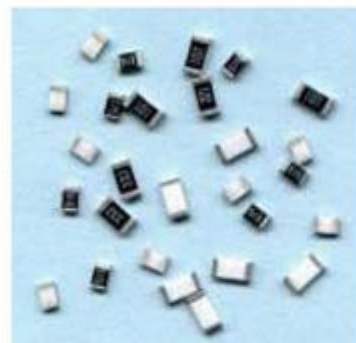


### FEATURES

- Miniature, light - weight
- Ideal for reflow and flow solder
- Low assembly cost, suit for automatic SMT equipment
- Stable properties, high reliability
- Superior mechanical and frequency characteristics



### HOW TO ORDER

RC	05	K	5	103	J	T	LF		
Product Code	Type		Resistance Temperature Coefficient		Resistance Value		Resistance Tolerance	Packaging Style	other
Chip Resistor	02 0402	Code T.C.R		E-24 : Significant figures + number of zeros	Code Tolerance	T Tape & Reel	Lead free		
	03 0603	B $\leq \pm 50\text{PPM}/^\circ\text{C}$	No. of Total Character(103=10000=5)	E-96 : No. of character + Significant figures + number of Zeros	F + 1%	B Bulk case			
	05 0805	K $\leq \pm 100\text{PPM}/^\circ\text{C}$			Example	G + 2%			
	06 1206			E-24 : 1R0 = 1.0 $\Omega$ , 103 = 10K $\Omega$	J + 5%				
	12 1210			E-96 : $\underline{\Omega}$ 1002 = 10K $\Omega$	O Jumper				
	20 2010			E-96 : $\underline{\Omega}$ 1003 = 100K $\Omega$					
	25 2512			Letter R is decimal point					
				Jumper is expressed by 000					

### STANDARD RESISTANCE SERIES

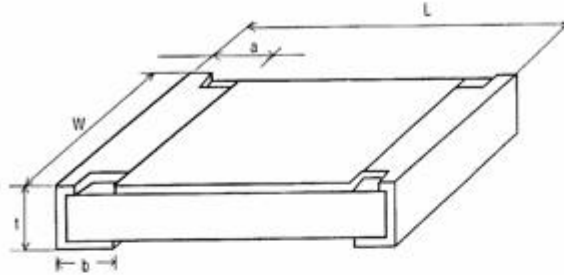
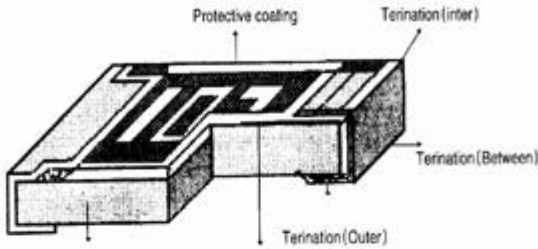
#### E-24 $\pm 5\%$

1.0	1.1	1.2	1.3	1.6	1.8	2.0	2.2	2.4	2.7	3.0
3.3	3.6	3.9	4.3	5.1	5.6	6.2	6.8	7.5	8.2	9.1

#### E-96 $\pm 1\%$

1.00	1.02	1.05	1.07	1.10	1.13	1.15	1.18	1.21	1.24	1.27	1.30
1.33	1.37	1.40	1.43	1.47	1.51	1.54	1.58	1.62	1.65	1.69	1.74
1.78	1.82	1.87	1.91	1.96	2.00	2.05	2.10	2.15	2.21	2.26	2.32
2.37	2.43	2.49	2.55	2.61	2.67	2.74	2.80	2.87	2.94	3.01	3.09
3.16	3.24	3.32	3.40	3.48	3.57	3.65	3.74	3.83	3.92	4.02	4.12
4.22	4.32	4.42	4.53	4.64	4.75	4.87	4.99	5.11	5.23	5.36	5.49
5.62	5.76	5.90	6.04	6.19	6.34	6.49	6.65	6.81	6.98	7.15	7.32
7.50	7.68	7.87	8.06	8.25	8.45	8.66	8.87	9.09	9.31	9.53	9.76

### CONSTRUCTION AND DIMENSIONS



High purity alumina substrate Resistive element

Dimensions (mm)					
Type	L	W	A	b	t
02	1.00 ± 0.05	0.50 ± 0.05	0.20 ± 0.10	0.25 <sup>+0.05</sup> / <sub>-0.010</sub>	0.35 ± 0.05
03	1.60 ± 0.15	0.80 ± 0.15	0.30 ± 0.15	0.20 ± 0.15	0.45 ± 0.10
05	2.00 ± 0.15	1.25 ± 0.15	0.40 ± 0.20	0.30 ± 0.15	0.50 ± 0.10
06	3.10 ± 0.15	1.60 ± 0.15	0.50 ± 0.20	0.40 ± 0.15	0.60 ± 0.10
12	3.10 ± 0.10	2.60 ± 0.15	0.55 ± 0.10	0.50 ± 0.25	0.50 ± 0.20
20	5.00 ± 0.10	2.50 ± 0.15	0.55 ± 0.10	0.60 ± 0.25	0.50 ± 0.20
25	6.35 ± 0.10	3.20 ± 0.15	0.55 ± 0.10	0.60 ± 0.25	0.50 ± 0.20

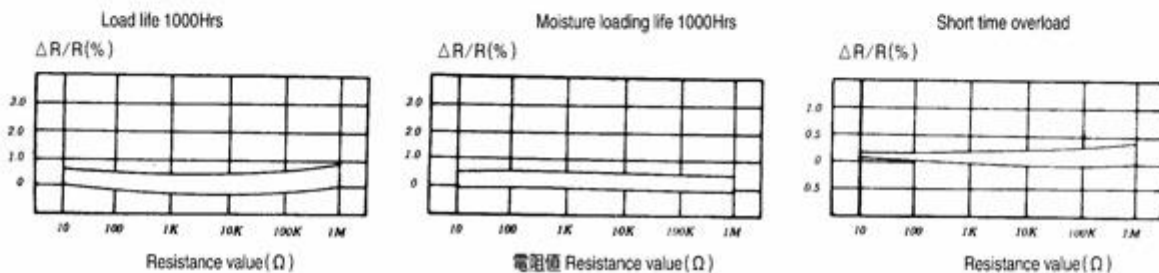
### RATED POWER

0402	0603	0805	1206	1210	2010	2512
1/16W	1/10W 1/16W	1/8W 1/10W	1/4W 1/8W	1/3W 1/4W	1/2W 3/4W	1W
50V	50V	150V	200V	200V	200V	200V
100V	100V	200V	400V	400V	400V	400V
± 1%(F) ± 2%(G) ± 5%(J)						
E-24, E-96 Series						
1A	1A	2A	2A	2A	2A	2A
50mW Max						

### CHARACTERISTICS

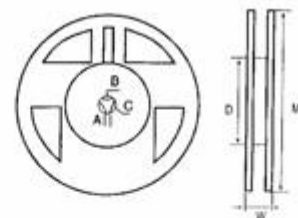
Item	1%	2% , 5%	Test Methods (JIS C 5202)
Temperature Cycling	$+(0.5\% + 0.05\Omega)$	$+(1.0\% + 0.05\Omega)$	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Short Time Over Load	$+(1\% + 0.05\Omega)$	$+(2\% + 0.1\Omega)$	Rated Voltage x 2.5 for 5 seconds
Resistance To Soldering Heat	$+(0.5\% + 0.05\Omega)$	$+(1\% + 0.05\Omega)$	$260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 10 seconds
Moisture Loading Life	$+(0.5\% + 0.05\Omega)$	$+(3\% + 0.1\Omega)$	$40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 90-95%RH 1000hrs at RCWV 1.5hrs ON, 0.5hrs OFF
Load Life	$+(1\% + 0.05\Omega)$	$+(3\% + 0.1\Omega)$	$70^{\circ}\text{C} \pm 2^{\circ}\text{C}$ , 1000hrs at RCWV 1.5hrs ON, 0.5hrs OFF
Solderability	Coverage	Coverage	$235^{\circ}\text{C} \pm 5^{\circ}\text{C}$ , for 3 seconds
Bending Strength	$+(1\% + 0.05\Omega)$	$+(1\% + 0.05\Omega)$	Bending Distance: 3mm (10 Seconds)

### CHARACTERISTICS DATA



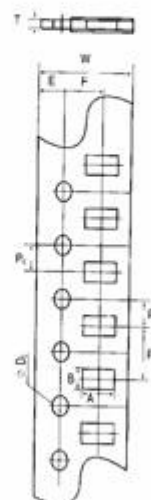
### PACKAGING

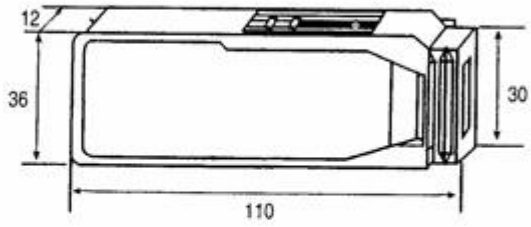
Type	A	B	W	F	E
RC-02	$1.2 \pm 0.1$	$0.7 \pm 0.1$	$8.0 \pm 0.20$	$3.5 \pm 0.05$	$1.75 \pm 0.1$
RC-03	$1.85 \pm 0.10$	$1.10 \pm 0.10$	$8.0 \pm 0.20$	$3.5 \pm 0.05$	$1.75 \pm 0.1$
RC-05	$2.35 \pm 0.15$	$1.65 \pm 0.20$	$8.0 \pm 0.20$	$3.5 \pm 0.05$	$1.75 \pm 0.1$
RC-06	$3.50 \pm 0.15$	$1.90 \pm 0.20$	$8.0 \pm 0.20$	$3.5 \pm 0.05$	$1.75 \pm 0.1$
RC-12	$3.50 \pm 0.20$	$2.80 \pm 0.20$	$8.0 \pm 0.20$	$3.5 \pm 0.05$	$1.75 \pm 0.1$
RC-20	$5.50 \pm 0.20$	$2.80 \pm 0.20$	$12.0 \pm 0.20$	$5.5 \pm 0.05$	$1.75 \pm 0.1$
RC-25	$6.70 \pm 0.20$	$3.48 \pm 0.20$	$12.0 \pm 0.20$	$5.5 \pm 0.05$	$1.75 \pm 0.1$



Type	P	P <sub>1</sub>	P <sub>2</sub>	$\Delta D_0$	T
RC-02	$2.0 \pm 0.01$	$2.0 \pm 0.05$	$4.0 \pm 0.05$	$1.5 \pm 0.10$	0.6 max
RC-03	$4.0 \pm 0.10$	$2.0 \pm 0.05$	$4.0 \pm 0.05$	$1.5 \pm 0.10$	$0.6 \pm 0.1$
RC-05	$4.0 \pm 0.10$	$2.0 \pm 0.05$	$4.0 \pm 0.05$	$1.5 \pm 0.10$	$0.75 \pm 0.1$
RC-06	$4.0 \pm 0.10$	$2.0 \pm 0.05$	$4.0 \pm 0.05$	$1.5 \pm 0.10$	$0.75 \pm 0.1$
RC-12	$4.0 \pm 0.10$	$2.0 \pm 0.05$	$4.0 \pm 0.05$	$1.5 \pm 0.10$	$0.75 \pm 0.1$
RC-20	$4.0 \pm 0.10$	$2.0 \pm 0.05$	$4.0 \pm 0.05$	$1.5 \pm 0.10$	$0.75 \pm 0.1$
RC-25	$4.0 \pm 0.10$	$2.0 \pm 0.05$	$4.0 \pm 0.05$	$1.5 \pm 0.10$	$0.75 \pm 0.1$

Type	W	M	A	B	C	D
RC-02						
RC-03						
RC-05						
RC-06	$12.5 \pm 0.5$	$178 \pm 2.0$	$2.0 \pm 0.5$	$13.5 \pm 0.5$	$21.0 \pm 0.5$	$80.0 \pm 2.0$
RC-12						
RC-20						
RC-25						





Tape & Reel (Pcs / Reel)			(Pcs / case)			
02	03, 05, 06, 12	20, 25	02	03	05	06
10000	5000	4000	50000	25000	10000	5000