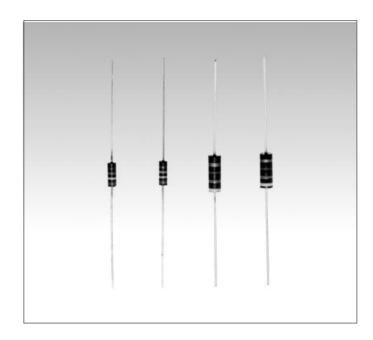
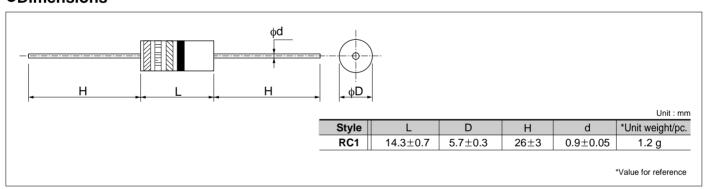
# RC<sub>1</sub>

#### Features

- 1. Excellent pulse endurance characteristics.
- 2. Resistance range of 2.2 ohm ~ 1M ohm.
- 3. Predictable and reliable performance.
- 4. Uniform quality from the hot-molded production process.

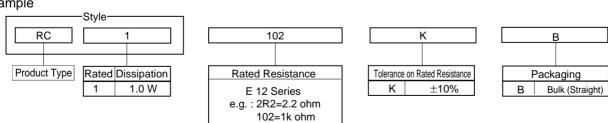


### Dimensions



# **●Part Number Description**





# FIXED CARBON COMPOSITION RESISTORS

## Ratings

Style	Rated Dissipation at 70°C W	Limiting Element Voltage V	Rated Resistance	Temperature Coeffic	ed Resistance Range ient of Resistance % at +100 °C	rated recolciance	Tolerance on Rated Resistance and Perferred Number Series for Resistors	Isolation Voltage V	Category Temperature Range °C
RC1	1.0	500	2.2 ohm~1.0M ohm	+6.5 to -3 +10 to -3 +13 to -3 +15 to -3	+6 to -5 +7.5 to -6	2.2 ohm ~ 1k ohm 1.2k ohm ~ 10k ohm 12k ohm ~100k ohm 120k ohm ~ 1M ohm	K ( ± 10%) E12 Series	1000	-55~+100

Note1. Rated Voltage =  $\sqrt{\text{(Rated Dissipation)} \times (\text{Rated Resistance})}$ . (d.c. or a.c. r.m.s. Voltage)

Note2. Limiting Element Voltage can only be applied to resistors when the resistance value is equal to or higher than the critical resistance value.

## **●Storage**

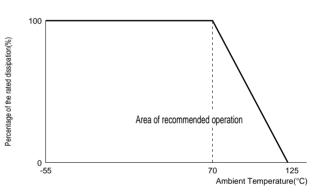
Temperature 20±15°C, Humidity 60%R.H. Max, Storing Term 2 years.

#### Derating Curve

The derated values of dissipation for temperatures in excess of  $70^{\circ}\text{C}$  shall be indicated by the following Curve.

# **●Climatic Category**

Lower Category Temperature -55°C **Upper Category Temperature** +100°C Duration of the Damp heat, Steady-State Test 500 hours



## ●Performance Characteristics JIS C 5201-1: 1998

Description	Requirements	Test Methods			
Voltage proof	No breakdown or flashover	Clause 4.7 V block method 1000 Vac, 60s			
Variation of resistance with temperature	See Ratings Table	Clause 4.8 Measuring temperature :+20°C/–55°C/ +20°C/+100°C/+20°C			
Overload	ΔR≤±(2.5%+0.1 ohm) No visible damage, legible marking	Clause 4.13 The applied voltage shall be 2.5 times of the rated voltage or twice of the limiting element voltage whichever is the less Severe, 5s.			
Tensile	ΔR≤±(2%+0.1 ohm) No visible damage	Clause 4.16.2 20N for 5~10s			
of terminations Bending	ΔR≤±(2%+0.1 ohm) No visible damage	Clause 4.16.3 10N			
Solderability	95% Coverage	Clause 4.17 235°C, 5s			
Resistance to soldering heat	ΔR≤±(5%+0.1 ohm)	Clause 4.18 After immersion into the flux, the immersion into solder shall be carried out 4mm from the body at 350°C for 3.0s.			
Rapid change of temperature	ΔR≤±(4%+0.1 ohm) No visible damage	Clause 4.19 5 cycles between-55°C and +85°C.			
Humidity	ΔR≤±(10%+0.5 ohm) No visible damage, legible marking	Clause 4.24 40°C, 95%R.H., 500 hours			
Endurance at 70°C	ΔR≤±(10%+0.5 ohm) No visible damage	Clause 4.25.1 Rated voltage, 1.5h "ON", 0.5h "OFF", 70°C, 1,000h.			