Number	Board Thick-ness	Length V	Depth D
2809-1	.031	.078	.068
2809-2	.062	.109	.098
2809-3	.094	.141	.098
2809-4	.125	.172	.098

2701

2701-X-01-XX-00-00-07-0

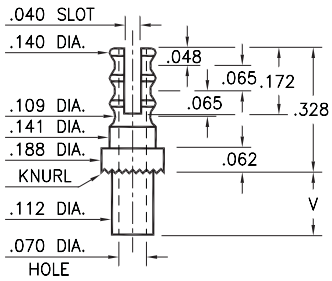
Swage mount in .116 hole



2808

2808-X-01-XX-00-00-07-0

Swage mount in .116 hole

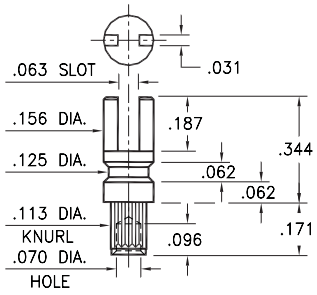


Basic Part Number	Board Thickness	Length V
2XXX-1	.031	.075
2XXX-2	.062	.105
2XXX-3	.094	.135
2XXX-4	.125	.165

2762

2762-4-01-XX-00-00-07-0

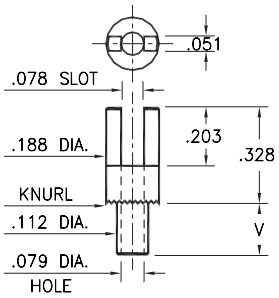
Swage mount in .116 hole
For a .125 thick board



2807

2807-X-01-XX-00-00-07-0

Swage mount in .116 hole



Basic Part Number	Board Thickness	Length V
2807-1	.031	.078
2807-2	.062	.109
2807-3	.094	.140
2807-4	.125	.171

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 01 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

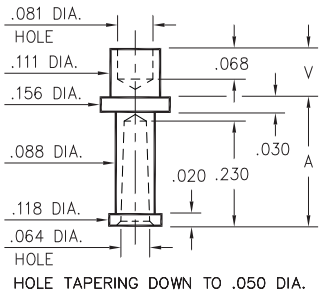
MALE PCB PINS

SOLDER TERMINALS VARIOUS TYPES

2709

2709-X-07-XX-00-00-07-0

Swage mount in .116 hole

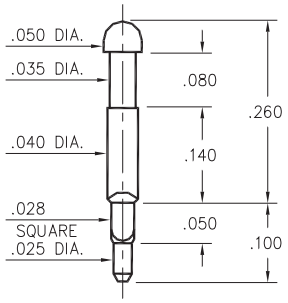


Basic Part Number	Board Thick-ness	Length V	Length A
2709-2	.062	.109	.281
2709-3	.094	.141	.250

8602

8602-1-00-XX-00-00-07-0

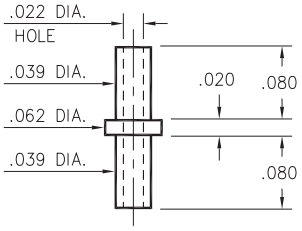
Square press-fit in .032 plated through-hole



2115

2115-2-00-XX-00-00-07-0

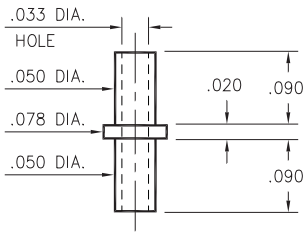
Swage mount in .043 hole
For a .062 thick board



2326

2326-2-00-XX-00-00-07-0

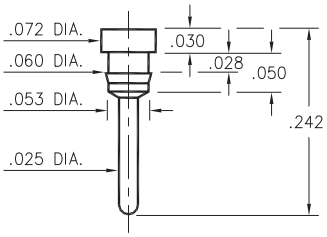
Swage mount in .055 hole
For a .062 thick board



8831

8831-0-00-XX-00-00-03-0

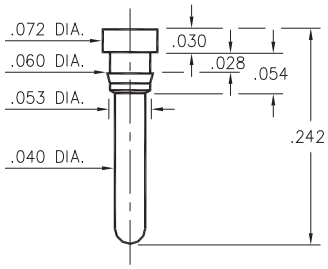
Press-fit in .057 mounting hole



8835

8835-0-00-XX-00-00-03-0

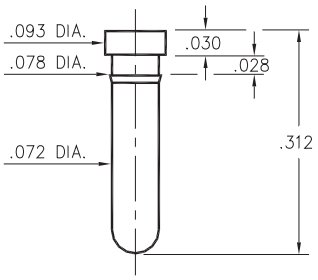
Press-fit in .057 mounting hole



8836

8836-0-00-XX-00-00-03-0

Press-fit in .075 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - XX - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

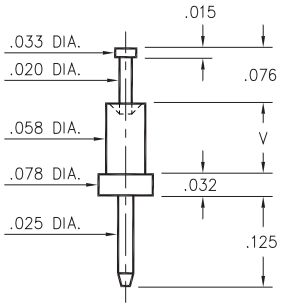
MALE PCB PINS

SOLDER TERMINALS PIN TYPE

2318

2318-X-00-XX-00-00-07-0

Swage mount in .062 hole

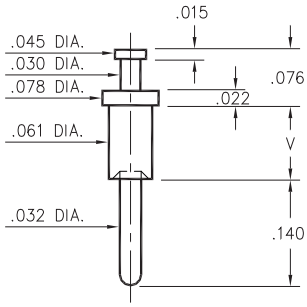


Basic Part Number	Board Thickness	Length V
2318-1	.031	.051
2318-2	.062	.082
2318-3	.094	.113

2309

2309-X-00-XX-00-00-07-0

Swage mount in .064 hole

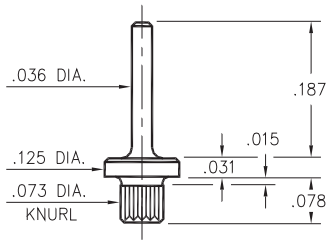


Basic Part Number	Board Thickness	Length V
2309-1	.031	.054
2309-2	.062	.084
2309-3	.094	.115
2309-4	.125	.147

2514

2514-2-00-XX-00-00-07-0

Press-fit in .070 mounting hole



SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - 07 - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

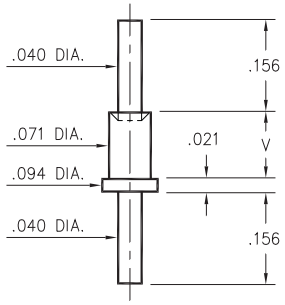
MALE PCB PINS

SOLDER TERMINALS PIN TYPE

2319

2319-X-00-XX-00-00-07-0

Swage mount in .076 hole

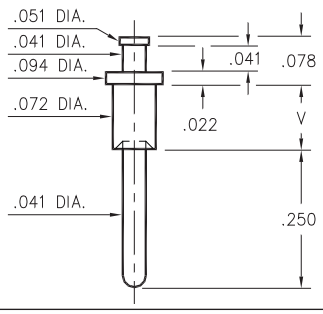


Basic Part Number	Board Thickness	Length V
2319-1	.031	.051
2319-2	.062	.082
2319-3	.094	.113

2313

2313-X-00-XX-00-00-07-0

Swage mount in .076 hole

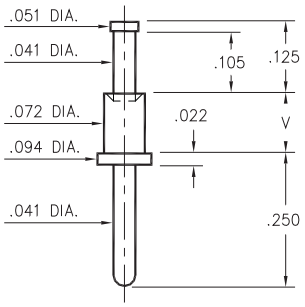


Basic Part Number	Board Thickness	Length V
2313-1	.031	.051
2313-2	.062	.084
2313-3	.094	.113
2313-4	.125	.145

2321

2321-X-00-XX-00-00-07-0

Swage mount in .076 hole

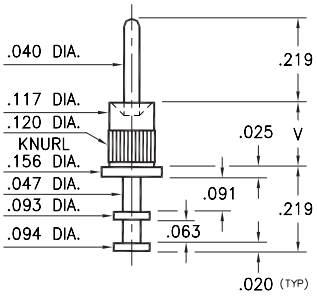


Basic Part Number	Board Thickness	Length V
2321-1	.031	.051
2321-2	.062	.082
2321-3	.094	.113
2321-4	.125	.145

2706

2706-X-00-XX-00-00-07-0

Swage mount in .120 hole

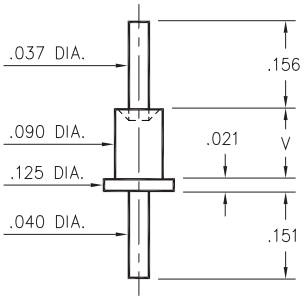


Basic Part Number	Board Thickness	Length V
2706-1	.031	.063
2706-2	.062	.093
2706-3	.094	.125
2706-4	.125	.156

2530

2530-X-00-XX-00-00-07-0

Swage mount in .094 hole

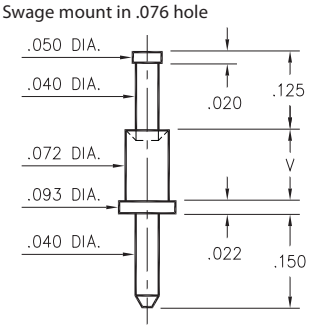


Basic Part Number	Board Thickness	Length V
2530-2	.062	.094
2530-3	.094	.125
2530-4	.125	.156

3156

3156-X-00-XX-00-00-08-0

Swage mount in .076 hole



Basic Part Number	Board Thickness	Length V
3156-1	.031	.051
3156-2	.062	.082
3156-3	.094	.113
3156-4	.125	.145

SPECIFICATIONS:

Pin Material: Brass Alloy 360, 1/2 Hard
(Swage pins are annealed)

Dimensions: Inches

Tolerances On: Lengths: ± .005
Diameters: ± .002
Angles: ± 2 °

RoHS-2 2011/65/EU

ORDER CODE: XXXX - X - 00 - XX - 00 - 00 - XX - 0

BASIC PART #

SPECIFY PIN FINISH:

- **01** 200 µ" TIN/LEAD OVER NICKEL
- ◆ **80** 200 µ" TIN OVER NICKEL (RoHS)
- ◆ **44** 300 µ" SILVER OVER COPPER (RoHS)
- **50** 300 µ" ELECTRO-SOLDER (60/40 SnPb)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

CUSTOM PRODUCT WORKSHEET

PHOTOCOPY THIS PAGE AND FAX, SCAN OR E-MAIL TO MILL-MAX FOR A PROMPT QUOTATION

Mill-Max Mfg. Corp., P.O. Box 300, 190 Pine Hollow Road, Oyster Bay, NY 11771-0300 www.mill-max.com

NAME: _____ **TITLE:** _____

COMPANY: _____ **DATE:** _____

ADDRESS: _____ **PHONE:** _____

_____ **EMAIL:** _____

QUANTITIES TO QUOTE: _____

SPECIFICATIONS OF MACHINED PINS, TERMINALS, RECEPTACLE SHELLS, INSULATORS, etc.

SIMILAR MILL-MAX PART #: _____

PIN MATERIAL:
- ☐ BRASS
- ☐ PHOSPHOR BRONZE
- ☐ TELLURIUM COPPER

INSULATOR MATERIAL:
- ☐ FR-4 EPOXY
- ☐ HIGH TEMP. THERMOPLASTIC

(Check available stock sizes on page 263)

PIN FINISH:
- ☐ TIN over NICKEL
- ☐ TIN/LEAD over NICKEL
- ☐ _____ µ" GOLD over NICKEL
- ☐ SILVER over COPPER
- ☐ OTHER: _____

ADDITIONAL SPECIFICATIONS FOR RECEPTACLE ONLY:

SIZE OF MATING PIN OR COMPONENT LEAD: _____
(round/square/rectangular)

LENGTH OF MATING PIN/LEAD: _____

USE MILL-MAX CONTACT TYPE#: _____
(See page 248 for selector chart)

REQUIRED INSERTION/ EXTRACTION FORCES: ☐ LOW ☐ MEDIUM ☐ HIGH

CONTACT FINISH:
- ☐ TIN over NICKEL
- ☐ _____ µ" GOLD over NICKEL
- ☐ OTHER: _____

STANDARD MACHINING TOLERANCES ARE ± .002" FOR DIAMETERS, ± .005" FOR LENGTHS. IF TIGHTER TOLERANCES ARE REQUIRED, PLEASE SPECIFIY CRITICAL DIMENSIONS ON SKETCH BELOW.

ARE THERE ANY UNUSUAL REQUIREMENTS SUCH AS HIGH OPERATING TEMPERATURE OR CURRENT RATING? _____

_____

IF YOU NEED ASSISTANCE, PLEASE CALL MILL-MAX AND ASK FOR AN APPLICATIONS ENGINEER

GENERAL CONTACT INFO

THE "MULTI-FINGER" CONTACT

Mill-Max makes pin receptacles by press-fitting a "multi-finger" spring contact into a machined shell. A selection of over 36 contact types are pre-tooled for those who wish to design custom receptacles. This extensive family of contacts will accept round pins ranging from .008" to .102" diameter, as well as rectangular component leads and square wraposts, where the effective diameter is taken as the diagonal dimension of the lead.

Many contacts are interchangeable within a given shell, and so the contact selector chart has been organized by alternate contact groupings. Standard receptacles found in this catalog can be easily assembled with alternate contacts to suit special applications, for example: low insertion force or high operating temperature.

Contact Groups	Contact Type	Accepts Minimum Pin Diameter	Accepts Maximum Pin Diameter	Contact Compliancy δ	Contact Length	Number of Fingers	Contact Material	Current Rating (For 10°C ΔT)
No Alternate	#04	.008	.013	.003	.053	3	BeCu	2A
No Alternate	#10	.012	.017	.002	.060	6		
A	#09	.015	.018	.002	.051	3		3A
	#11		.020	.003	.075			
	#21		.022	.004				
	#05							
	#25		.020	.003			BeNi	
B	#12		.022	.003	.062	4	BeCu	
	#22			.005		6		
C	#30		.025		.083	4		
	#38			.004			BeNi	
	#32		.026	.009		6	BeCu	
	#35			.008				
	#43							
K	#15	.020	.032	.005	.084			4.5A
	#19			.003			BeNi	
D	#06	.022		.007	.113	4	BeCu	
	#26			.005			BeNi	
	#16		.034	.006	.083	6	BeCu	
	#47	.025	.037	.011				
	#56			.009			BeNi	
L	#18	.037	.043	.004	.062		BeCu	8A
	#58			.003			BeNi	
E	#36	.022	.042	.022	.120	4	BeCu	
	#34	.032	.046	.010	.120			
	#49			.006	.125			
	#24			.009	.120		BeNi	
F	#02	.040	.050	.006	.088	6	BeCu	
	#28	.042	.052	.005				
J	#42	.053	.063	.004	.150	4		20A
	#03	.040	.060	.010				11.2A
G	#23	.045	.065	.008	.100	6		
	#13	.048	.064	.010	.127	4		
	#33			.008			BeNi	
H	#07	.065	.082	.013	.150		BeCu	15A
	#27			.012			BeNi	
	#14		.085	.014			BeCu	
No Alternate	#08	.084	.102	.011	.122	6		18A

GENERAL CONTACT INFO

CONTACT SPECIFICATIONS

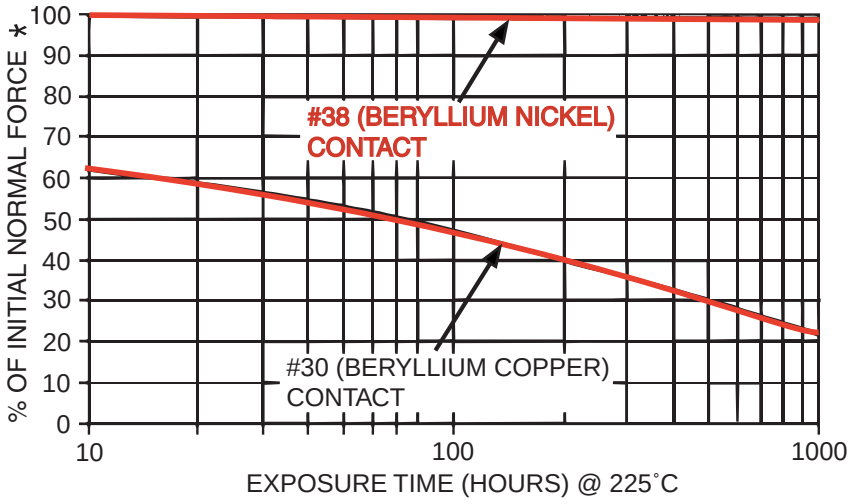
The Mill-Max "multi-finger" contact exhibits wide conformity, eg. the ability of any single contact to accept a broad range of round pins as well as rectangular or square leads.
The insertion/extraction force characteristics that follow were derived using 30µ" gold-plated contacts and bullet-shaped polished steel, gauge pins. The curves represent typical average values. The charts only guide you in selecting a clip that is close to your specification. Your results may vary, so for your specification, **visit www.mill-max.com to obtain complimentary samples of a receptacle assembly for your evaluation.**

COMPLIANCY (δ)

The compliancy factor (δ) describes the re-configured operating range after inserting the largest permissible mating pin.
For example: the # 34 contact has an initial operating range from .032" to .046" diameter pins. After insertion of a .046" pin, the contact is sized, and the minimum pin acceptance becomes .046" - .010" = .036". Thus, the new operating range becomes .036" to .046".

CONTACT MATERIAL AND STRESS RELAXATION AT HIGH TEMPERATURE

Mill-Max Mfg. contacts are made from either beryllium copper or beryllium nickel that has been heat treated to achieve ultimate spring properties. The graph illustrates how beryllium copper loses its spring properties over time at a high temperature (225°C). Thus, for burn-in applications and continuous operation above 150°C, beryllium nickel should be substituted for beryllium copper.



CURRENT RATING

Current rating for each contact group can be found in the contact selector chart on page 248. This current rating (for a 10° C temperature rise above ambient) is conservative, since it rates an individual pin/receptacle pair in free air. For all practical applications, the current rating will be higher because of the heat sinking ability of wires and circuit traces attached to the pins and receptacles.

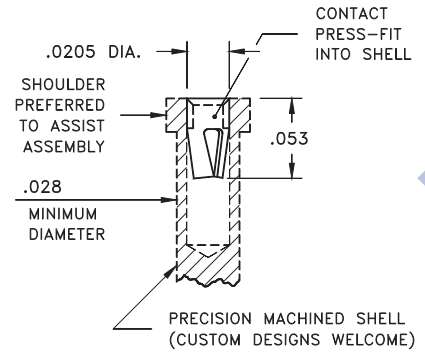
Mill-Max receptacles are capable of 1,000 minimum insertion/extraction cycles for a broad range of applications. Mating pin size, shape and finish, along with application specific variables, will affect the life of a contact.

CONTACT DATA

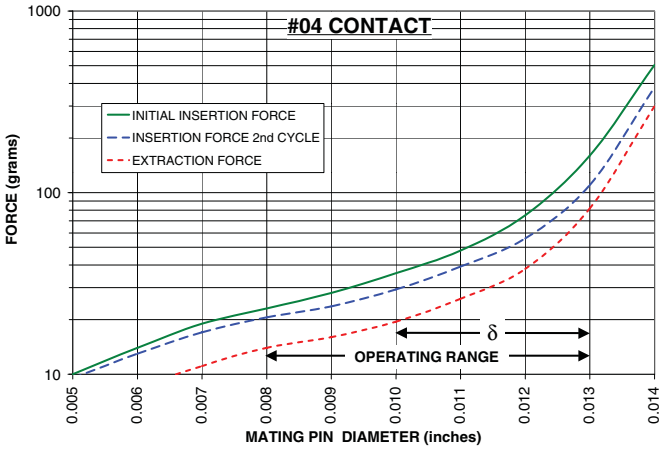
INSERTION / EXTRACTION FORCE GRAPHS

#04 CONTACT

FOR .008"-.013" DIAMETER PINS (δ = .003)
3-FINGER (See page 248)

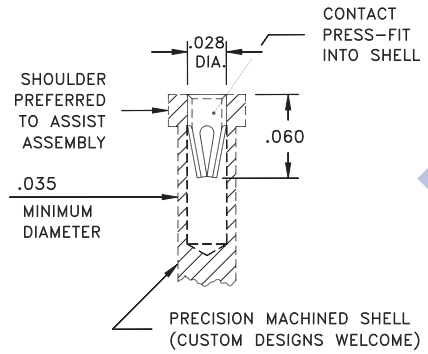


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

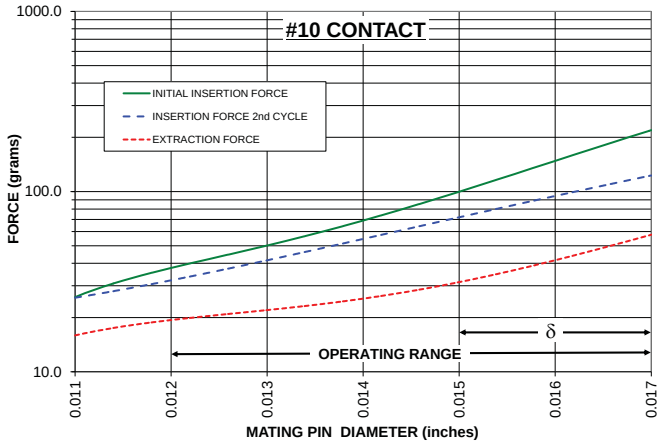


#10 CONTACT

FOR .012"-.017" DIAMETER PINS (δ = .002)
6-FINGER (See page 248)

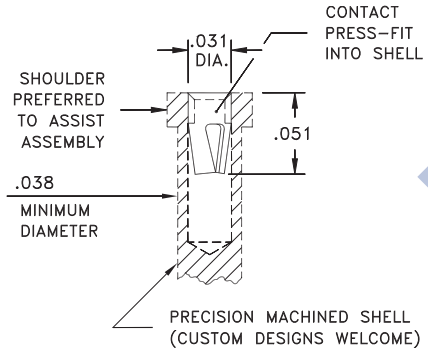


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

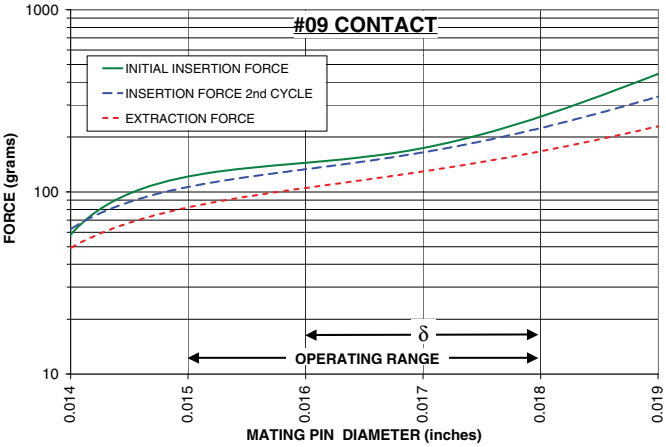


#09 CONTACT

FOR .015"-.018" DIAMETER PINS (δ = .002)
3-FINGER, GROUP A (See page 248)



CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

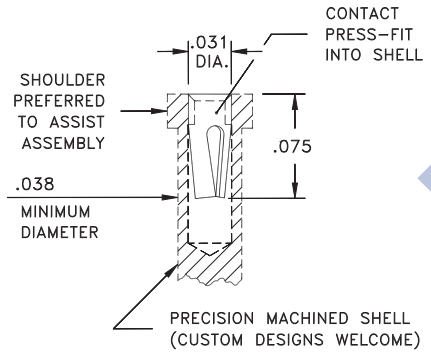
The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

CONTACT DATA

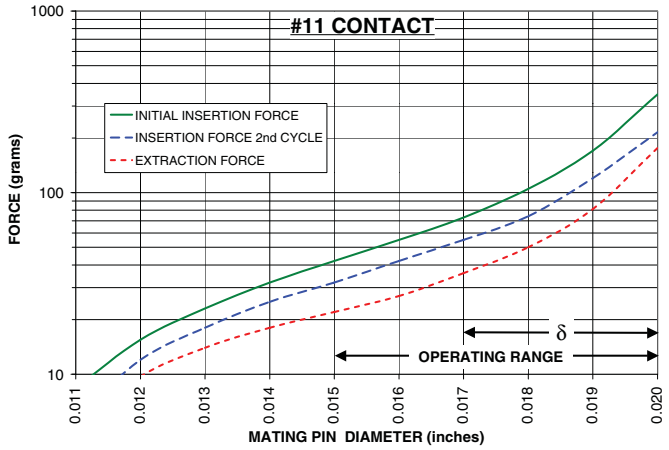
INSERTION / EXTRACTION FORCE GRAPHS

#11 CONTACT

FOR .015"-.020" DIAMETER PINS (δ = .003)
3-FINGER, GROUP A (See page 248)

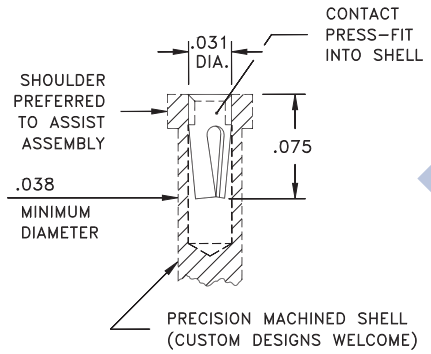


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

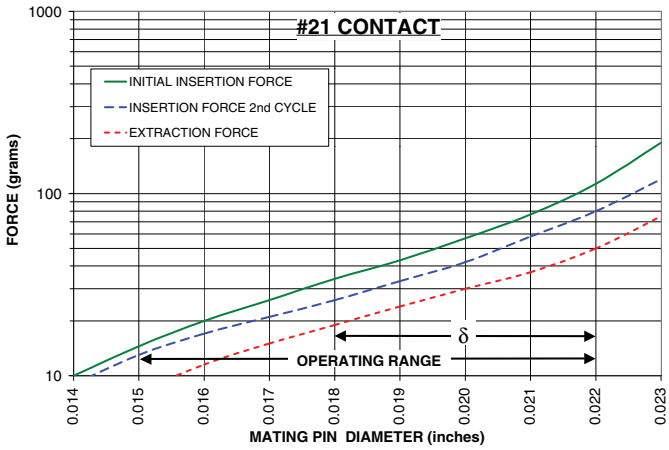


#21 CONTACT

FOR .015"-.022" DIAMETER PINS (δ = .004)
3-FINGER, GROUP A (See page 248)

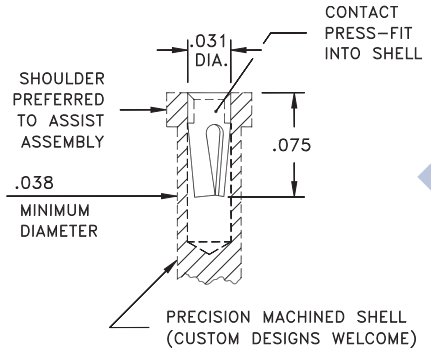


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

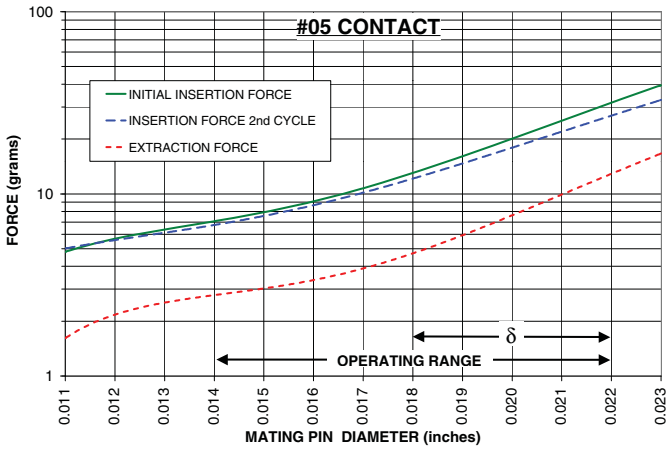


#05 CONTACT

FOR .015"-.022" DIAMETER PINS (δ = .004)
3-FINGER, GROUP A (See page 248)



CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

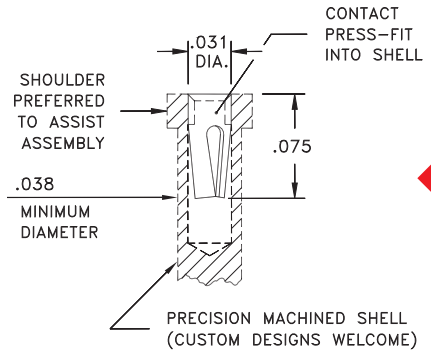
The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

CONTACT DATA

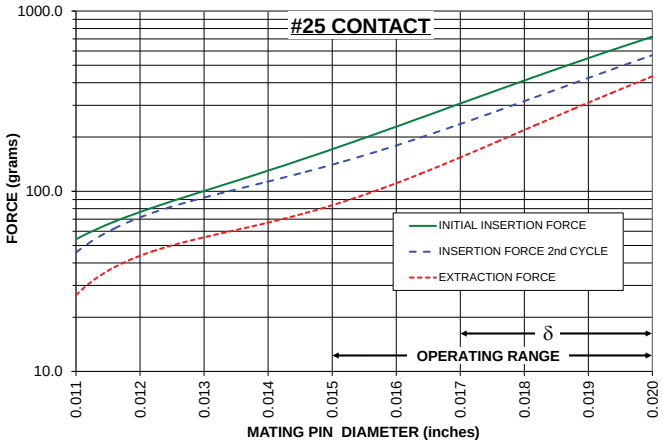
INSERTION / EXTRACTION FORCE GRAPHS

#25 CONTACT

FOR .015"-.020" DIAMETER PINS (δ = .003)
3-FINGER, GROUP A (See page 248)

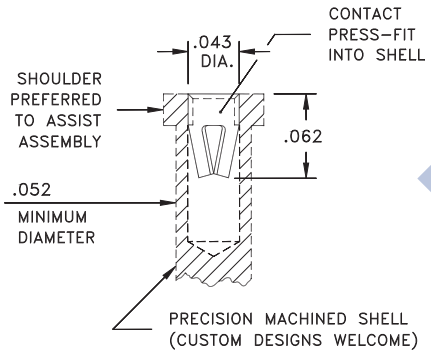


CONTACT MATERIAL
BERYLLIUM NICKEL
Alloy 360,
Heat Treated

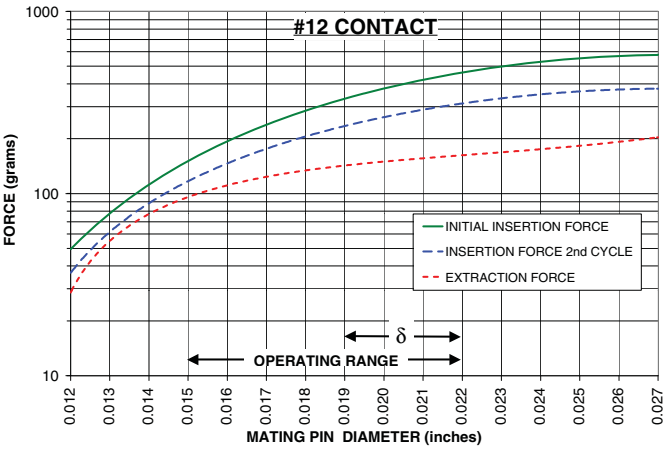


#12 CONTACT

FOR .015"-.022" DIAMETER PINS (δ = .003)
4-FINGER, GROUP B (See page 248)

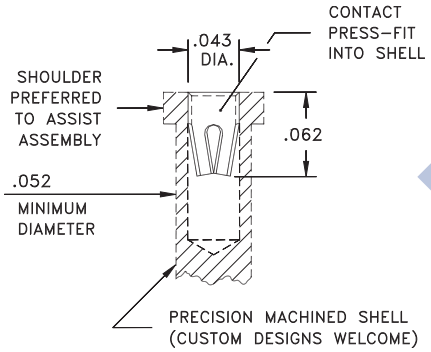


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

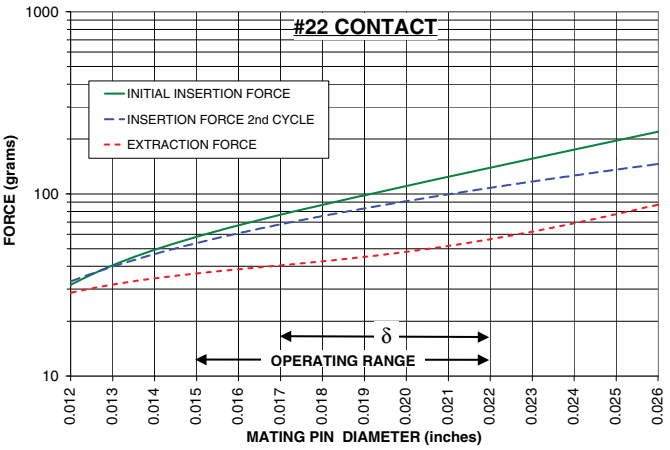


#22 CONTACT

FOR .015"-.022" DIAMETER PINS (δ = .005)
6-FINGER, GROUP B (See page 248)



CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

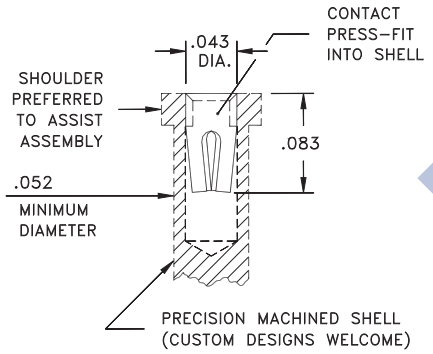
The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

CONTACT DATA

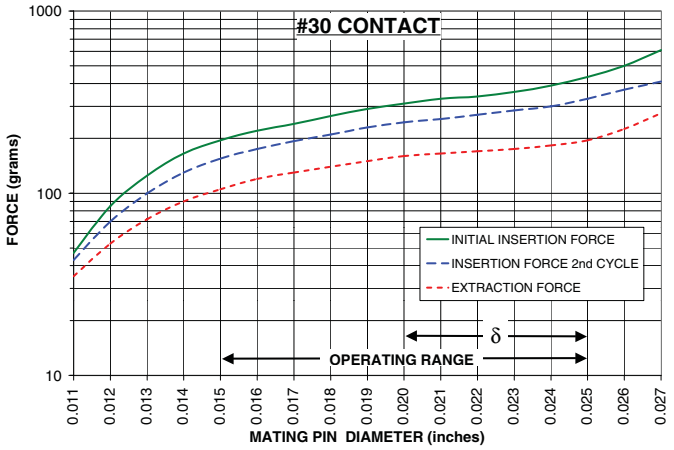
INSERTION / EXTRACTION FORCE GRAPHS

#30 CONTACT

FOR .015"-.025" DIAMETER PINS (δ = .005)
4-FINGER, GROUP C (See page 248)

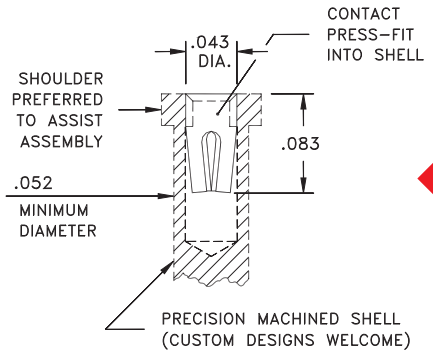


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

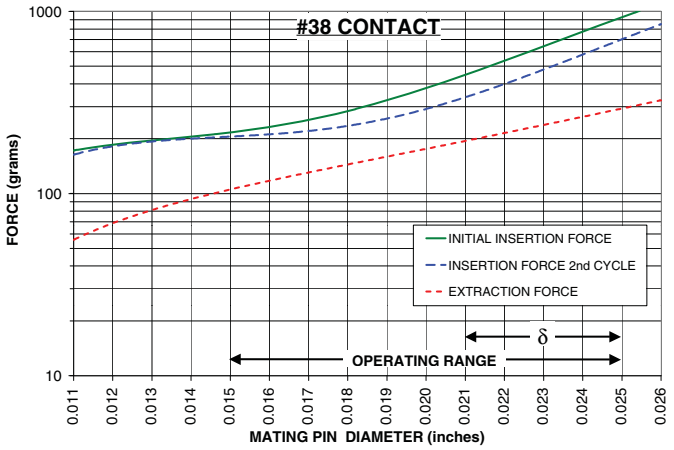


#38 CONTACT

FOR .015"-.025" DIAMETER PINS (δ = .004)
4-FINGER, GROUP C (See page 248)

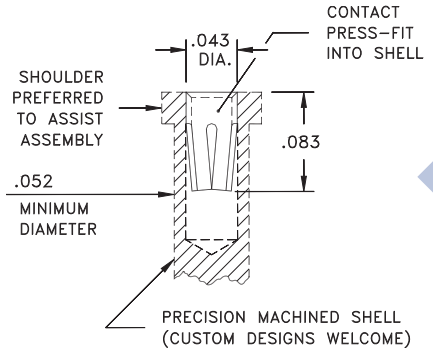


CONTACT MATERIAL
BERYLLIUM NICKEL
Alloy 360,
Heat Treated

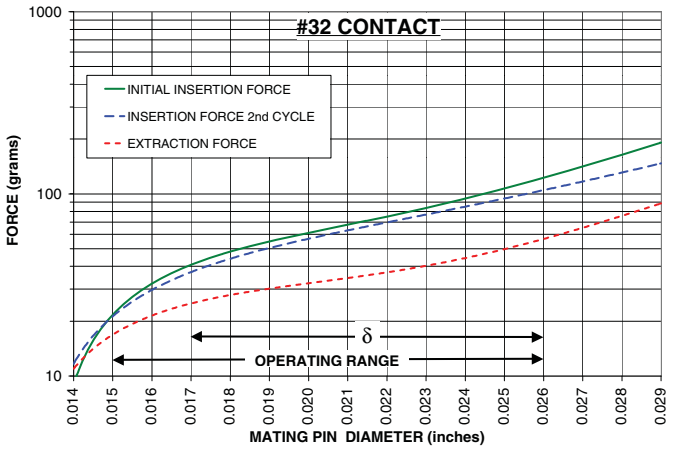


#32 CONTACT

FOR .015"-.026" DIAMETER PINS (δ = .009)
6-FINGER, GROUP C (See page 248)



CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

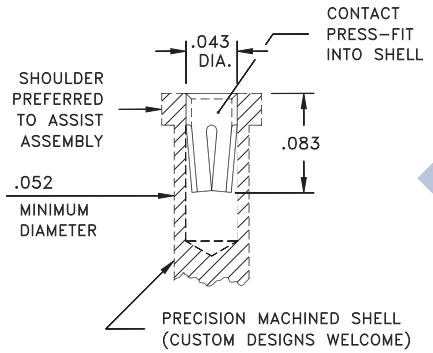
The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

CONTACT DATA

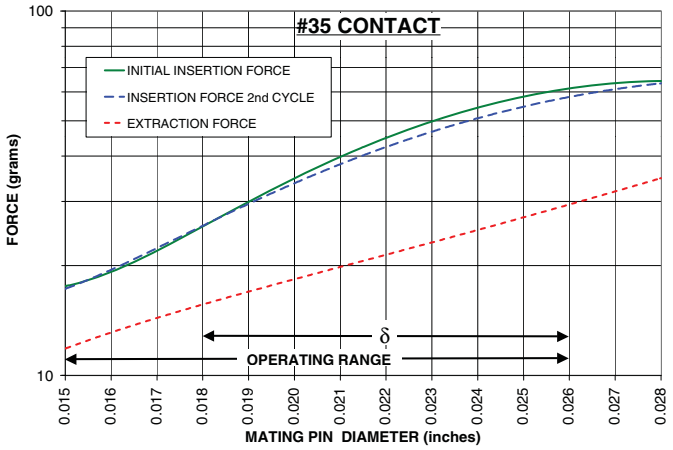
INSERTION / EXTRACTION FORCE GRAPHS

#35 CONTACT

FOR .015"-.026" DIAMETER PINS (δ = .008)
6-FINGER, GROUP C (See page 248)

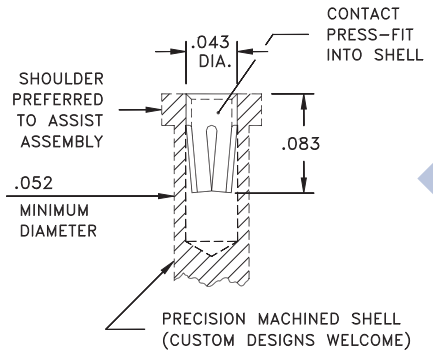


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

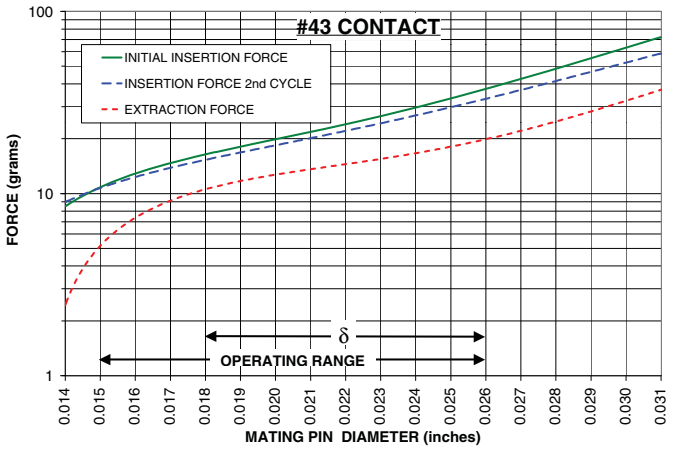


#43 CONTACT

FOR .015"-.026" DIAMETER PINS (δ = .008)
6-FINGER, GROUP C (See page 248)

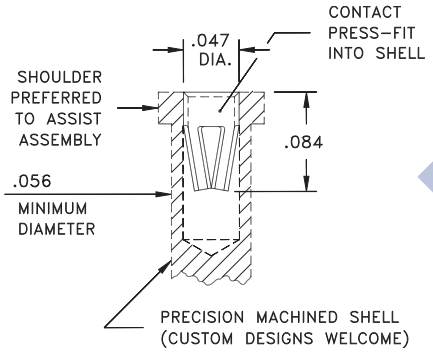


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

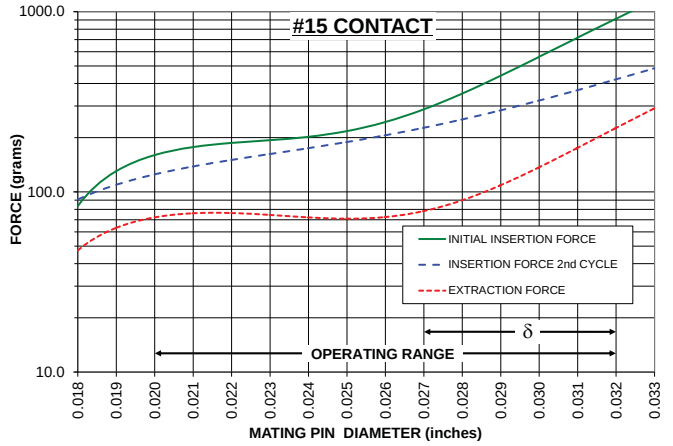


#15 CONTACT

FOR .020"-.032" DIAMETER PINS (δ = .005)
6-FINGER, GROUP K (See page 248)



CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

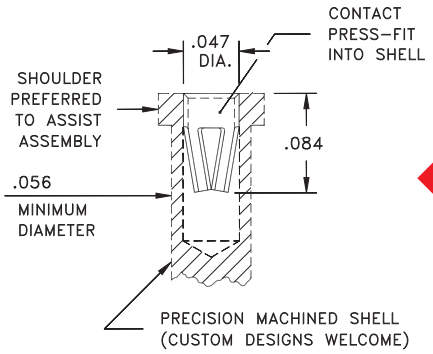
The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

CONTACT DATA

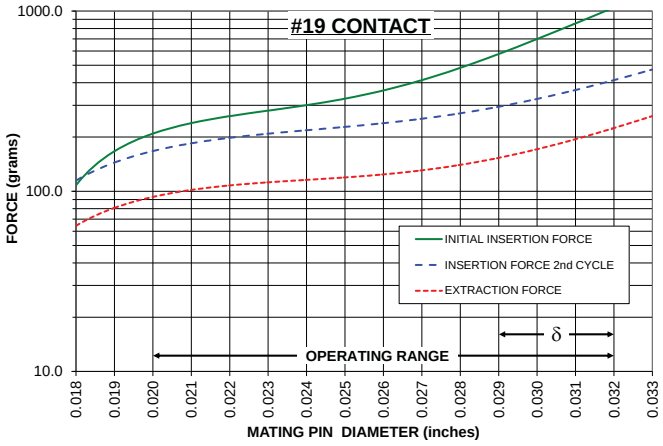
INSERTION / EXTRACTION FORCE GRAPHS

#19 CONTACT

FOR .020"-.032" DIAMETER PINS (δ = .003)
6-FINGER, GROUP K (See page 248)

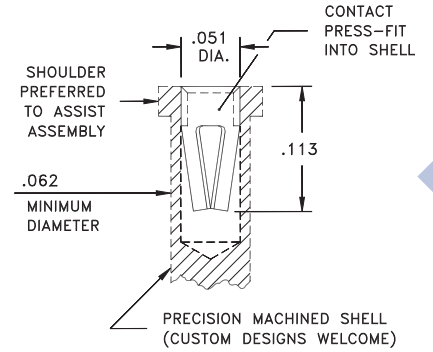


CONTACT MATERIAL
BERYLLIUM NICKEL
Alloy 360,
Heat Treated

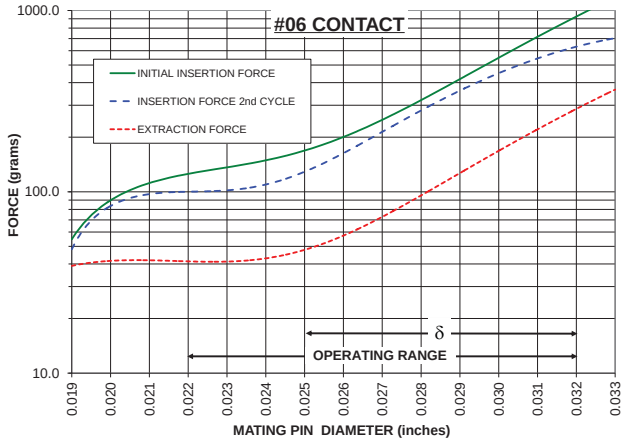


#06 CONTACT

FOR .022"-.032" DIAMETER PINS (δ = .007)
4-FINGER, GROUP D (See page 248)

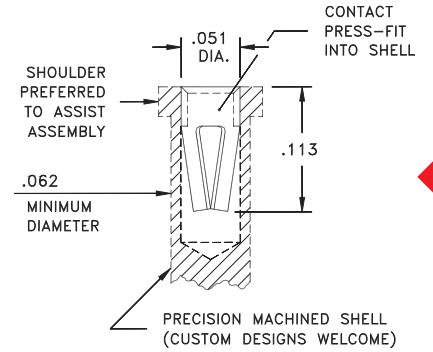


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

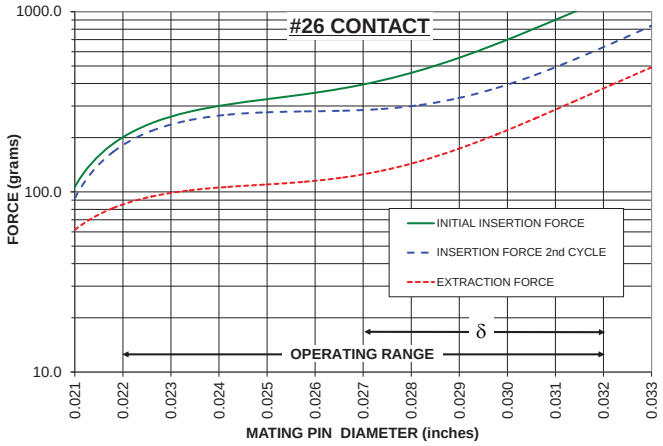


#26 CONTACT

FOR .022"-.032" DIAMETER PINS (δ = .005)
4-FINGER, GROUP D (See page 248)



CONTACT MATERIAL
BERYLLIUM NICKEL
Alloy 360,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

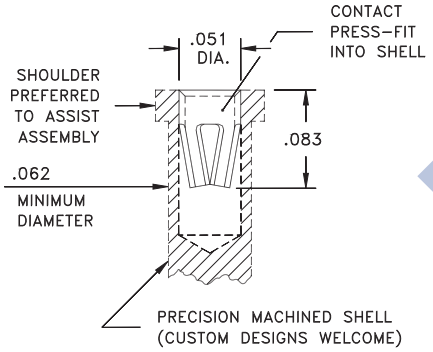
The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

CONTACT DATA

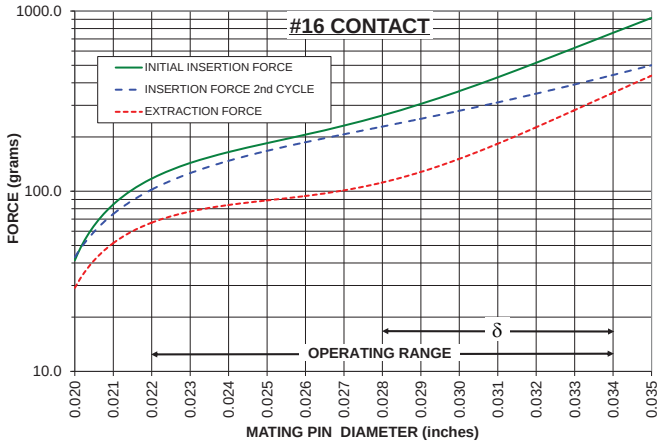
INSERTION / EXTRACTION FORCE GRAPHS

#16 CONTACT

FOR .022"-.034" DIA. & .025" SQ. (δ = .006)
6-FINGER, GROUP D (See page 248)

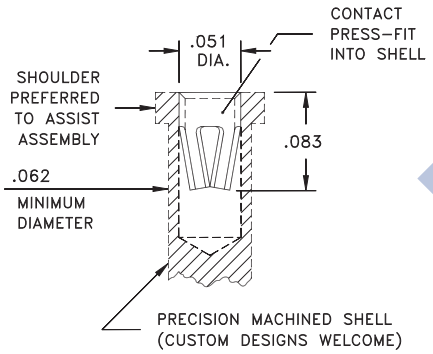


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

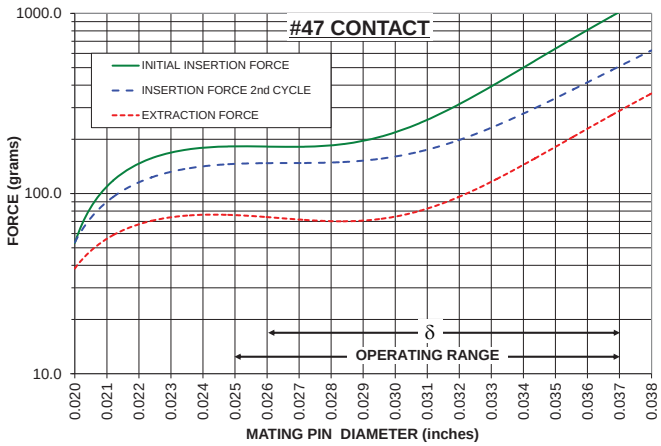


#47 CONTACT

FOR .025"-.037" DIA. & .025" SQ. (δ = .011)
6-FINGER, GROUP D (See page 248)

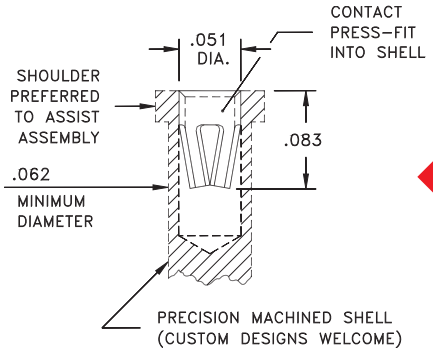


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

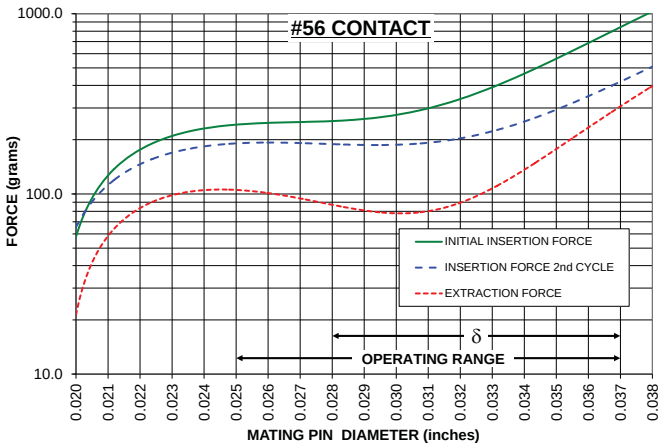


#56 CONTACT

FOR .025"-.037" DIA. & .025" SQ. (δ = .009)
6-FINGER, GROUP D (See page 248)



CONTACT MATERIAL
BERYLLIUM NICKEL
Alloy 360,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

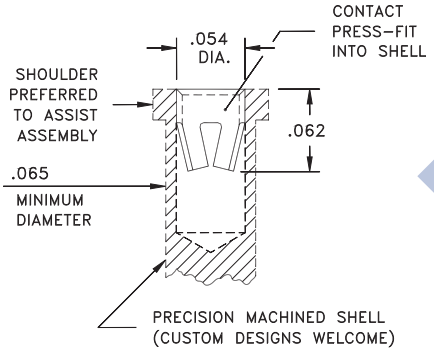
The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

CONTACT DATA

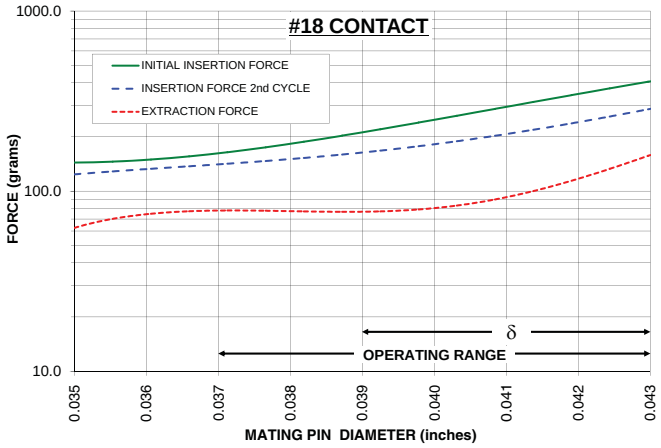
INSERTION / EXTRACTION FORCE GRAPHS

#18 CONTACT

FOR .037"-.043" DIAMETER PINS (δ = .004)
6-FINGER, GROUP L (See page 248)

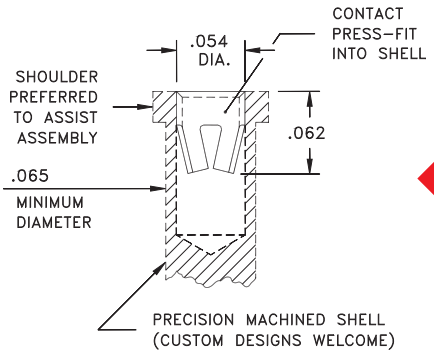


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

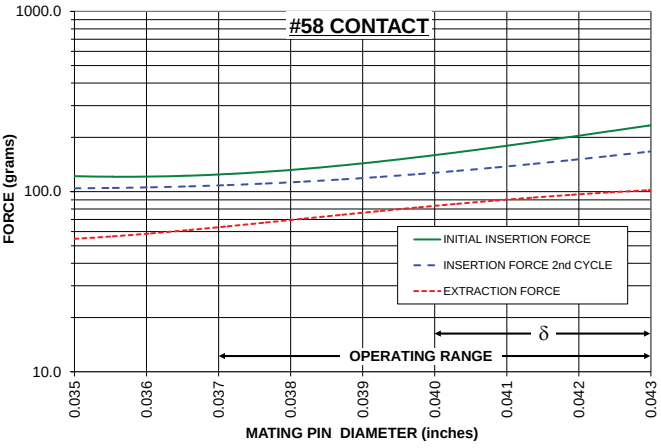


#58 CONTACT

FOR .037"-.043" DIAMETER PINS (δ = .003)
6-FINGER, GROUP L (See page 248)

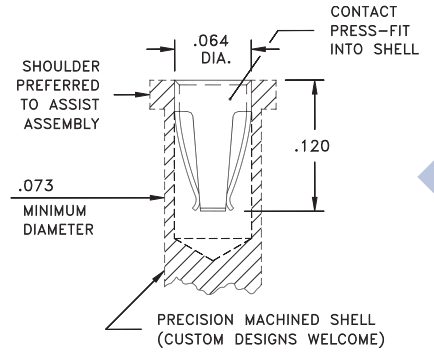


CONTACT MATERIAL
BERYLLIUM NICKEL
Alloy 360,
Heat Treated

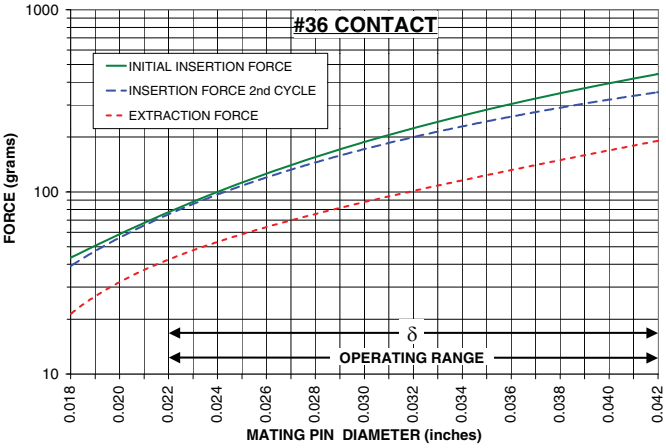


#36 CONTACT

FOR .022"-.042" DIAMETER PINS (δ = .022)
4-FINGER, GROUP E (See page 248)



CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

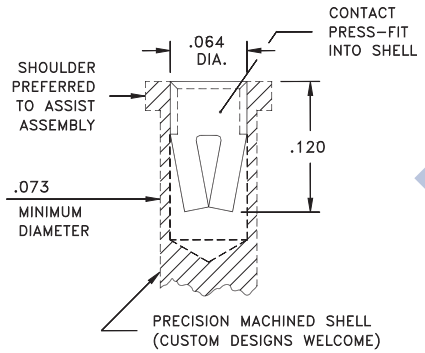
The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

CONTACT DATA

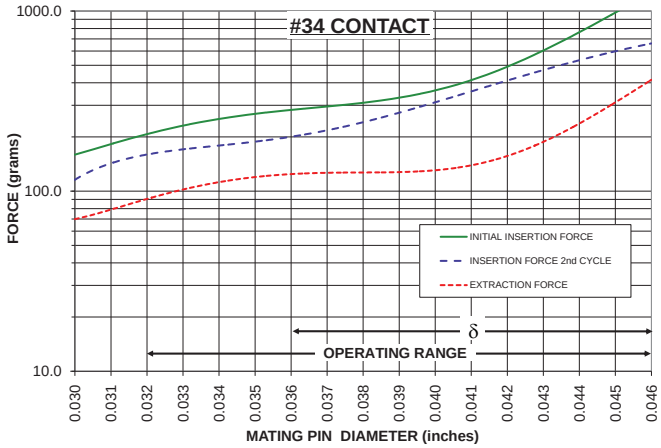
INSERTION / EXTRACTION FORCE GRAPHS

#34 CONTACT

FOR .032"-.046" DIAMETER PINS (δ = .010)
4-FINGER, GROUP E (See page 248)

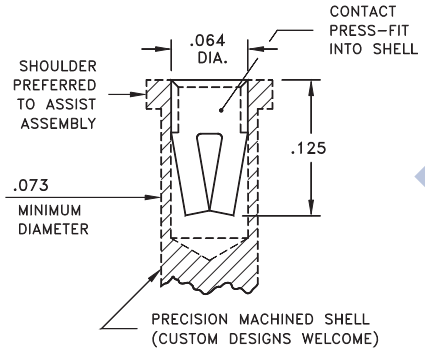


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

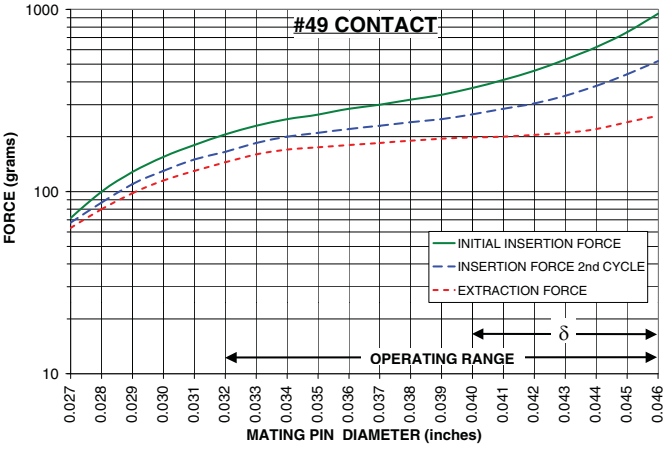


#49 CONTACT

FOR .032"-.046" DIAMETER PINS (δ = .006)
4-FINGER, GROUP E (See page 248)

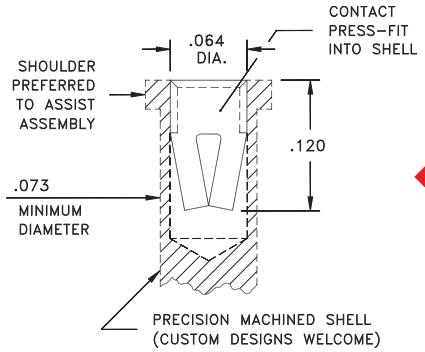


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

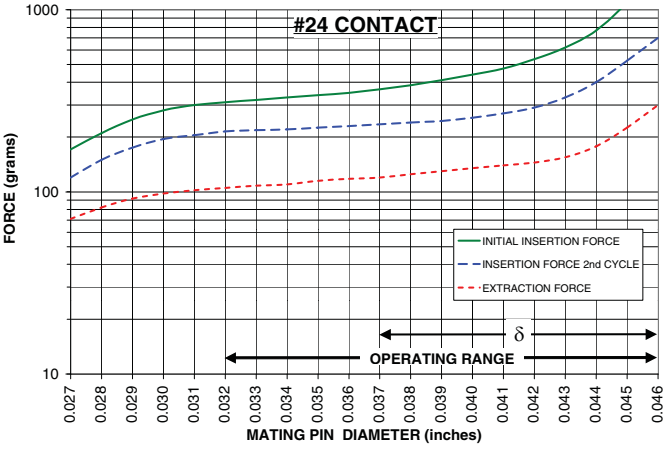


#24 CONTACT

FOR .032"-.046" DIAMETER PINS (δ = .009)
4-FINGER, GROUP E (See page 248)



CONTACT MATERIAL
BERYLLIUM NICKEL
Alloy 360,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

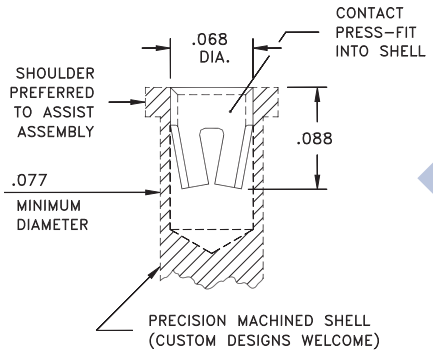
The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

CONTACT DATA

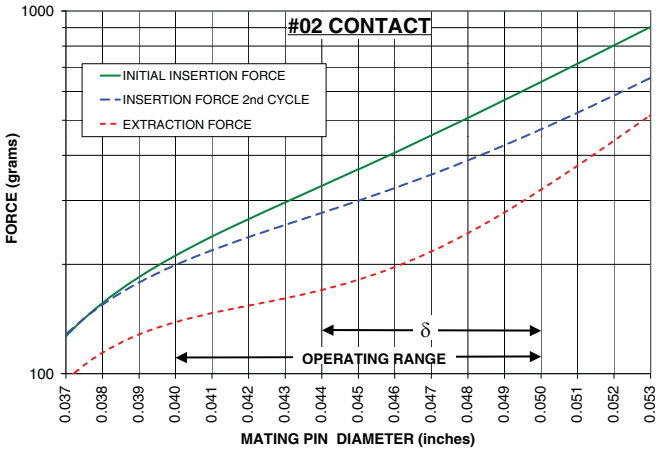
INSERTION / EXTRACTION FORCE GRAPHS

#02 CONTACT

FOR .040"-.050" DIAMETER PINS (δ = .006)
6-FINGER, GROUP F (See page 248)

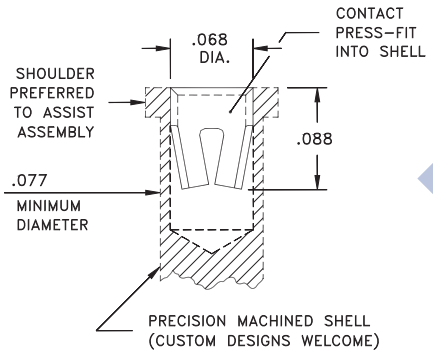


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

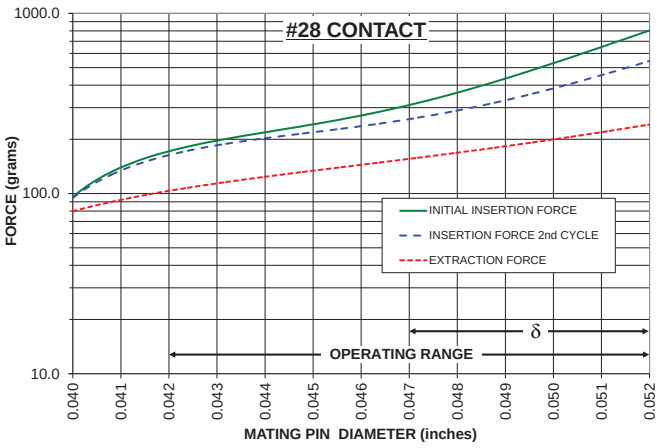


#28 CONTACT

FOR .042"-.052" DIAMETER PINS (δ = .005)
6-FINGER, GROUP F (See page 248)

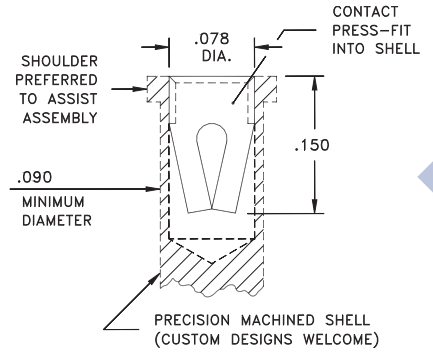


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

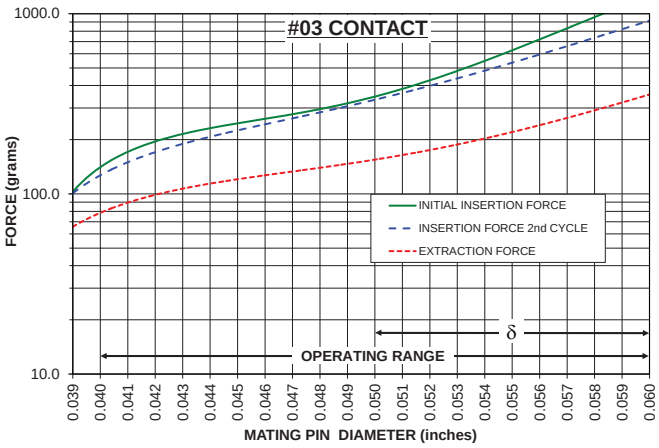


#03 CONTACT

FOR .040"-.060" DIAMETER PINS (δ = .010)
4-FINGER, GROUP J (See page 248)



CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

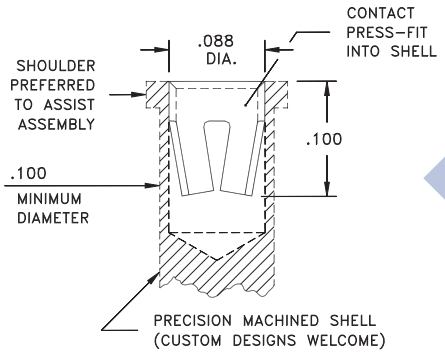
The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

CONTACT DATA

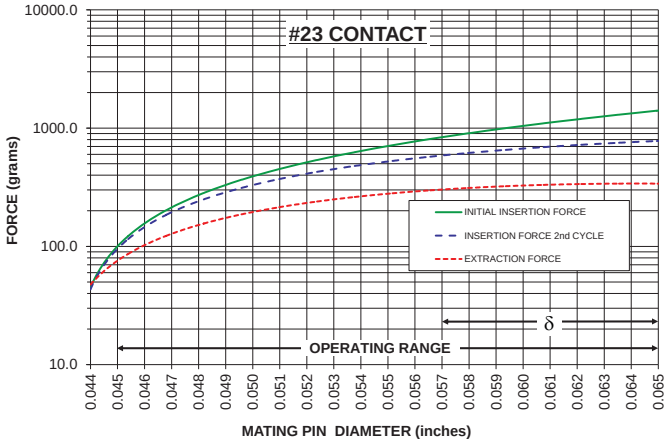
INSERTION / EXTRACTION FORCE GRAPHS

#23 CONTACT

FOR .045"-.065" DIAMETER PINS (δ = .008)
6-FINGER, GROUP G (See page 248)

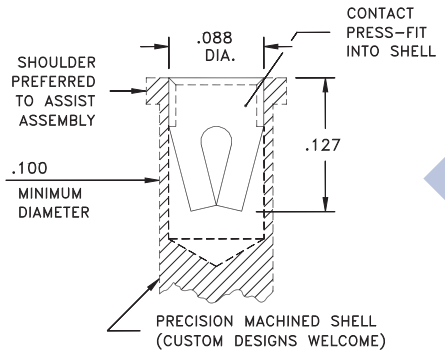


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

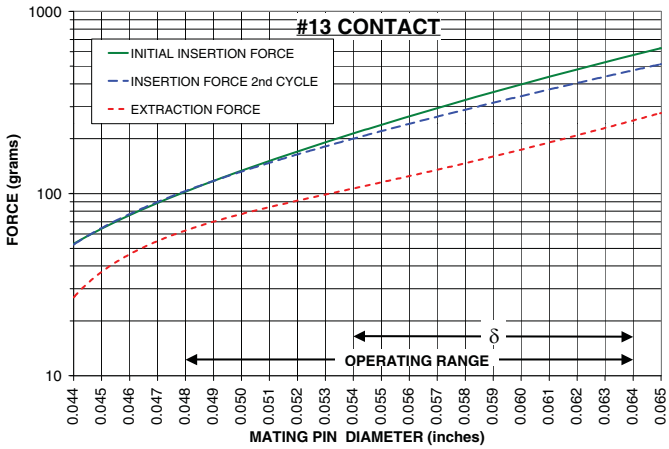


#13 CONTACT

FOR .048"-.064" DIAMETER PINS (δ = .010)
4-FINGER, GROUP G (See page 248)

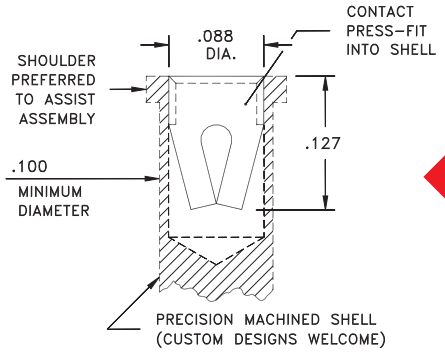


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

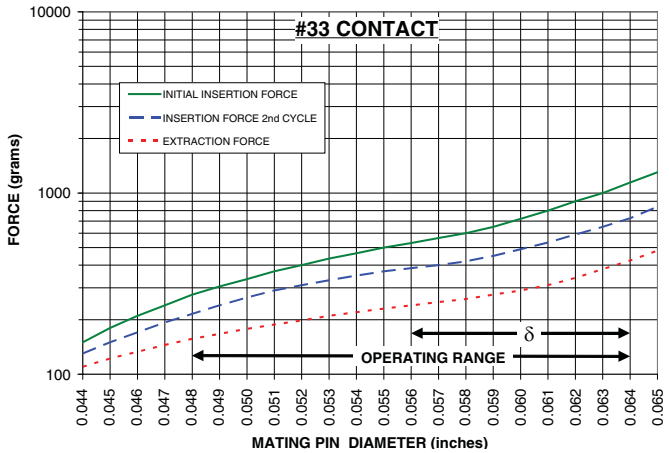


#33 CONTACT

FOR .048"-.064" DIAMETER PINS (δ = .008)
4-FINGER, GROUP G (See page 248)



CONTACT MATERIAL
BERYLLIUM NICKEL
Alloy 360,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

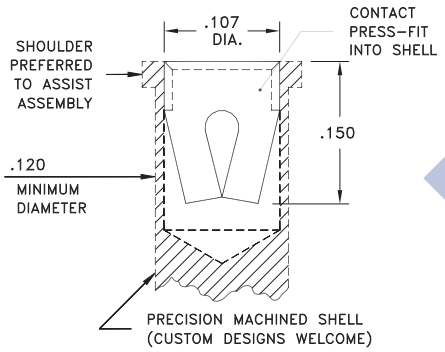
The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

CONTACT DATA

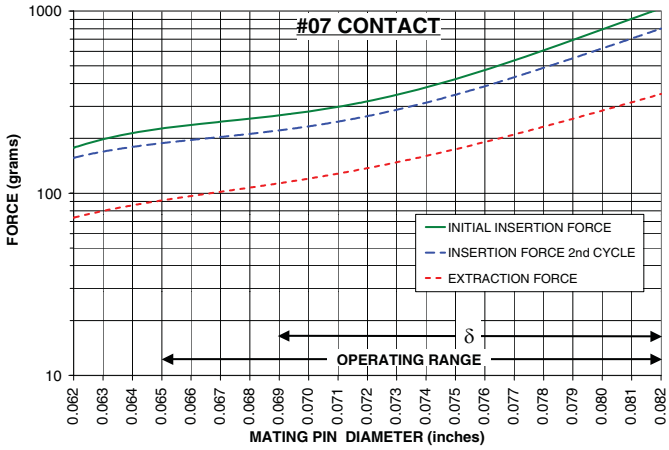
INSERTION / EXTRACTION FORCE GRAPHS

#07 CONTACT

FOR .065"-.082" DIAMETER PINS (δ = .013)
4-FINGER, GROUP H (See page 248)

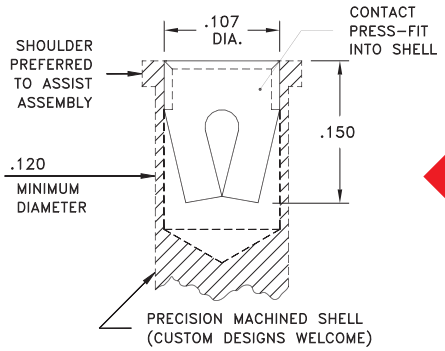


CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated

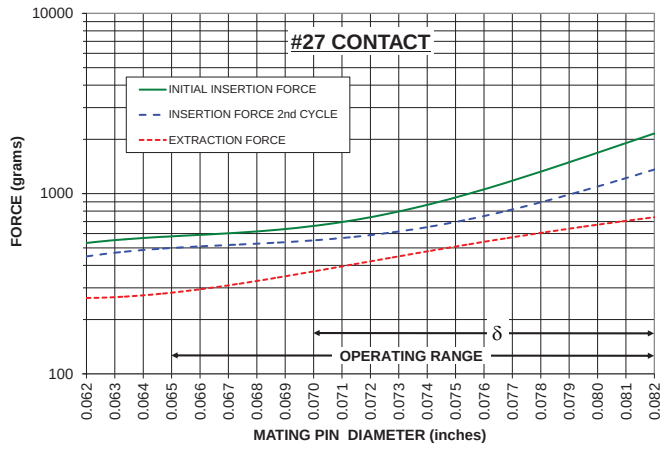


#27 CONTACT

FOR .065"-.082" DIAMETER PINS (δ = .012)
4-FINGER, GROUP H (See page 248)

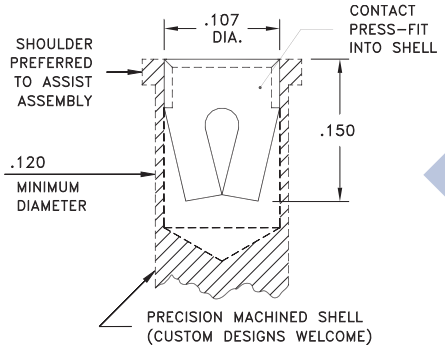


CONTACT MATERIAL
BERYLLIUM NICKEL
Alloy 360,
Heat Treated

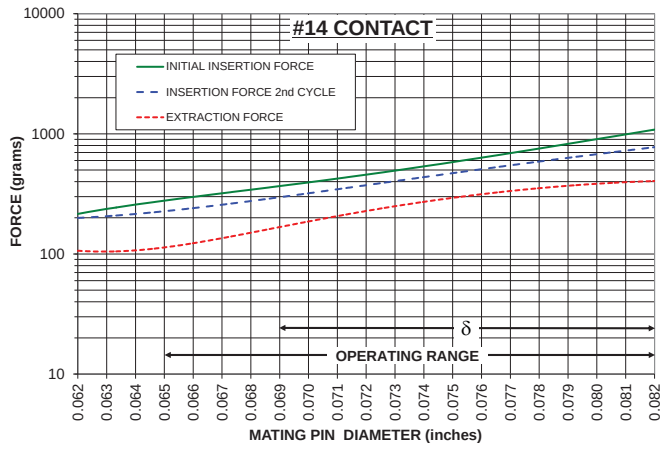


#14 CONTACT

FOR .065"-.082" DIAMETER PINS (δ = .014)
4-FINGER, GROUP H (See page 248)



CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

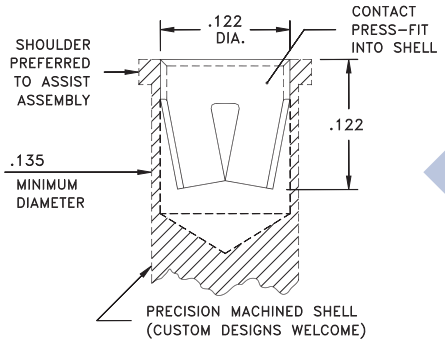
The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

CONTACT DATA

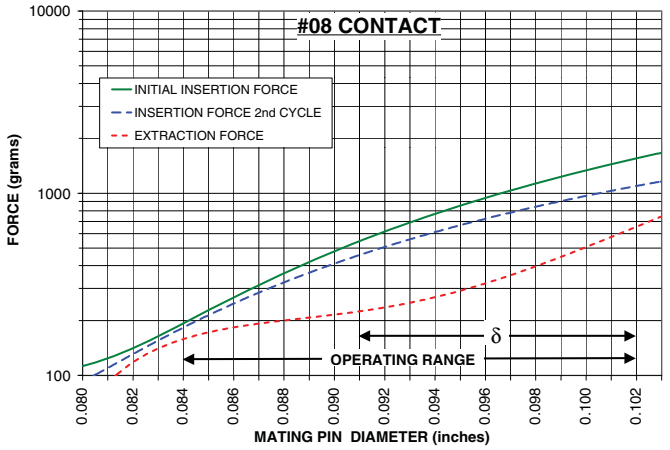
INSERTION / EXTRACTION FORCE GRAPHS

#08 CONTACT

FOR .084"-.102" DIAMETER PINS (δ = .011)
6-FINGER (See page 248)



CONTACT MATERIAL
BERYLLIUM COPPER
Alloy 172,
Heat Treated



The insertion / extraction force characteristics above were derived using a 30 microinch gold-plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values; they are best used to compare the differences between similar size contacts and to guide you in selecting one that is suitable for your application. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

DETAILED PROPERTIES OF MILL-MAX RAW MATERIALS

PROPERTIES OF METALS USED BY MILL-MAX

Copper alloy rod and wire for precision-machined pins, receptacles & solder terminals **(RoHS-2 directive 2011/65/EU, exemption 6c) allows up to 4% lead as an alloy agent in copper. All Mill-Max pin materials are:**

BRASS ALLOY 360 per ASTM B 16
PHOSPHOR BRONZE Alloy 544 (UNS C54400) per ASTM B 139
TELLURIUM COPPER Alloy 145 (UNS C14500) per ASTM B 301
Spring alloy strip for stamping "multi-finger" spring contacts
BERYLLIUM COPPER Alloy 172 (UNS C17200) per ASTM B 194
BERYLLIUM NICKEL Alloy 360 (UNS N03360)

Properties of BRASS:
Stock diameters available: .062/.072/.078/.093/.125/.156/.187/.250"
Chemical composition: Cu 61.5%, Zn 35.4%, Pb 3.1%
Temper as machined: H02/H04
Modulus of elasticity: 14 MPSI
Tensile strength: 70-90 KSI
Hardness as machined: 80-90 Rockwell B
After machining, brass parts are often annealed (softened) for subsequent bending, swaging or crimping. A partial anneal down to 60±10 RB is recommended for 90° bends, a full anneal down to 35±15 RB is recommended for pins or terminals that are swaged (riveted) to a circuit board or crimped to a wire.
Density: .307 lbs/in3
Electrical conductivity: 26% IACS *
Melting point: 900°C/885°C (liquidus/solidus)

Properties of PHOSPHOR BRONZE:
Used for pins requiring more durability than brass.
Stock diameters available: .072/.078"
Chemical composition: Cu 88%, Sn 4%, Zn 4%, Pb 4%
Temper as machined: H04
Modulus of elasticity: 15 MPSI
Tensile strength: 70-80 KSI
Hardness as machined: 83 Rockwell B
Density: .321 lbs/in3
Electrical conductivity: 19% IACS *
Melting point: 1000°C/930°C (liquidus/solidus)

Properties of TELLURIUM COPPER:
Used for pins requiring a higher current carrying capacity than brass or phosphor bronze.
Stock diameters available: .079/.093/.125/.156"
Chemical composition: Cu 99.44%, Te .55%, P .008%
Temper as machined: H02
Modulus of elasticity: 17 MPSI
Tensile strength: 43 KSI
Hardness as machined: 43 Rockwell B
Density: .323 lbs/in3
Electrical conductivity: 93% IACS *
Thermal conductivity: 91% IACS *
Melting point: 1075°C/1051°C (liquidus/solidus)

Properties of BERYLLIUM COPPER:
Chemical composition: Cu 98.1%, Be 1.9%
Temper as stamped: TD01
Properties after heat treatment (TH01):
Modulus of Elasticity: 19 MPSI
Tensile Strength: 175-205 KSI
Yield Strength (0.2% offset): 150-185 KSI
Elongation: 3-10%
Stress Relaxation†: 96% of stress remains after 1,000 hours @ 100 °C
70% of stress remains after 1,000 hours @ 200 °C
Hardness: 36-43 Rockwell C
Density: .298 lbs/in3
Electrical Conductivity: 22% IACS *
Melting point: 980°C/865°C (liquidus/solidus)
Since BeCu loses its spring properties over time at high temperatures, it is rated for continuous use up to 150°C. For "down-hole" and "burn-in" applications up to 300°C. Mill-Max offers nine contacts (#19, #24, #25, #26, #27, #33, #38, #56, #58) made from Beryllium Nickel Alloy 360 (UNS N03360)

Properties of BERYLLIUM NICKEL:
Chemical composition: Ni 97.6%, Be 1.9%, Ti 0.5%
Modulus of Elasticity: 27-30 MPSI
Tensile Strength: 245 KSI min.
Yield Strength (0.2% offset): 200 KSI min.
Elongation: 9% min.
Hardness: 49 Rockwell C
Density: .294 lbs/in3
Electrical Conductivity: 7% IACS *
Melting point: 1,325°C/1,195°C (liquidus/solidus)

* International Annealed Copper Standard, i.e.: as a % of pure copper.

PROPERTIES OF PLASTICS USED BY MILL-MAX

Standard plastics used for catalog products:

Injection Molded

PCT Polyester, High Temp (Thermx CG933, black)
Nylon46, High Temp (Stanyl TE250F6 {30% glass} or TE250F9 {45% glass}, black)
PPS, High Temp (Ryton R-4-200)

Machined

FR-4 Epoxy/Glass Laminate. In stock thicknesses available: .010", .020", .031", .047", .062", .093", .125" (natural color, beige). Other thicknesses available upon request.

G-30 Polyimide/Glass Laminate, .062" thick (natural color, brown)

TEMPERATURE COMPARISON OF MOLDED INSULATORS

MATERIAL	BRAND	GRADE	HEAT DEFLECTION TEMP. (per ASTM D 648)
PCT Polyester	Thermx	CG-933	529°F (276°C) @ 66 psi
Nylon 46	Stanyl	TE250-F6 or F9	554°F (290°C) @ 264 psi
PPS	Ryton	R-4-200	>500°F (>260°C) @ 264 psi

Note: Materials with HDT above 446°F (230°C) are considered suitable for "eutectic" reflow soldering. For "lead-free" reflow soldering, choose materials with an HDT above 500°F (260°C).

PCT is the standard plastic used with RoHS "lead-free" plated pins.

MILL-MAX STANDARD PLATINGS (FINISHES):

GOLD per ASTM B 488, Type 1 (99.7% min. gold),
Code C (130-200 HK {Knoop hardness}),
Class (thickness) per customer's requirements

SILVER per ASTM B 700, Type 1 (99.9% min. silver),
Grade B (Bright),
Class S (anti-tarnish treatment),
Thickness (7.5µm/300µ" used for solder terminals)

TIN/LEAD (93/7) per ASTM B 545 (Appendix X6.3.2.5 to eliminate whisker growth) Class A (2.5µm/100µ")
or Class B (5µm/200µ"),
Bright finish (Matte available to order)

ELECTRO-SOLDER (60/40) per ASTM B 579, SC2 (8µm/300µ"),
Bright finish (Matte available to order)

Standard finishes available for RoHS "lead-free" applications:

GOLD per ASTM B 488, Type 1 (99.7% min. gold),
Code C (130-200 HK {Knoop hardness}),
Class (thickness) per customer's requirements

TIN (100%) per ASTM B 545, Class A (2.5µm/100µ") or
Class B (5µm/200µ"),
Matte finish (With whisker and oxide inhibitors & a nickel underplate)

ALL MILL-MAX PARTS REQUIRE AN UNDERPLATE:

Brass parts need a barrier plate to prevent zinc diffusion, 50µ" min. nickel or 100µ" min. copper is recommended by ASTM B 545 and 579. ASTM B 488 also recommends a 50µ" min. nickel barrier plate beneath gold to prevent copper diffusion inherent with all copper alloy products.

MILL-MAX STANDARD UNDERPLATES:

NICKEL per ASTM B 689, Type 2 (Bright),
Class 1.25 (1.25µm/50µ")) or Class 2.5 (2.5µm/100µ")

Also available for military and "non-magnetic" applications:

COPPER per ASTM B 734, Class 2.5 (2.5µm/100µ") or
Class 5 (5µm/200µ")

Pins & Receptacles

Pin & receptacle shells are manufactured by precision high-speed turning machines. The base materials for these components are copper alloys.

Receptacles are a two piece construction consisting of a plated contact press-fit into a plated shell. The contacts are stamped from beryllium copper strip.

Materials

Pins & Receptacle Shells:
Brass Alloy 360 UNS C36000 ASTM-B16
(Up to a .250" diameter)
Phosphor Bronze alloy 544 UNS C54400 ASTM-B139
(Up to a .072" diameter)
Tellurium Copper alloy 145 UNS C14500 ASTM-B301
(Up to a .156" diameters)

See page 154 and 203 for a complete list of standard available stock diameters.
(For the availability of larger diameter materials contact Technical Services).

Contacts:
Beryllium copper UNS C17200 ASTM-B194 (For most applications)
Beryllium Nickel UNS N03360 (For high temperature applications)

(For individual contact specifications see pages 250 - 262)
The materials listed above are all RoHS compliant.

Dimensional, Mechanical & Environmental Data

Standard tolerances for pins & receptacle shells:
Diameters +/- .002"
Lengths +/- .005"
Angles +/- 2°

Mechanical Life (Durability): Mill-Max receptacles are capable of 1,000 minimum insertion/extraction cycles for a broad range of applications. Mating pin size, shape and finish, along with application specific variables, will affect the life of a contact.

Contact Forces: See individual contact specifications on pages 250 - 262.

Environmental Data:
- Operating temperature range: -55/+125° C
- Vibration (No electrical discontinuity Greater than 1 µs): 10-2000 HZ, 15 G
- Shock (No electrical discontinuity Greater than 1 µs): 50 G

Electrical data is dependent on the contact used in the receptacle. See page 248 for free air current ratings of the contacts.

Platings

GOLD per ASTM B 488 and MIL-G-45204, Type 1, Code C
SILVER per ASTM B 700, Grade B, Class S
TIN per ASTM B 545, Type 1
TIN/LEAD (93/7) per ASTM B 545
ELECTRO-SOLDER (60/40) per ASTM B 579, Bright
NICKEL per SAE-AMS-QQ-N-290
ELECTROLESS NICKEL per MIL-C-26074
COPPER per SAE-AMS-2418

Connectors

Connectors are headers, sockets and interconnects. They consist of pins, receptacles or spring pins assembled into thermoplastics or machined laminate insulator bodies. They are available in DIP, SIP, strip, BGA and PGA packages in grids of 1mm, .050", .070", 2mm, .100", .8mm for BGA's and .100" interstitial for PGA's.

Electrical Data

SERIES:	100-700	80X	830	850
• Rated current (Amps):	3	3	3	1
• Rated voltage:	100 VRMS/150 VDC			
• Contact resistance:	10 mΩ max.			
• Insulation resistance:	10,000 MΩ min.			
• Dielectric strength: (700 VRMS min. for series 117 Shrink DIP)	1000 VRMS min.			
• Air and creepage distance (inch.): (.012 for series 117 Shrink DIP)	.028	.033/.028	.020	.016/.020
• Capacitance(pF max):	.8	1	1	1

Electrical data above does not apply to BGA, PLCC, USB or spring-loaded connectors. Electrical data for these products can be found on the following pages: BGA – Page 141; PLCC - Page 141; USB - Pages 147 - 150; Spring-Loaded connectors – Pages 6 - 19
Current ratings are for a 10° C temperature rise above ambient

Operating temperature range: -55/+125° C

General tolerances for assembled connector products:
- Lengths: +/- .010"
- Connector Flatness: .005" (up to 1" in length)
- Co-planarity of SMT Connectors: .005" (up to 1" in length)
- For connectors exceeding 1" in length the flatness/co-planarity may exceed .005". Please contact Technical Services for more information.

(Note: Specifications and tolerances are provided wherever possible. Due to the wide variety of connectors Mill-Max offers, the specific tolerances vary from product to product. If you need information regarding the tolerance of a particular part, please contact Technical Services.)

Materials

Insulator Bodies:
Standard material is glass filled thermoplastic polyester (PCT), self extinguishing, rated UL 94 V-0.

Some surface mount, pin grid array, spring pin and shrouded connector insulators are molded from high temperature Nylon 46 or PPS, rated UL 94 V-0.

FR-4 epoxy laminate is a thermoset material used in custom insulators and high temperature applications. It is especially useful because of its low Temperature Coefficient of Expansion (TCE). See chart below:

TCE for molded insulator	30 ppm/° C
TCE for 4-Layer PCB	13 ppm/° C
TCE for unclad epoxy	12 ppm/° C

The above insulator materials are all suitable for lead free soldering processes up to 260° C.

For complete material properties of plastics used by Mill-Max see page 263.

For inquiries regarding other insulator materials, please contact Technical Services.

Spring Pins

Spring pins consist of precision-machined brass components assembled together with beryllium copper or stainless steel springs. External components and internal springs are gold-plated. Spring pins are designed to be used at mid-stroke. Over compression can cause damage restricting the movement of the plunger.

Materials

External Components (Body, Piston, Base, Tail):
Brass Alloy 360 UNS C36000 ASTM-B16

Springs

Beryllium copper UNS C17200 ASTM-B197
Stainless Steel 302

Dimensional, Mechanical & Environmental Data

Standard tolerances for spring pins at initial height:
Diameters +/- .002"
Lengths +/- .006"

Mechanical life (durability): Tested to 1,000,000 cycles
Force tolerance: +/- 20 g (See individual spring pin data on pages 6 - 19 for forces)
Stroke tolerance: +/- .005"

Environmental Data:
- Operating temperature range: -55/+125° C
- Vibration (No electrical discontinuity Greater than 1 µs): 0-200 HZ, 10 G
- Shock (No electrical discontinuity Greater than 1 µs): 50 G

For complete material properties of metals, platings and plastics used by Mill-Max see page 263.

Where applicable, Mill-Max products and procedures are designed to meet the following standards:

MIL-STD 1916 - DOD preferred methods for acceptance of product
MIL-STD 202G - Test methods for electronic and electrical component parts
MIL-STD 45662 - Calibration system requirements, or ISO 10012
MIL-F-14072 - Finishes for ground based electronic equipment
MIL-I-45208 - Inspection system requirements or equivalent
MIL-S-83505 - General specification for sockets (lead, electronic components)
MIL-DTL-83734 - General specification for DIP sockets

In the interest of improved design, quality and performance, Mill-Max reserves the right to make changes in its specifications without prior notice.

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

GLOSSARY OF TERMS AND DEFINITIONS

Annealing - Refers to a brass pin that has been softened by heat treatment which makes the pin easier to crimp, rivet (swage) or bend.

Carrier - An assembly consisting of an insulator with male pins onto which receptacles are loaded. This assembly is employed as a fixture during the soldering operation and is then removed leaving a PC board populated with individual receptacles. Female carriers that load male pins are also available for special applications.

Clip - See Contact.

Closed Entry - Refers to female contacts where the front rim prevents the insertion of an oversize pin that would otherwise damage the contact.

Compliancy - Contact's ability to accept multiple insertions and extractions of a wide range of pin shapes and sizes while retaining its original configuration.

Compliant Press Fit - Method of mounting an interconnect component to a PC board where a drilled and slotted receptacle or pin is pressed into a plated-through-hole without damaging the hole.

Constant Usage Temperature (CUT) - Constant Usage Temperature is a measure of the maximum temperature that a material may be exposed to for long periods of time, 1000 - 1500 hrs., before degradation of its electrical and mechanical properties occurs.

Contact (and Contact Clip) - Multi-finger spring insert of a receptacle which completes the electrical path between a male pin and a female receptacle. Also referred to as a clip.

Contact Rating - Current carrying capability of a contact measured in amperes with respect to temperature rise above ambient.

Contact Resistance - The electrical resistance at the point of connection determined by the contact geometry, area of contact, plating and normal force.

Coplanarity – Refers to the measurement of multiple points and their distance from a respective plane. This is particularly useful for surface mount parts to determine the maximum amount of difference in the height of the surfaces that need to be soldered.

Electroplating - The electrodepositing of a metal coating on a conductive object such as a pin, shell, or contact clip.

Electro-vibratory Plating - An electroplating system where the parts are processed in a vibrating basket which ensures uniform plating thickness and avoids damage to delicate parts.

End Stackable - The ability for connectors to be mounted end to end while maintaining grid or spacing.

Extraction Force (or Withdrawal Force) - The force required to remove a lead from a contact.

Epoxy - Woven glass cloth epoxy laminate. Classified as a thermoset, the woven fibers of these materials enable them to withstand high temperatures without being damaged. Cut from large sheets of material, the insulator is then machined on a high speed drill/router the same way as printed circuit boards are fabricated.

Electrostatic Discharge (ESD) - The momentary electric current that flows between two objects that may cause damage to electronic equipment.

Flash (Plating) - A very thin plating of metal, usually less than 10 micro inches, to uniformly cover the surface of the base metal.

Flatness – Sometimes used in place of coplanarity, flatness refers to the amount of variation of a plane or surface.

Floating Contact - In surface mount sockets, a receptacle designed to move up and down freely in an insulator to compensate for unevenly dispensed solder paste.

Free Machining Alloy - An alloy which is easy to machine, e.g. brass alloy 360.

Fretting - A form of corrosion caused by vibration.

Gas Tight Connection - An electrical connection of sufficient pressure to prevent the intrusion of a corrosive atmosphere into the contact area.

Heat Deflection Temperature (HDT) - An industry recognized test for comparing the short term effects of high temperature on plastics.

Heat Treating - The process of using specific heating and cooling cycles to alter the mechanical properties of an alloy. Generally, heat treating can harden or soften a metal depending on the material, the parameters used and the desired physical property.

Hex Press Fit - A method of press-fitting either a pin or receptacle, using a hexagonal cross section, into a plated through-hole without causing damage to the hole while still maintaining a gas tight seal.

High Speed Turning - See Precision-Machined.

Injection Molding - A method of molding plastics by first heating granular plastic to its molten state and injecting it into the mold cavity where the plastic solidifies and is then ejected from the cavity.

GLOSSARY OF TERMS AND DEFINITIONS

Insertion Force - The force required to insert a male lead into a female socket.

Knurl - A vertical serration machined around the diameter of an interconnect pin providing a retention feature for press-fitting in a PC board or insulator and also preventing rotation of the pin.

LCP (Liquid Crystal Polymer) - Classified as a thermoplastic, LCP is a hard, rigid material which exhibits outstanding strength at high temperatures and excectional strength and toughness in its thin walls. Applications: LCP is used as an insulator material for tight grid (.050", 2mm) connectors and extremely high temperature requirements.

Mating Pin – The pin used to interconnect two electronic devices by inserting it into the contact. Critical features are diameter, length, and shape (but not limited to.)

Machined - See Precision-Machined.

Migration - For a brass part plated with tin or gold, the migration of zinc from brass to the surface of the plating. This becomes zinc oxide and renders the part unsolderable. Zinc migration is prevented by using a copper or nickel underplate as a barrier.

Nylon 46 - Classified as thermoplastics. Nylon 46 offers superior heat resistance, good electrical properties and excellent toughness in its thin walls, which are desirable characteristics for connector insulators. Its superior strength in thin walls enables the press-fitting of pins in close proximity to each other without cracking or warping the material, making it ideal for molding 2mm and .050" grid insulators. Nylon 46 is suitable for high temperature applications including vapor phase, infra-red reflow and wave soldering operations.

Passive Device or Component – An electronic connector that consumes electrical energy, but does not produce electrical energy. Passive devices are not susceptible to significant ESD damage.

PCB - Printed Circuit Board.

PCT (Polycyclohexane Terephthalate) - Thermoplastic polyester is rated for higher temperatures. PCT is a standard material on DIP and SIP insulators for higher temperature operations. All PGA and surface mount products are molded from PCT and are suitable for infra-red, vapor phase and wave soldering.

Plating - A process in which metals (e.g. gold, tin-lead, nickel, silver) are electrically deposited onto a base metal in very thin and precise thicknesses.

Plated Through-Hole - A hole in a printed circuit board which has metallic walls connected to conductors on the surface or inside the board, in which the component lead is inserted and soldered.

Precision-Machined - Manufacturing process whereby a rapidly turning solid metal rod is cut to precise tolerances.

Receptacle - Female contact consisting of an outer shell & inner spring contact (clip) designed for multiple mating/unmating cycles with a male pin or component lead.

Screw-Machined - See Precision-Machined.

Secondary Machining - A process in which holes, slots, flats, squares or other special features may be machined onto a pin or receptacle after the basic shape of the part has been turned on a high speed lathe.

Shrink DIP Package - An IC which has a pin spacing of .070" on centers.

Skiving – The removal of a thin amount of plating when pins or contacts are press fit. For example, soft platings may yield some amount of skiving upon press fitting into an insulator or board. Skiving may also appear under a contact clip pressed into a receptacle shell.

Standoff - A protrusion at the bottom of the connector used to raise it off the PC board to aid in solder fillet formation, board inspection, flux removal and cleaning.

Swage Mount - A type of mounting commonly used with solder terminals and printed circuit pins where one end of the terminal is flared out (riveted) securing it to the PCB.

Thermal Coefficient of Expansion (TCE) - Expansion of material caused by an increase in temperature.

Thermoset - Type of plastic which is heat cured into a permanent shape and, due to chemical reaction, cannot be remelted.

Thermoplastics - Type of plastic which is molded under heat and pressure and can be remelted & reused many times.

Top Plate - Final surface plating over base metal and underplating.

Underplate - Plating between the base metal and the top plating.

Withdrawal Force (or Extraction Force) - The force required to remove a lead from a contact.

Wrapost (Terminal or Receptacle) - The length of square cross section of certain pins and receptacles which is used for making electrical connections via wire wrapping. Wire wrapping is a process in which wire is wrapped around the post to form a gas-tight connection without soldering.

INDEX

NUMERICAL LISTING AND LOCATION OF MILL-MAX SOCKET ASSEMBLY NUMBERS WITH REFERENCE TO MILL-MAX PINS

MILL-MAX SOCKET ASSEMBLY NUMBER	MILL-MAX PIN # REF.	PAGE #
101-93-XXX-41-56X000	1001/0156	95
104-XX-XXX-41-770000	0477	96
104-XX-XXX-41-780000	0478	96
110-XX-210-10-001000	1001	134
110-XX-210-10-002000	1001	135
110-XX-3XX-10-001000	1001	134
110-XX-3XX-10-002000	1001	135
110-XX-3XX-10-003000	1001	135
110-XX-3XX-10-004000	1001	135
110-XX-3XX-10-005000	1001	135
110-XX-XXX-41-001000	1001	90
110-XX-XXX-41-105000	1005	104
110-XX-XXX-41-530000	1001	100
110-XX-XXX-41-605000	1005	94
110-XX-XXX-41-801000	1001	98
111-XX-XXX-41-001000	0134	91
113-XX-XXX-41-117000	1334/1434	107
114-XX-XXX-41-117000	1434	106
115-XX-XXX-41-001000	0501	92
115-XX-XXX-41-003000	1534	93
116-XX-XXX-41-001000	0153-5	111
116-XX-XXX-41-003000	0153-2	111
116-XX-XXX-41-006000	0153-1	111
116-XX-XXX-41-007000	0153-3	111
116-XX-XXX-41-008000	0153-4	111
117-XX-XXX-41-005000	1802	125
117-XX-XXX-41-105000	1802	126
121-XX-XXX-41-001000	0040-1	109
122-XX-XXX-41-001000	0089-2	109
122-XX-XXX-41-801000	0089-2	98
123-XX-XXX-41-001000	0088-3	109
123-XX-XXX-41-801000	0088-3	98
124-XX-XXX-41-002000	0086-4	109
126-XX-XXX-41-001000	2601	110
126-XX-XXX-41-002000	2602	110
126-XX-XXX-41-003000	2603	110
127-XX-XXX-41-002000	1702-2	125
127-XX-XXX-41-003000	1703-3	125
134-10-XXX-00-000000	3400	122
134-10-XXX-00-010000	3401	122
134-10-XXX-00-020000	3402	122
134-10-XXX-00-050000	3405	122
134-10-XXX-00-100000	3410	122
142-XX-XXX-00-591000	4259-1	123
142-XX-XXX-00-592000	4259-2	123
142-XX-XXX-00-593000	4259-3	123
142-XX-XXX-00-594000	4259-4	123
146-XX-XXX-41-012000	4612	97
146-XX-XXX-41-013000	4613	97
150-XX-XXX-00-001000	0290	116
150-10-XXX-00-106000	3404	124
151-10-XXX-00-003000	5503	120
151-10-XXX-00-004000	5504	120
151-10-XXX-00-005000	5505	120
151-10-XXX-00-009000	5509	121
151-10-XXX-00-010000	5510	121
151-10-XXX-00-011000	5511	121
153-XX-XXX-00-001000	5301	116
160-XX-XXX-00-001000	0282	117
162-XX-XXX-00-001000	1106-2	117
162-XX-XXX-00-180000	6218	127
162-XX-XXX-30-180000	6218	128
163-XX-XXX-00-001000	1106-3	117
170-XX-XXX-00-001000	0700	118
173-XX-XXX-00-001000	0730-3	118
180-XX-XXX-00-001000	8000	119
182-XX-XXX-00-001000	8301-2	119
183-XX-XXX-00-001000	8301-3	119
210-XX-XXX-41-001000	1001	99
210-XX-XXX-41-101000	1001	101
210-XX-XXX-41-105000	1005	105
210-XX-XXX-41-105799	1005	105
214-XX-XXX-01-670799	1434	108
214-XX-XXX-01-670800	1434	108
217-XX-764-41-005000	1802	125
222-XX-XXX-41-001000	0089-2	99
223-XX-XXX-41-001000	0088-3	99
223-XX-XXX-41-101000	0038-3	102
227-XX-764-41-002000	1702-2	125
227-XX-764-41-003000	1703-3	125
296-XX-010-30-691800	4077/4078	133
296-XX-010-30-692800	4077/4078	133
299-XX-XXX-10-001000	1103/0903	129
299-XX-XXX-10-002000	1103/0904	129
299-XX-XXX-11-001000	1103/1610	129
299-XX-210-12-001800	1002-X	133
301-43-1XX-41-560000	0156/1001	46
304-XX-1XX-41-770000	0477	73
304-XX-1XX-41-780000	0478	73
310-XX-1XX-40-023000	1023	50
310-XX-1XX-41-001000	1001	46,65
310-XX-1XX-41-105000	1005	51
310-XX-1XX-41-107000	1005	51
311-XX-1XX-41-001000	0134	65
315-XX-1XX-41-001000	0501	65
315-XX-1XX-41-003000	1534	65
316-XX-1XX-41-001000	0153-5	67
316-XX-1XX-41-003000	0153-2	67
316-XX-1XX-41-006000	0153-1	67
316-XX-1XX-41-007000	0153-3	67
316-XX-1XX-41-008000	0153-4	67
317-XX-121-41-005000	1802	125
317-XX-121-41-105000	1802	126
319-10-1XX-00-001000	1942	20
319-10-1XX-00-002000	1940	20
319-10-1XX-00-005000	1938	20
319-10-1XX-30-041000	1941	20
321-13-1XX-41-001000	0040-1	69
322-XX-1XX-41-001000	0089-2	69
323-XX-1XX-41-001000	0088-3	69
324-XX-1XX-41-002000	0086-4	69
326-XX-1XX-41-001000	2601	71
326-XX-1XX-41-002000	2602	71
326-XX-1XX-41-003000	2603	71
327-XX-121-41-002000	1702-2	125
327-XX-121-41-003000	1703-3	125

INDEX

NUMERICAL LISTING AND LOCATION OF MILL-MAX SOCKET ASSEMBLY NUMBERS WITH REFERENCE TO MILL-MAX PINS

MILL-MAX SOCKET ASSEMBLY NUMBER	MILL-MAX PIN # REF.	PAGE #
329-XX-1XX-41-540000	2954	48
329-10-1XX-00-560000	2956-1	49
330-10-1XX-00-240000	3024	20
334-XX-1XX-00-000000	3400	81
334-XX-1XX-00-010000	3401	81
334-XX-1XX-00-020000	3402	81
334-XX-1XX-00-050000	3405	81
334-XX-1XX-00-100000	3410	81
335-XX-1XX-00-160000	3516	78
340-XX-1XX-30-780100	4078	41,49
342-XX-1XX-00-591000	4259-1	82
342-XX-1XX-00-592000	4259-2	82
342-XX-1XX-00-593000	4259-3	82
342-XX-1XX-00-594000	4259-4	82
346-XX-1XX-41-012000	4612	73
346-XX-1XX-41-013000	4613	73
349-10-1XX-00-560000	4956-1	59
350-XX-1XX-00-001000	0290	52,84
350-XX-1XX-00-006000	3404	46
350-XX-1XX-00-106000	3404	51
350-XX-1XX-00-107000	3404	51
351-10-1XX-00-003000	5503	79
351-10-1XX-00-004000	5504	79
351-10-1XX-00-005000	5505	79
351-10-1XX-00-009000	5509	79
351-10-1XX-00-010000	5510	79
351-10-1XX-00-011000	5511	79
351-10-1XX-40-002000	5102	50
353-XX-1XX-00-001000	5301	86
360-XX-1XX-00-001000	0282	84
362-XX-1XX-00-001000	1106-2	86
363-XX-1XX-00-001000	1106-3	86
364-10-1XX-00-580000	6458	78
370-XX-1XX-00-001000	0700	84
373-XX-1XX-00-001000	0730-3	86
380-XX-1XX-00-001000	8000	48,84
382-XX-1XX-00-001000	8301-2	86
383-XX-1XX-00-001000	8301-3	86
388-XX-102-11-740799	8874	152
388-XX-102-11-740800	8874	152
395-XX-101-03-380000	8433	151
395-XX-101-07-350000	8994	151
395-XX-101-34-340000	8993	151
399-XX-1XX-10-003000	1103	46
399-10-1XX-10-008000	1940	20
399-XX-1XX-10-009000	5011	46
399-XX-0XX-21-300000	9930	41
399-XX-0XX-00-310000	9931	41
410-XX-2XX-10-001000	1001	134
410-XX-2XX-10-002000	1001	134
410-XX-2XX-41-001000	1001	47,66
410-XX-2XX-41-105000	1005	51
411-XX-2XX-41-001000	0134	66
414-XX-2XX-41-117000	1434	49
415-XX-2XX-41-001000	0501	66
415-XX-2XX-41-003000	1534	66
416-XX-2XX-41-001000	0153-5	68
416-XX-2XX-41-003000	0153-2	68

MILL-MAX SOCKET ASSEMBLY NUMBER	MILL-MAX PIN # REF.	PAGE #
416-XX-2XX-41-006000	0153-1	68
416-XX-2XX-41-007000	0153-3	68
416-XX-2XX-41-008000	0153-4	68
419-10-2XX-00-001000	1942	21
419-10-2XX-00-002000	1940	21
419-10-2XX-00-005000	1938	21
419-10-2XX-30-041000	1941	21
421-XX-2XX-41-001000	0040-1	70
422-XX-2XX-41-001000	0089-2	70
423-XX-2XX-41-001000	0088-3	70
424-XX-2XX-41-002000	0086-4	70
426-XX-2XX-41-001000	2601	72
426-XX-2XX-41-002000	2602	72
426-XX-2XX-41-003000	2603	72
429-XX-2XX-41-540000	2954	48
429-10-2XX-00-560000	2956-0	49
430-10-2XX-00-240000	3024	21
435-XX-2XX-00-160000	3516	78
442-XX-2XX-00-591000	4259-1	83
442-XX-2XX-00-592000	4259-2	83
442-XX-2XX-00-593000	4259-3	83
442-XX-2XX-00-594000	4259-4	83
446-XX-2XX-41-012000	4612	74
446-XX-2XX-41-013000	4613	74
449-10-2XX-00-560000	4956-1	59
450-XX-2XX-00-001000	0290	52,85
450-XX-2XX-00-006000	3404	47
450-XX-2XX-00-106000	3404	51
451-10-2XX-00-003000	5503	80
451-10-2XX-00-004000	5504	80
451-10-2XX-00-005000	5505	80
451-10-2XX-00-009000	5509	80
451-10-2XX-00-010000	5510	80
451-10-2XX-00-011000	5511	80
453-10-2XX-00-001000	5301	87
460-XX-2XX-00-001000	0282	85
463-XX-2XX-00-001000	1106-3	87
464-10-2XX-00-580000	6458	78
470-XX-2XX-00-001000	0700	85
473-XX-2XX-00-001000	0730-3	87
480-10-2XX-00-001000	8000	48,85
483-XX-2XX-00-001000	8301-3	87
499-XX-2XX-10-003000	1103/1602	47
499-10-2XX-10-008000	1938/1940	21
499-10-2XX-10-009000	5011/5113	47
507-10-XXX-XX-XXX437	0737	140
510-XX-XXX-XX-XXX00X	1001	138
511-XX-XXX-XX-XXX00X	0134	138
513-XX-XXX-XX-XXX085	1385	138
514-XX-XXX-XX-XXX034	1434	138
515-XX-XXX-XX-XXX00X	0501	138
518-XX-XXX-XX-XXX00X	180X	138
522-XX-XXX-XX-XXX00X	0089-2	138
523-XX-XXX-XX-XXX00X	0088-3	138
540-10-XXX-XX-XXX448	4048	142
540-10-XXX-XX-XXX454	4054	142
540-10-XXX-XX-XXX498	4098	142
540-44-XXX-17-40000X	N/A	145

INDEX

NUMERICAL LISTING AND LOCATION OF MILL-MAX SOCKET ASSEMBLY NUMBERS WITH REFERENCE TO MILL-MAX PINS

MILL-MAX SOCKET ASSEMBLY NUMBER	MILL-MAX PIN # REF.	PAGE #
550-XX-XXX-XX-XXX012	5012	140
551-XX-XXX-XX-XXX003	5503	140
551-XX-XXX-XX-XXX004	5504	140
551-XX-XXX-XX-XXX005	5505	140
579-10-XXX-XX-XXX429	7929	142
582-11-XXX-XX-XXX414	8214	142
587-10-XXX-XX-XXX437	8737	142
594-XX-020-01-007032	8857-X	133
599-11-XXX-XX-XXX428	9928	142
599-10-XXX-XX-XXX429	9929	142
599-11-XXX-XX-XXX442	9942	142
599-XX-XXX-XX-XXX476	9976	140
605-XX-XXX-11-480000	0548	114
605-XX-XXX-XX-XXX048	0548	139
612-XX-XXX-41-001000	0255	112
612-XX-XXX-41-002000	8855	112
612-XX-XXX-41-003000	0135	112
612-XX-XXX-41-004000	0132	112
614-XX-XXX-31-002000	0442	115
614-XX-XXX-31-007000	1407	114
614-XX-XXX-31-012000	0552-1	115
614-XX-XXX-31-018000	0552-2	115
614-XX-XXX-41-001000	1401	113
614-XX-XXX-XX-XXX007	1407	139
614-XX-XXX-XX-XXX012	0552-1	139
614-XX-XXX-XX-XXX0XX	1401	139
712-XX-XXX-41-001000	0255	75
714-XX-XXX-31-007000	1407	76
714-XX-XXX-31-012000	0552-1	77
714-XX-XXX-31-018000	0552-2	77
714-XX-XXX-41-001000	1401	76
800-XX-0XX-10-001000	7007	54
800-XX-0XX-10-002000	5016	53
800-XX-0XX-10-004000	3077	62
800-XX-0XX-10-007000	1107	61
800-10-0XX-10-052000	5016	58
800-XX-0XX-20-001000	5005	54
800-10-0XX-20-201000	5005	64
800-10-0XX-30-001000	7007	59
800-10-0XX-30-052000	5016	58
800-10-0XX-40-002000	1502	50
800-XX-0XX-61-001000	5601	56
800-10-0XX-61-051000	5607	58
800-XX-0XX-62-001000	5602	56
801-XX-0XX-10-001000	1304	54
801-XX-0XX-10-002000	1303	53
801-XX-0XX-10-003000	1303	52
801-XX-0XX-10-004000	1313	62
801-13-0XX-10-007000	1134	61
801-XX-0XX-10-012000	1303	53
801-XX-0XX-10-013000	1303	52
801-43-0XX-10-201000	1304	64
801-43-0XX-10-212000	1303	64
801-XX-0XX-20-001000	1305	54
801-43-0XX-20-201000	1305	64
801-43-0XX-30-001000	1304	59
801-XX-0XX-40-002000	1303	50
801-XX-0XX-61-001000	4614	56
801-XX-0XX-62-001000	4615	56
802-XX-0XX-10-001000	7007	55
802-XX-0XX-10-002000	5016	53
802-XX-XXX-10-004000	3077	62
802-XX-0XX-10-007000	1107	61
802-10-0XX-10-052000	5016	58
802-XX-0XX-20-001000	5005/5107	55
802-10-0XX-30-001000	7007	59
802-10-0XX-30-052000	5016	58
802-XX-0XX-61-001000	5601	57
802-10-0XX-61-051000	5607	58
802-XX-0XX-62-001000	5602	57
803-XX-XXX-10-001000	1304	55
803-XX-0XX-10-002000	1303	53
803-XX-0XX-10-003000	1303	52
803-XX-XXX-10-004000	1313	62
803-13-0XX-10-007000	1134	61
803-XX-XXX-20-001000	1305/1306	55
803-XX-XXX-30-001000	1304	59
803-XX-XXX-61-001000	4614	57
803-XX-XXX-62-001000	4615	57
804-10-0XX-10-002000	5016	60
805-43-0XX-10-012000	1303	60
810-22-0XX-40-001101	0916-0	10
811-22-0XX-30-00X101	0900-X	07
811-22-00X-30-00X191	0900-X	12
812-22-0XX-30-00X101	0907-X	08
812-22-0XX-30-01X101	0907-X/0908-X	11
812-22-00X-30-00X191	0907-X	12
813-22-0XX-30-00X101	0900-X	07
813-22-0XX-30-00X191	0900-X	12
814-22-0XX-30-00X101	0907-X	08
814-22-0XX-30-01X101	0907-X/0908-X	11
814-22-0XX-30-00X191	0907-X	12
815-22-0XX-30-001101	0965	06
816-22-0XX-10-00X101	0908-X	15
817-22-0XX-30-001101	0965	06
818-22-0XX-10-00X101	0908-X	15
819-22-0XX-30-001101	0913-0	09
820-22-0XX-30-001101	0913-0	09
821-22-0XX-10-00X101	0906-X	13
823-22-0XX-10-00X101	0906-X	13
824-22-0XX-00-001000	0933	17
825-22-0XX-10-001101	0914	14
826-22-0XX-00-001000	0933	17
827-22-0XX-10-001101	0914	14
829-22-0XX-20-00X101	0929, 0970	16
830-XX-0XX-10-001000	5012	43
830-XX-0XX-20-001000	3790	45
830-XX-0XX-30-001000	6218	44
830-XX-0XX-30-002000	6218	44
831-XX-0XX-10-001000	1802	43
831-XX-0XX-20-001000	1805	45
831-XX-0XX-30-001000	1802	44
831-XX-0XX-30-002000	1802	44
832-XX-XXX-10-001000	5012	43
832-XX-XXX-20-001000	3790/3796	45
832-XX-XXX-30-001000	6218	44

INDEX

NUMERICAL LISTING AND LOCATION OF MILL-MAX SOCKET ASSEMBLY NUMBERS WITH REFERENCE TO MILL-MAX PINS

MILL-MAX SOCKET ASSEMBLY NUMBER	MILL-MAX PIN # REF.	PAGE #
833-XX-XXX-10-001000	1802	43
833-43-XXX-20-001000	1805/3805	45
833-XX-XXX-30-001000	1802	44
834-XX-0XX-10-001000	3435	63
835-XX-0XX-10-001000	3435	63
850-XX-0XX-10-001000	4006-0	34
850-XX-0XX-20-001000	4006-1	36
850-XX-0XX-30-001000	4006-0	37
850-XX-0XX-30-002000	4006-0	37
850-10-0XX-40-001000	4006-1	40
851-XX-0XX-10-001000	4890-0	34
851-XX-0XX-10-002000	0467	34
851-XX-0XX-10-011000	4890-1	35
851-XX-0XX-10-021000	4890-2	35
851-XX-0XX-20-001000	4890-1	36
851-XX-0XX-30-001000	4890-0	37
851-XX-0XX-30-002000	4890-0	37
851-XX-0XX-40-001000	4890-1	40
852-XX-XXX-10-001000	4006-0	34
852-XX-XXX-20-001000	4006-1/2	36
852-XX-XXX-30-001000	4006-0	37
853-XX-XXX-10-001000	4890-0	34
853-XX-XXX-10-011000	4890-1	35
853-XX-XXX-10-021000	4890-2	35
853-XX-XXX-20-001000	4890-1/2	36
853-XX-XXX-30-001000	4890-0	37
854-22-0XX-10-001101	0950-0	18
854-22-0XX-30-001101	0951-0	19
855-22-0XX-10-001101	0950-0	18
855-22-0XX-30-001101	0951-0	19
856-10-0XX-10-051000	1933	22
856-10-0XX-30-051000	1935	22
857-10-0XX-10-051000	1933	22
857-10-0XX-30-051000	1935	22
860-10-0XX-10-002000	3039	33
861-13-0XX-10-002000	0439	33
862-XX-121-00-180000	6218	127
862-10-121-30-180000	6218	128
870-10-0XX-20-001000	3790	42
871-XX-0XX-20-001000	1805	42
891-10-064-30-120000	N/A	32
893-43-064-30-420000	N/A	32
896-43-004-00-000000	N/A	148
896-43-004-90-000000	N/A	148
896-43-005-40-100001	N/A	150
896-43-008-90-000000	N/A	148
896-46-009-90-300000	N/A	147
897-43-004-90-000000	N/A	148
897-43-005-00-100001	N/A	150
897-46-009-90-300000	N/A	147
897-10-010-00-300002	N/A	149
897-10-010-40-300002	N/A	149
917-XX-XXX-41-001000	1701	136
917-XX-XXX-41-001799	1701	136
917-XX-XXX-41-005000	1705	136
940-44-XXX-17-40000X	N/A	143
940-44-XXX-24-000000	N/A	144
999-11-XXX-10-000000	N/A	152

INDEX

NUMERICAL LISTING AND LOCATION OF MILL-MAX PINS

PART #	PAGE #	PART #	PAGE #	PART #	PAGE #	PART #	PAGE #	PART #	PAGE #	PART #	PAGE #
0038	198	0309	177	0381	189	0553	157	0921	24	1092	228
0039	198	0312	183	0382	201	0554	157	0922	25	1093	228
0040	198	0314	183	0383	201	0555	163	0925	23	1094	225
0066	198	0315	214	0384	197	0556	166	0926	24	1095	226
0067	198	0316	183	0385	170	0558	163	0927	23	1096	228
0068	198	0317	183	0387	192	0560	160	0928	23	1097	226
0086	198	0318	226	0388	194	0566	157	0929	25	1103	166
0088	198	0319	181	0389	194	0569	158	0930	25	1104	168
0089	198	0321	197	0390	194	0574	161	0932	25	1105	190
0132	165	0322	182	0391	192	0577	196	0933	27	1106	228
0133	165	0323	182	0393	192	0579	159	0934	23	1107	218
0134	165	0324	182	0394	192	0600	215	0936	23	1109	165
0135	165	0325	182	0395	193	0613	159	0940	219	1110	225
0136	166	0326	174	0396	174	0616	192	0952	211	1122	228
0137	166	0327	183	0397	173	0660	163	0956	25	1124	225
0138	166	0328	183	0398	173	0664	174	0959	24	1130	210
0139	166	0329	184	0399	177	0665	163	0962	27	1134	177
0141	166	0330	177	0400	179	0666	164	0965	24	1147	159
0145	166	0331	181	0401	180	0667	163	0967	26	1179	207
0146	166	0332	197	0405	182	0668	164	0977	24	1210	225
0147	165	0333	183	0407	175	0669	164	0980	24	1212	226
0148	166	0334	183	0415	175	0670	164	0985	27	1213	226
0149	162	0335	179	0433	188	0671	161	0990	26	1214	226
0152	166	0336	182	0434	188	0672	168	0995	221	1215	225
0153	167	0337	197	0435	188	0673	164	0997	26	1216	226
0156	165	0338	172	0436	188	0675	163	1001	165	1221	225
0240	168	0339	172	0439	156	0676	164	1005	166	1222	225
0252	164	0340	183	0442	157	0677	163	1010	225	1261	167
0253	164	0341	164	0444	199	0678	164	1011	225	1267	210
0255	165	0342	188	0445	199	0679	163	1012	225	1302	226
0257	211	0343	184	0447	166	0680	162	1013	166	1303	180
0259	218	0344	182	0461	158	0682	163	1020	225	1304	177
0265	216	0345	183	0462	160	0697	164	1021	225	1305	179
0270	216	0347	184	0463	160	0700	216	1022	225	1306	179
0272	216	0348	182	0464	156	0703	161	1023	171	1313	181
0273	175	0349	182	0466	160	0707	161	1024	168	1334	171
0275	216	0350	193	0467	158	0730	228	1030	198, 226	1385	170
0279	177	0351	183	0468	161	0739	185	1031	198, 226	1401	170
0280	200	0353	197	0477	162	0814	184	1032	198, 226	1407	157
0281	200	0354	187	0478	162	0850	28	1033	164	1434	162
0282	216	0355	187	0479	197	0851	28	1034	198	1502	224
0284	175	0356	184	0489	160	0852	28	1035	198	1508	224
0285	175	0357	183	0490	192	0853	28	1036	198	1534	161
0286	218	0358	184	0491	192	0854	28	1038	167	1602	167
0287	175	0359	184	0492	189	0855	28	1040	198	1610	167
0290	215	0360	184	0493	192	0856	28	1045	198	1701	171
0291	175	0362	189	0496	190	0900	23	1047	199	1702	198
0292	173	0363	189	0498	168	0901	25	1052	201	1703	198
0293	175	0364	189	0501	162	0903	167	1053	201	1705	168
0294	173	0365	189	0504	212	0904	167	1064	228	1706	168
0295	173	0366	189	0505	212	0905	23	1065	163	1707	168
0297	173	0367	189	0512	161	0906	25	1066	163	1752	213
0298	174	0368	190	0520	223	0907	23	1067	211	1753	168
0300	177	0370	192	0522	211	0908	25	1068	228	1762	168
0301	177	0372	189	0529	156	0910	26	1070	228	1782	170
0303	175	0373	183	0542	211	0912	217	1071	228	1801	165
0305	177	0375	197	0548	157	0913	23	1072	228	1802	169
0306	175	0376	197	0550	161	0914	25	1083	227	1803	169
0307	168	0378	172	0552	158	0915	211	1090	227	1804	169

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

INDEX

NUMERICAL LISTING AND LOCATION OF MILL-MAX PINS

PART #	PAGE #	PART #	PAGE #	PART #	PAGE #	PART #	PAGE #	PART #	PAGE #	PART #	PAGE #
1805	169	2362	241	2817	236	3150	220	4040	192	5503	214
1806	169	2365	232	2821	231	3151	219	4064	188	5504	214
1807	169	2381	207	2954	171	3152	223	4068	204	5505	214
1808	169	2400	179	2956	218	3153	221	4071	205	5509	214
1873	176	2501	235	3000	218	3154	211	4078	167	5510	212
1933	213	2502	242	3006	208	3155	209	4095	180	5511	212
1935	213	2503	233	3013	165	3156	246	4184	204	5522	158
1938	218	2505	232	3016	157	3157	211	4194	209	5531	159
1940	218	2506	232	3018	170	3158	211	4209	205	5552	160
1941	218	2507	241	3024	218	3159	222	4259	212	5556	209
1942	218	2508	234	3039	208	3169	212	4268	206	5601	220
2086	158	2510	230	3044	189	3185	170	4280	197	5602	220
2101	231	2511	242	3061	159	3210	210	4286	163	5607	213
2102	229	2512	236	3077	215	3221	221	4288	204	5650	176
2103	238	2513	230	3100	185	3222	221	4310	170	5660	166
2104	238	2514	245	3101	221	3223	221	4353	204	5739	161
2105	238	2515	242	3102	221	3230	222	4361	204	5834	190
2106	238	2516	242	3103	221	3231	223	4366	210	5960	170
2107	238	2517	239	3104	221	3232	222	4378	166	5970	162
2108	229	2520	239	3105	221	3233	223	4428	196	6002	172
2109	229	2524	234	3106	221	3301	219	4477	206	6021	176
2110	231	2526	241	3110	220	3302	219	4526	221	6023	158
2111	229	2530	246	3111	220	3303	219	4582	190	6092	206
2112	238	2533	231	3112	217	3304	219	4612	162	6095	206
2113	229	2551	234	3113	219	3400	215	4613	162	6142	207
2115	244	2561	234	3114	217	3401	215	4614	179	6192	159
2297	200	2601	199	3115	217	3402	215	4615	179	6214	158
2301	232	2602	199	3116	210	3404	212	4622	169	6218	208
2302	241	2603	199	3117	217	3405	215	4689	204	6252	169
2303	239	2617	213	3118	217	3406	214	4825	204	6401	180
2304	233	2650	205	3119	217	3408	216	4890	160	6458	213
2305	233	2701	243	3120	221	3409	214	4900	191	6477	206
2306	233	2702	235	3121	208	3410	215	4956	218	6547	205
2307	233	2703	235	3122	221	3411	215	4964	205	6585	212
2308	230	2704	233	3123	221	3413	213	4965	205	6628	181
2309	245	2705	236	3124	221	3435	197	4993	156	6659	184
2310	232	2706	246	3125	221	3450	181	4994	160	6800	185
2311	233	2707	230	3126	221	3490	187	5005	215	6821	220
2312	230	2708	231	3128	208	3516	212	5011	214	6857	179
2313	246	2709	244	3129	210	3520	181	5012	208	7007	215
2314	242	2710	235	3130	219	3601	223	5016	215	7009	172
2315	241	2713	235	3131	217	3602	217	5035	205	7065	163
2316	231	2715	243	3132	220	3603	216	5059	184	7132	167
2317	231	2717	235	3133	223	3609	223	5062	206	7305	179
2318	245	2762	243	3134	219	3620	219	5063	205	7310	224
2319	246	2801	237	3135	210	3621	219	5102	224	7405	181
2320	239	2802	237	3136	220	3667	190	5107	215	7406	181
2321	246	2803	236	3137	220	3790	209	5113	214	7491	160
2322	239	2804	237	3138	223	3796	209	5137	204	7520	175
2323	239	2805	237	3139	217	3802	169	5155	209	7553	159
2324	229	2806	237	3140	221	3805	169	5231	224	7614	179
2325	232	2807	243	3141	221	3808	187	5240	205	7827	210
2326	244	2808	243	3142	222	3907	170	5275	225	7937	224
2328	239	2809	243	3144	223	4001	170	5280	197	8000	216
2329	230	2810	234	3145	222	4006	208	5295	174	8006	216
2333	231	2811	237	3146	222	4011	165	5301	227	8016	193
2348	232	2812	234	3147	210	4015	196	5342	171	8067	190
2352	241	2815	236	3148	220	4030	169	5359	196	8086	207
2355	232	2816	236	3149	221	4034	189	5435	210	8114	175

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

INDEX

NUMERICAL LISTING AND LOCATION OF MILL-MAX PINS

PART #	PAGE #	PART #	PAGE #	PART #	PAGE #	PART #	PAGE #	PART #	PAGE #	PART #	PAGE #
8131	168	8954	222								
8206	185	8955	222								
8210	156	8963	194								
8252	167	8964	171								
8257	205	8969	209								
8300	177	8975	157								
8301	227	8979	209								
8303	180	8995	213								
8330	206	8996	191								
8331	181	9000	211								
8360	184	9016	192								
8363	169	9019	173								
8365	191	9022	207								
8401	179	9036	209								
8404	213	9039	173								
8427	162	9050	204								
8433	188	9051	209								
8445	167	9064	191								
8451	206	9075	213								
8467	159	9081	208								
8553	157	9083	204								
8579	158	9086	206								
8600	222	9092	224								
8602	244	9101	176								
8608	227	9113	204								
8637	157	9137	204								
8679	176	9159	209								
8685	209	9184	187								
8730	190	9185	205								
8806	180	9214	192								
8808	205	9218	213								
8815	220	9222	187								
8827	176	9225	156								
8829	190	9228	206								
8830	169	9234	166								
8831	244	9265	207								
8835	244	9280	191								
8836	244	9293	174								
8837	193	9324	189								
8838	185	9353	181								
8852	170	9354	181								
8853	185	9359	184								
8855	171	9363	171								
8857	171	9372	190								
8859	212	9393	179								
8862	171	9401	190								
8864	174	9407	159								
8866	169	9462	159								
8874	159	9548	157								
8876	218	9553	159								
8877	171	9801	190								
8885	208	9808	176								
8894	161	9872	207								
8898	166	9970	162								
8919	215	9976	216								
8940	211										
8947	156										
8952	222										
8953	222										

SPECIAL FEATURE QUICK REFERENCE GUIDE

CATEGORIES	SPRING-LOADED CONNECTORS	INTERCONNECTS	IC SOCKETS TO SOCKETS	IO SOCKETS
Vertical SMT 	Pages 6, 7, 8, 9, 11, 12, 19, 20, 21, 22	Pages 32, 37, 41, 44, 49, 51, 58, 59	Pages 104, 105, 106, 107, 108, 124, 126, 128, 136, 138, 140, 142, 143, 145	Pages 149, 152
Horizontal SMT 	Page 10	Pages 38, 39, 40, 50	Page 133	Pages 148, 149, 150
Compliant Tail 	N/A	Pages 56, 57, 58, 73, 74	Page 97	N/A
Right Angle 	Pages 16, 20, 21	Pages 36, 42, 45, 46, 47, 54, 55, 64	Pages 129, 133	Page 151
Soldercup 	Pages 17, 20, 21	Pages 48, 61, 84, 85, 86, 87	Page 119	N/A
Turret 	N/A	Pages 84, 85, 86, 87	Page 118	N/A
Slotted 	N/A	Pages 84, 85, 86, 87	Page 117	N/A
Wrapost 	N/A	Pages 69, 70, 71, 72, 86, 87	Pages 98, 99, 102, 109, 110, 116, 117, 118, 119, 125, 138	N/A

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPECIAL FEATURE QUICK REFERENCE GUIDE

CATEGORIES	SPRING-LOADED PINS	PIN RECEPTACLES (Pin Acceptance Range)				MALE PCB PINS
		.008-.025	.026-.040	.041-.064	.065-.102	
Vertical SMT 	Pages 23, 24, 26	Pages 159, 167	N/A	Page 187	N/A	Pages 216, 218, 224
Horizontal SMT 	Page 26	Pages 161, 170	Pages 180, 181, 185	Page 188	N/A	Page 224
Compliant Tail 	N/A	Pages 156, 160, 162, 170	Page 179	Page 191	Page 194	Pages 213, 220
Soldercup 	Pages 27, 28	Pages 159, 168, 171	Pages 177, 181	Page 181	Page 192	Pages 216, 218, 227
Crimp Barrel 	Pages 27, 28	Pages 159, 168, 172	Pages 172, 174, 175, 182	Pages 182, 190	Pages 190, 192	Pages 216, 217, 218, 223
Turret 	N/A	Page 168	Pages 174, 175, 182, 184	Pages 182, 187, 190	Pages 190, 193, 194	Pages 216, 226, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 245, 246
Slotted 	N/A	N/A	Page 182	N/A	N/A	Pages 216, 219, 224, 228, 238, 239, 241, 242, 243
Wrapost 	N/A	Pages 198, 199	Pages 200, 201	Page 201	N/A	Pages 225, 226, 227, 228

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com