

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		Total Ch.	Resistance Value		Resistance Tolerance		Packaging Style	other		
Chip Resistor	02	0402	Code	T.C.R	No.of Total Character(103=10000=5)	E-24 :	Significant figures + number of zeros		Code	Tolerance	T	Tape & Reel	Lead free
	03	0603				E-96 :	No. of character + Significant figures + number of Zeros		F	+ 1%	B	Bulk case	
	05	0805	B	$\leq \pm 50\text{PPM}/^{\circ}\text{C}$		G	+ 2%						
	06	1206	K	$\leq \pm 100\text{PPM}/^{\circ}\text{C}$		J	+ 5%						
	12	1210	Example			O	Jumper						
	20	2010	E-24 :	1R0 = 1.0Ω , 103 = 10KΩ									
	25	2512	E-96:	<u>5</u> 1002 = 10KΩ									
				E-96 :	<u>6</u> 1003 = 100KΩ								
				Letter R is decimal point									
				Jumper is expressed by 000									

STANDARD RESISTANCE SERIES

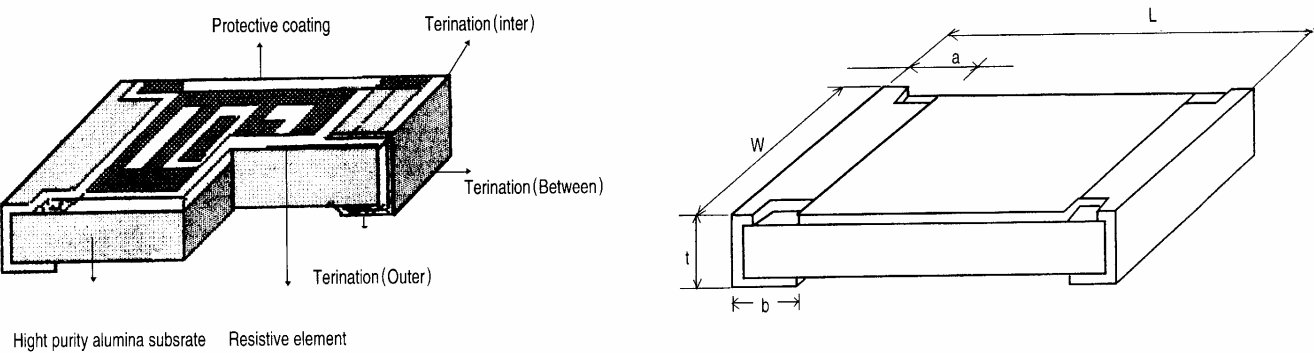
E-24 $\pm 5\%$

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 ± 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

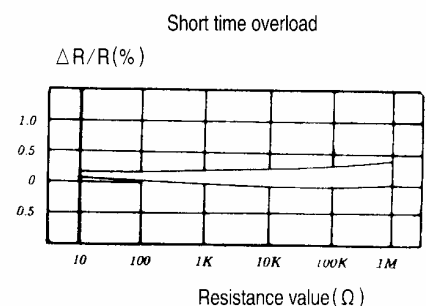
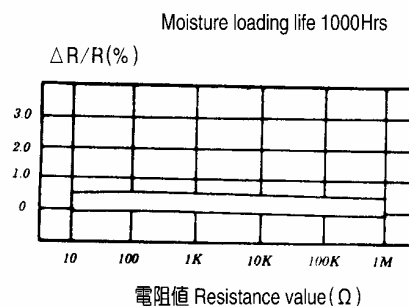
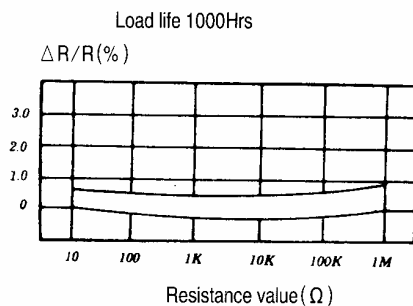
RATED POWER

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

CHARACTERISTICS

Item	1%	2% , 5%	Test Methods (JIS C 5202)
Temperature Cycling	$+(0.5\% + 0.05\Omega)$	$+(1.0\% + 0.05\Omega)$	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
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

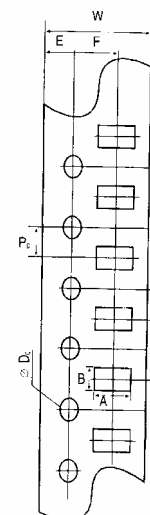
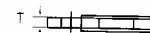
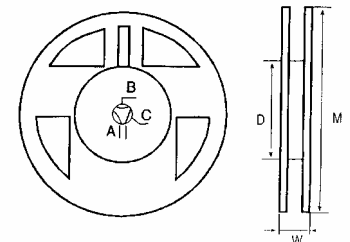


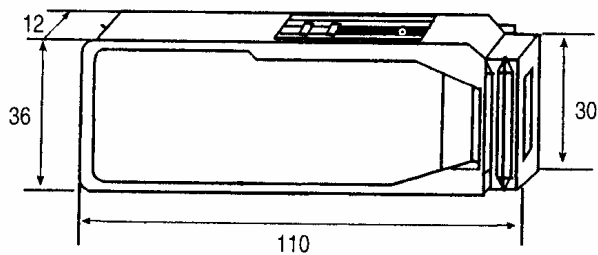
PACKAGING

Type	A	B	W	F	E
RC-02	1.2 ± 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