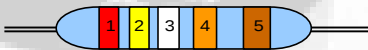


Resistance Tolerance (%)																								
E192	E96	E24	E12	E6	E192	E96	E24	E12	E6	E192	E96	E24	E12	E6	E192	E96	E24	E12	E6	E192	E96	E24	E12	E6
0.10%					0.10%					0.10%					0.10%					0.10%				
0.25%	1%	2%	10%	20%	0.25%	1%	2%	10%	20%	0.25%	1%	2%	10%	20%	0.25%	1%	2%	10%	20%	0.25%	1%	2%	10%	20%
0.50%		5%			0.50%		5%			0.50%		5%			0.50%		5%			0.50%		5%		
10.0	10.0	10	10	10	15.8	15.8	-	-	-	24.9	24.9	-	-	-	39.2	39.2	39	39	-	62.6	-	-	-	-
10.1	-	-	-	-	16.0	-	16	-	-	25.2	-	-	-	-	39.7	-	-	-	-	63.4	63.4	-	-	-
10.2	10.2	-	-	-	16.2	16.2	-	-	-	25.5	25.5	-	-	-	40.2	40.2	-	-	-	64.2	-	-	-	-
10.4	-	-	-	-	16.4	-	-	-	-	25.8	-	-	-	-	40.7	-	-	-	-	64.9	64.9	-	-	-
10.5	10.5	-	-	-	16.5	16.5	-	-	-	26.1	26.1	-	-	-	41.2	41.2	-	-	-	65.7	-	-	-	-
10.6	-	-	-	-	16.7	-	-	-	-	26.4	-	-	-	-	41.7	-	-	-	-	66.5	66.5	-	-	-
10.7	10.7	-	-	-	16.9	16.9	-	-	-	26.7	26.7	-	-	-	42.2	42.2	-	-	-	67.3	-	-	-	-
10.9	-	-	-	-	17.2	-	-	-	-	27.1	-	27	27	-	42.7	-	-	-	-	68.1	68.1	68	68	68
11.0	11.0	11	-	-	17.4	17.4	-	-	-	27.4	27.4	-	-	-	43.2	43.2	43	-	-	69.0	-	-	-	-
11.1	-	-	-	-	17.6	-	-	-	-	27.7	-	-	-	-	43.7	-	-	-	-	69.8	69.8	-	-	-
11.3	11.3	-	-	-	17.8	17.8	-	-	-	28.0	28.0	-	-	-	44.2	44.2	-	-	-	70.6	-	-	-	-
11.4	-	-	-	-	18.0	-	18	18	-	28.4	-	-	-	-	44.8	-	-	-	-	71.5	71.5	-	-	-
11.5	11.5	-	-	-	18.2	18.2	-	-	-	28.7	28.7	-	-	-	45.3	45.3	-	-	-	72.3	-	-	-	-
11.7	-	-	-	-	18.4	-	-	-	-	29.1	-	-	-	-	45.9	-	-	-	-	73.2	73.2	-	-	-
11.8	11.8	-	-	-	18.7	18.7	-	-	-	29.4	29.4	-	-	-	46.4	46.4	-	-	-	74.1	-	-	-	-
12.0	-	12	12	-	18.9	-	-	-	-	29.8	-	-	-	-	47.0	-	47	47	47	75.0	75.0	75	-	-
12.1	12.1	-	-	-	19.1	19.1	-	-	-	30.1	30.1	30	-	-	47.5	47.5	-	-	-	75.9	-	-	-	-
12.3	-	-	-	-	19.3	-	-	-	-	30.5	-	-	-	-	48.1	-	-	-	-	76.8	76.8	-	-	-
12.4	12.4	-	-	-	19.6	19.6	-	-	-	30.9	30.9	-	-	-	48.7	48.7	-	-	-	77.7	-	-	-	-
12.6	-	-	-	-	19.8	-	-	-	-	31.2	-	-	-	-	49.3	-	-	-	-	78.7	78.7	-	-	-
12.7	12.7	-	-	-	20.0	20.0	20	-	-	31.6	31.6	-	-	-	49.9	49.9	-	-	-	79.6	-	-	-	-
12.9	-	-	-	-	20.3	-	-	-	-	32.0	-	-	-	-	50.5	-	-	-	-	80.6	80.6	-	-	-
13.0	13.0	13	-	-	20.5	20.5	-	-	-	32.4	32.4	-	-	-	51.1	51.1	51	-	-	81.6	-	-	-	-
13.2	-	-	-	-	20.8	-	-	-	-	32.8	-	-	-	-	51.7	-	-	-	-	82.5	82.5	82	82	-
13.3	13.3	-	-	-	21.0	21.0	-	-	-	33.2	33.2	33	33	33	52.3	52.3	-	-	-	83.5	-	-	-	-
13.5	-	-	-	-	21.3	-	-	-	-	33.6	-	-	-	-	53.0	-	-	-	-	84.5	84.5	-	-	-
13.7	13.7	-	-	-	21.5	21.5	-	-	-	34.0	34.0	-	-	-	53.6	53.6	-	-	-	85.6	-	-	-	-
13.8	-	-	-	-	21.8	-	-	-	-	34.4	-	-	-	-	54.2	-	-	-	-	86.6	86.6	-	-	-
14.0	14.0	-	-	-	22.1	22.1	22	22	22	34.8	34.8	-	-	-	54.9	54.9	-	-	-	87.6	-	-	-	-
14.2	-	-	-	-	22.3	-	-	-	-	35.2	-	-	-	-	55.6	-	-	-	-	88.7	88.7	-	-	-
14.3	14.3	-	-	-	22.6	22.6	-	-	-	35.7	35.7	-	-	-	56.2	56.2	56	56	-	89.8	-	-	-	-
14.5	-	-	-	-	22.9	-	-	-	-	36.1	-	36	-	-	56.9	-	-	-	-	90.9	90.9	91	-	-
14.7	14.7	-	-	-	23.2	23.2	-	-	-	36.5	36.5	-	-	-	57.6	57.6	-	-	-	92.0	-	-	-	-
14.9	-	-	-	-	23.4	-	-	-	-	37.0	-	-	-	-	58.3	-	-	-	-	93.1	93.1	-	-	-
15.0	15.0	15	15	15	23.7	23.7	-	-	-	37.4	37.4	-	-	-	59.0	59.0	-	-	-	94.2	-	-	-	-
15.2	-	-	-	-	24.0	-	24	-	-	37.9	-	-	-	-	59.7	-	-	-	-	95.3	95.3	-	-	-
15.4	15.4	-	-	-	24.3	24.3	-	-	-	38.3	38.3	-	-	-	60.4	60.4	-	-	-	96.5	-	-	-	-
15.6	-	-	-	-	24.6	-	-	-	-	38.8	-	-	-	-	61.2	-	-	-	-	97.6	97.6	-	-	-
															61.9	61.9	62	-	-	98.8	-	-	-	-

STANDARD COLOR CODE



PRECISION - Have three significant-figure bands, a multiplier band and a tolerance band. Tolerances 1% or less.

GENERAL PURPOSE - Have two significant-figure bands, a multiplier band and a tolerance band. Tolerances 2% or greater.



	Nominal	Multiplier	Tolerance (%)
Black	0	1	-
Brown	1	10	1
Red	2	100	2
Orange	3	1K	-
Yellow	4	10K	-
Green	5	100K	0.5
Blue	6	1000K	0.25
Violet	7	-	0.1
Gray	8	-	-
White	9	0.001	-
Silver	-	0.01	10
Gold	-	0.1	5

SMD MARKING

Resistance value in three-digit designation system is marked on the glasscoat. Illustrated is a resistor of 15KO. Four-digit resistance designation systems is applied to RMC 1/8 and E-96 Series. For example: 1502 designated 15KO. (The last digit specifies the number of zeros.)

Part Marking Instructions - Chip Resistors



1% Marking

The nominal resistance is marked on the surface of the overcoating with the use of 4 digit markings.

0201 and 0402 are not marked.



5% Marking

The nominal resistance is marked on the surface of the overcoating with the use of 3 digit markings.

0201 and 04402 are not marked.

For shared E24/E96 values, 1% tolerance product may be marked with three digit marking instead of the standard four digit marking for all other E96 values. All E24 values available in 1% tolerance are also marked with three digit marking.

Marking Instructions for 0603 1% Chip Resistors (per EIA-J)

A two-digit number is assigned to each standard R-Value (E96) as shown in the chart below.

This is followed by one alpha character which is used as a multiplier. Each letter from "Y" - "F" represents a specific multiplier as follows:

Y = 0.1	B = 100	E = 100,000
X = 1	C = 1,000	F = 1,000,000
A = 10	D = 10,000	

EXAMPLE:

Chip Marking	Explanation	Value
01B	01 means 10.0 and B = 100	$10.0 \times 100 = 1 \text{ K ohm}$
25C	25 means 17.8 and C = 1,000	$17.8 \times 1,000 = 17.8 \text{ K ohm}$
93D	93 means 90.9 and D = 10,000	$90.9 \times 10,000 = 909 \text{ K ohm}$

E96											
1%	#	1%	#	1%	#	1%	#	1%	#	1%	#
10.0	01	14.7	17	21.5	33	31.6	49	46.4	65	68.1	81
10.2	02	15.0	18	22.1	34	32.4	50	47.5	66	69.8	82
10.5	03	15.4	19	22.6	35	33.2	51	48.7	67	71.5	83
10.7	04	15.8	20	23.2	36	34.0	52	49.9	68	73.2	84
11.0	05	16.2	21	23.7	37	34.8	53	51.1	69	75.0	85
11.3	06	16.5	22	24.3	38	35.7	54	52.3	70	76.8	86
11.5	07	16.9	23	24.9	39	36.5	55	53.6	71	78.7	87
11.8	08	17.4	24	25.5	40	37.4	56	54.9	72	80.6	88
12.1	09	17.8	25	26.1	41	38.3	57	56.2	73	82.5	89
12.4	10	18.2	26	26.7	42	39.2	58	57.6	74	84.5	90
12.7	11	18.7	27	27.4	43	40.2	59	59.0	75	86.6	91
13.0	12	19.1	28	28.0	44	41.2	60	60.4	76	88.7	92
13.3	13	19.6	29	28.7	45	42.2	61	61.9	77	90.9	93
13.7	14	20.0	30	29.4	46	43.2	62	63.4	78	93.1	94
14.0	15	20.5	31	30.1	47	44.2	63	64.9	79	95.3	95
14.3	16	21.0	32	30.9	48	45.3	64	66.5	80	97.6	96

Stackpole Electronics, Inc.
2700 Wycliff Road, Suite 410
Raleigh, NC 27607
marketing@seielect.com
www.seielect.com

Toll Free: (888) 734-7347
Tel: (919) 850-9500
Fax: (919) 850-9504