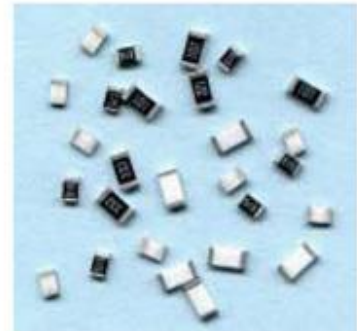


### FEATURES

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

### STANDARD RESISTANCE SERIES

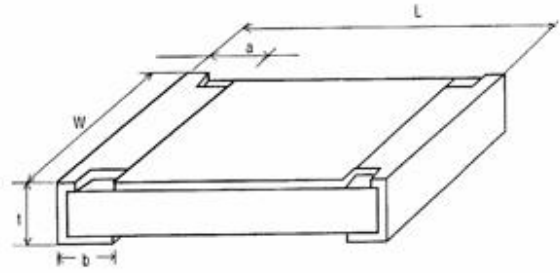
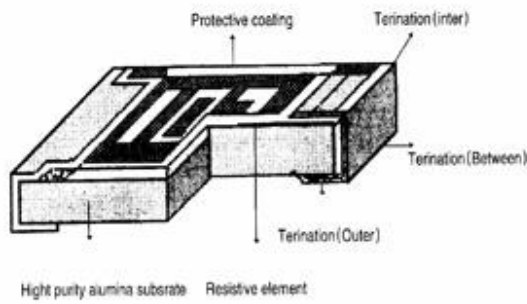
#### E-24 $\pm 5\%$

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



Dimensions (mm)					
Type	L	W	A	b	t
02	$1.00 \pm 0.05$	$0.50 \pm 0.05$	$0.20 \pm 0.10$	$0.25^{+0.05}_{-0.010}$	$0.35 \pm 0.05$
03	$1.60 \pm 0.15$	$0.80 \pm 0.15$	$0.30 \pm 0.15$	$0.20 \pm 0.15$	$0.45 \pm 0.10$
05	$2.00 \pm 0.15$	$1.25 \pm 0.15$	$0.40 \pm 0.20$	$0.30 \pm 0.15$	$0.50 \pm 0.10$
06	$3.10 \pm 0.15$	$1.60 \pm 0.15$	$0.50 \pm 0.20$	$0.40 \pm 0.15$	$0.60 \pm 0.10$
12	$3.10 \pm 0.10$	$2.60 \pm 0.15$	$0.55 \pm 0.10$	$0.50 \pm 0.25$	$0.50 \pm 0.20$
20	$5.00 \pm 0.10$	$2.50 \pm 0.15$	$0.55 \pm 0.10$	$0.60 \pm 0.25$	$0.50 \pm 0.20$
25	$6.35 \pm 0.10$	$3.20 \pm 0.15$	$0.55 \pm 0.10$	$0.60 \pm 0.25$	$0.50 \pm 0.20$

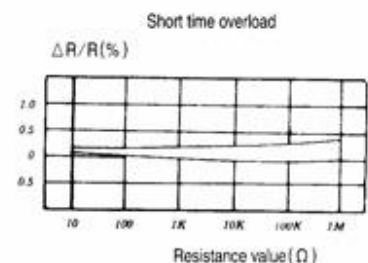
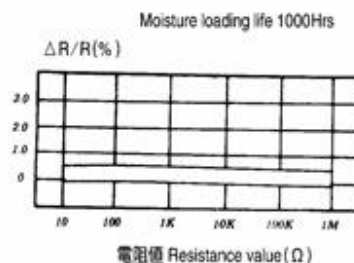
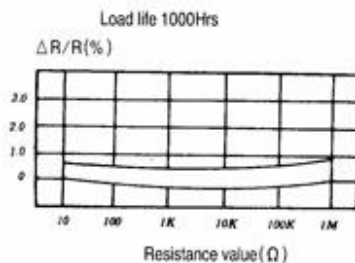
### RATED POWER

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
$\pm 1\%(F)$ $\pm 2\%(G)$ $\pm 5\%(J)$						
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% + 0.05Ω)	+ (1.0% + 0.05Ω)	-55°C ~ +125°C
Short Time Over Load	+ (1% + 0.05Ω)	+ (2% + 0.1Ω)	Rated Voltage x 2.5 for 5 seconds
Resistance To Soldering Heat	+ (0.5% + 0.05Ω)	+ (1% + 0.05Ω)	260°C ± 5°C for 10 seconds
Moisture Loading Life	+ (0.5% + 0.05Ω)	+ (3% + 0.1Ω)	40°C ± 2°C 90-95%RH 1000Hrs at RCWV 1.5Hrs ON, 0.5Hrs OFF
Load Life	+ (1% + 0.05Ω)	+ (3% + 0.1Ω)	70°C ± 2°C, 1000Hrs at RCWV 1.5Hrs ON, 0.5Hrs OFF
Solderability	Coverage	Coverage	235°C ± 5°C, for 3 seconds
Bending Strength	+ (1% + 0.05Ω)	+ (1% + 0.05Ω)	Bending Distance: 3mm (10 Seconds)

### CHARACTERISTICS DATA



### PACKAGING

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

Type	P	P <sub>1</sub>	P <sub>0</sub>	ΔD <sub>0</sub>	T
RC-02	2.0 ± 0.01	2.0 ± 0.05	4.0 ± 0.05	1.5 ± 0.10	0.6 max
RC-03	4.0 ± 0.10	2.0 ± 0.05	4.0 ± 0.05	1.5 ± 0.10	0.6 ± 0.1
RC-05	4.0 ± 0.10	2.0 ± 0.05	4.0 ± 0.05	1.5 ± 0.10	0.75 ± 0.1
RC-06	4.0 ± 0.10	2.0 ± 0.05	4.0 ± 0.05	1.5 ± 0.10	0.75 ± 0.1
RC-12	4.0 ± 0.10	2.0 ± 0.05	4.0 ± 0.05	1.5 ± 0.10	0.75 ± 0.1
RC-20	4.0 ± 0.10	2.0 ± 0.05	4.0 ± 0.05	1.5 ± 0.10	0.75 ± 0.1
RC-25	4.0 ± 0.10	2.0 ± 0.05	4.0 ± 0.05	1.5 ± 0.10	0.75 ± 0.1

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

