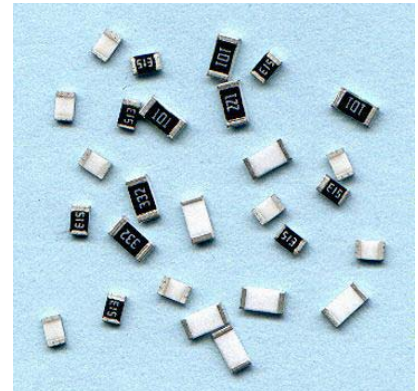


FEATURES

- 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
- This sheet is the statement of the lead-free thick film chip resistors



HOW TO ORDER

RC	05	K	103	J	T	LF		
Product Code	Type		Resistance Value		Resistance Tolerance		Packaging Style	Other
Chip Resistor	02 0402	Resistance Temperature Coefficient		E-24 : Significant figures + number of zeros	Code Tolerance		T Tape & Reel	Lead-free
	03 0603	Code T.C.R	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 E-24 : 1R0 = 1.0 Ω , 103 = 10K Ω E-96 : $\underline{5}$ 1002 = 10K Ω E-96 : $\underline{6}$ 1003 = 100K Ω Letter R is decimal point Jumper is expressed by 000	G + 2%				
	06 1206	L $\leq \pm 250\text{PPM}/^{\circ}\text{C}$		J + 5%				
	12 1210			O Jumper				
	20 2010							
	25 2512							

STANDARD RESISTANCE SERIES

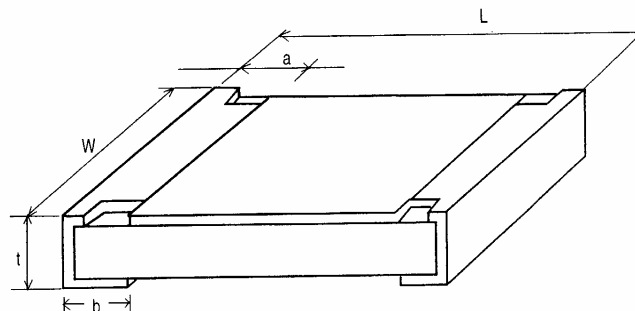
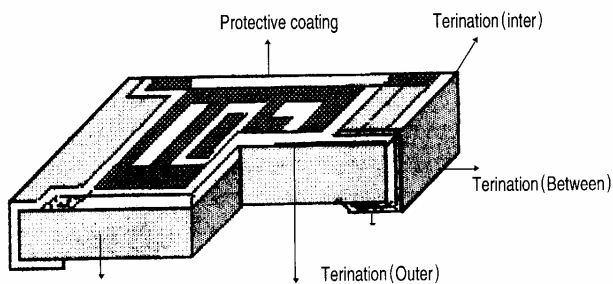
E-24 $\pm 5\%$

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 ^{+0.05} / _{-0.010}	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

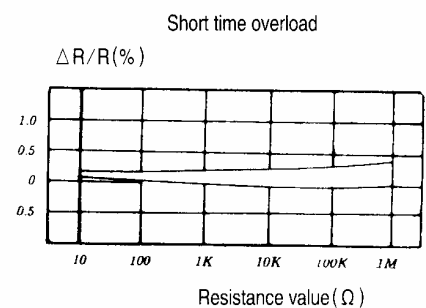
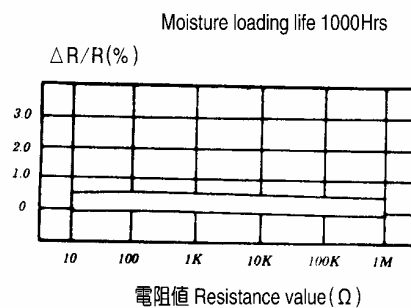
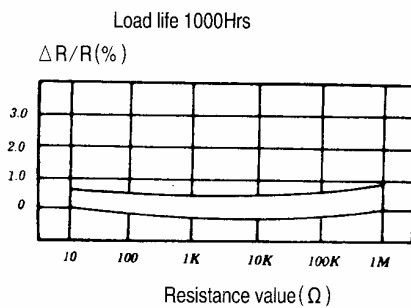
RATED POWER

0402	0603	0805	1206	1210	2010	2512
1/16W	1/10W	1/8W	1/4W	1/3W	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						
-55°C ~ +125°C						
±250ppm/°C / ±100ppm/°C						
+70°C						

CHARACTERISTICS

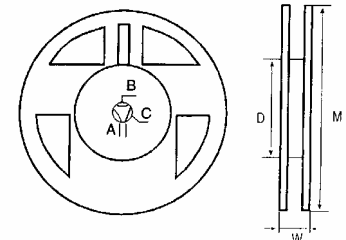
Item	1%	2% , 5%	Test Methods (JIS C 5202)
Temperature Cycling	+ (0.5% + 0.05Ω)	+ (1.0% + 0.05Ω)	-55°C ~ +125°C
Short Time Over Load	+ (1% + 0.05Ω)	+ (2% + 0.1Ω)	Rated Voltage x 2.5 for 5 seconds
Resistance To Soldering Heat	+ (0.5% + 0.05Ω)	+ (1% + 0.05Ω)	260°C ± 5°C for 10 seconds
Moisture Loading Life	+ (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



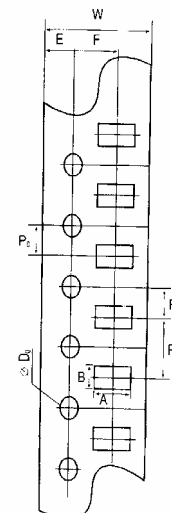
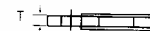
PACKAGING

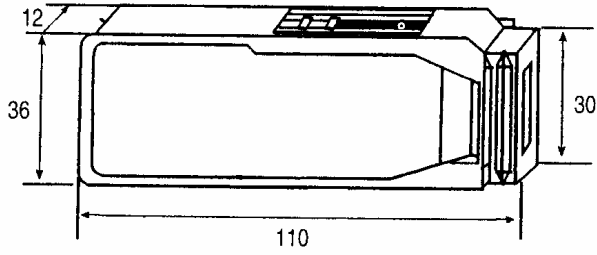
Type	A	B	W	F	E
RC-02	1.2 ± 0.1	0.7 ± 0.1	8.0 ± 0.20	3.5 ± 0.05	1.75 ± 0.1
RC-03	1.85 ± 0.10	1.10 ± 0.10	8.0 ± 0.20	3.5 ± 0.05	1.75 ± 0.1
RC-05	2.35 ± 0.15	1.65 ± 0.20	8.0 ± 0.20	3.5 ± 0.05	1.75 ± 0.1
RC-06	3.50 ± 0.15	1.90 ± 0.20	8.0 ± 0.20	3.5 ± 0.05	1.75 ± 0.1
RC-12	3.50 ± 0.20	2.80 ± 0.20	8.0 ± 0.20	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 ₁	P ₀	ΔD ₀	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						





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