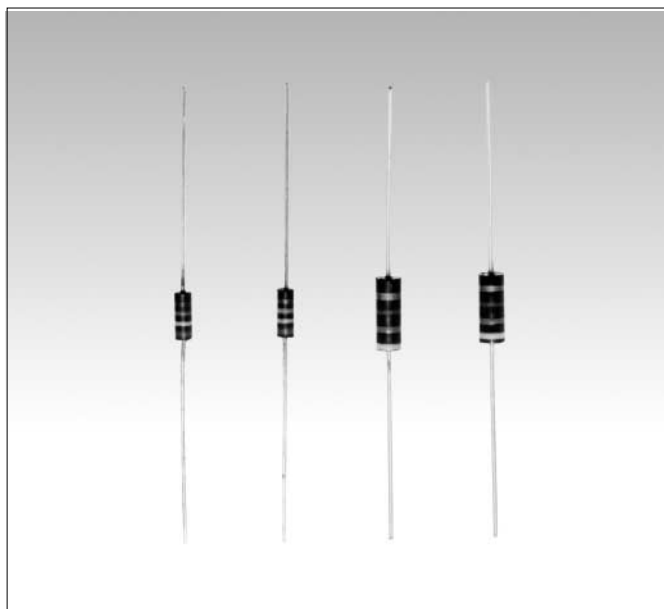


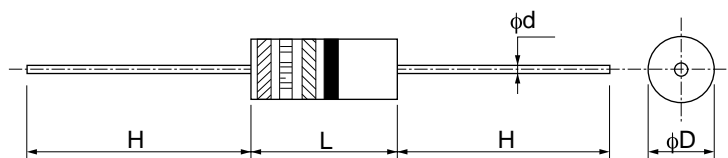
RC1

●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



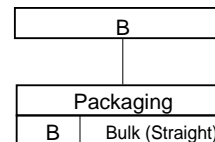
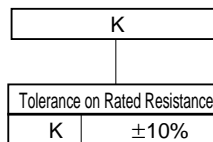
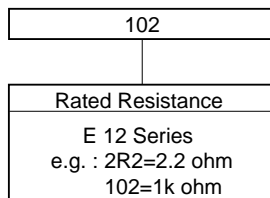
| Style | L | D | H | d | *Unit weight/pc. |
|-------|----------|---------|------|----------|------------------|
| RC1 | 14.3±0.7 | 5.7±0.3 | 26±3 | 0.9±0.05 | 1.2 g |

Unit : mm

*Value for reference

●Part Number Description

Example



FIXED CARBON COMPOSITION RESISTORS

RC

●Ratings

| Style | Rated Dissipation at 70°C W | Limiting Element Voltage V | Rated Resistance Range | Combination of Rated Resistance Range and Temperature Coefficient of Resistance | | | Tolerance on Rated Resistance and Preferred Number Series for Resistors | Isolation Voltage V | Category Temperature Range °C |
|-------|-----------------------------|----------------------------|------------------------|---|---|--|---|---------------------|-------------------------------|
| | | | | Temperature Coefficient of Resistance % | | Rated Resistance Range | | | |
| | | | | at -55 °C | at +100 °C | | | | |
| RC1 | 1.0 | 500 | 2.2 ohm-1.0M ohm | +6.5 to -3 +10 to -3 +13 to -3 +15 to -3 | +5 to -4 +6 to -5 +7.5 to -6 +10 to -7 | 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)

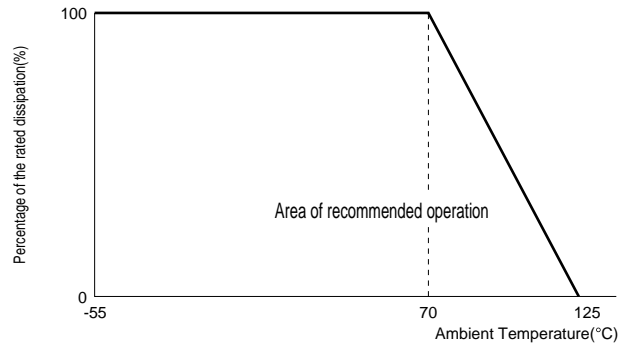
Note2. Limiting Element Voltage can only be applied to resistors when the resistance value is equal to or higher than the critical resistance value.

●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°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 | $\Delta R_{\leq \pm}(2.5\%+0.1 \text{ ohm})$ 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. |
| Robustness of terminations | Tensile $\Delta R_{\leq \pm}(2\%+0.1 \text{ ohm})$ No visible damage | Clause 4.16.2 20N for 5~10s |
| | Bending $\Delta R_{\leq \pm}(2\%+0.1 \text{ ohm})$ No visible damage | Clause 4.16.3 10N |
| Solderability | 95% Coverage | Clause 4.17 235°C, 5s |
| Resistance to soldering heat | $\Delta R_{\leq \pm}(5\%+0.1 \text{ ohm})$ | 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 | $\Delta R_{\leq \pm}(4\%+0.1 \text{ ohm})$ No visible damage | Clause 4.19 5 cycles between -55°C and +85°C. |
| Humidity | $\Delta R_{\leq \pm}(10\%+0.5 \text{ ohm})$ No visible damage, legible marking | Clause 4.24 40°C, 95%R.H., 500 hours |
| Endurance at 70°C | $\Delta R_{\leq \pm}(10\%+0.5 \text{ ohm})$ No visible damage | Clause 4.25.1 Rated voltage, 1.5h "ON", 0.5h "OFF", 70°C, 1,000h. |