

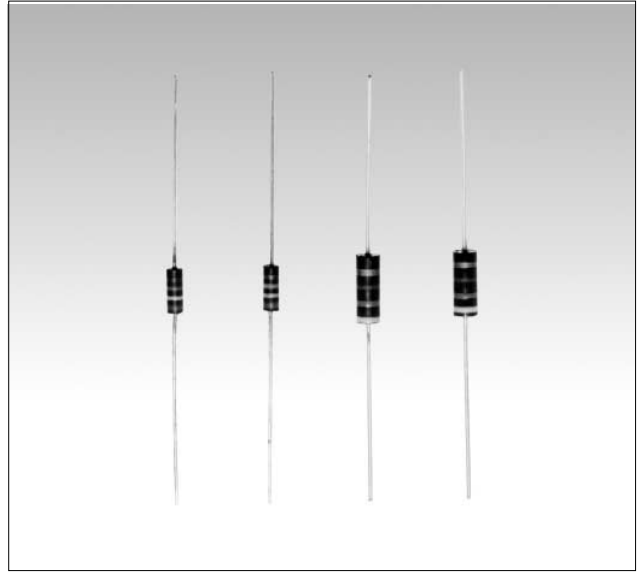
FIXED CARBON COMPOSITION RESISTORS

RC1

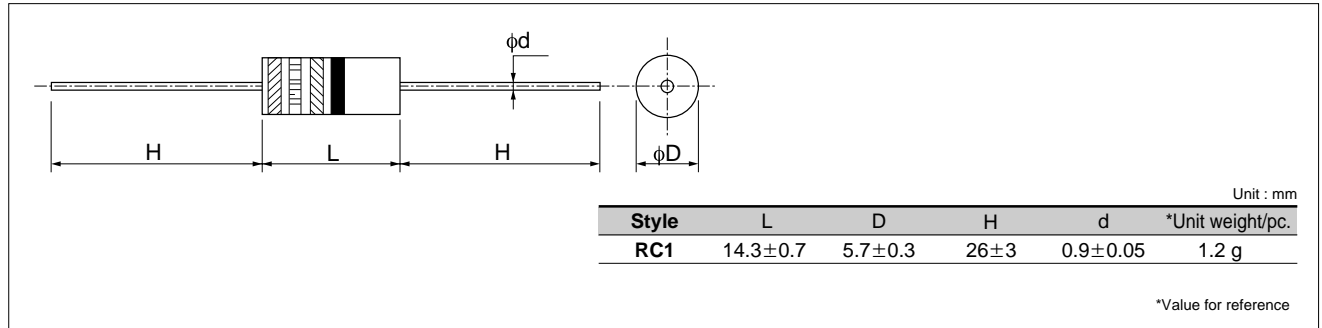
KAMAYA OHM

●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.

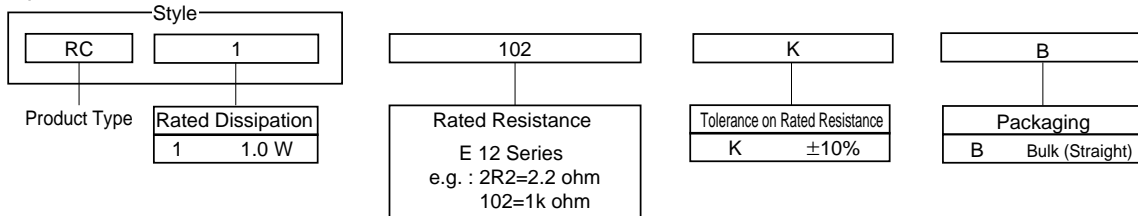


●Dimensions



●Part Number Description

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	+5 to -4	2.2 ohm ~ 1k ohm	K (± 10%) E12 Series	1000	-55~+100
				+10 to -3	+6 to -5	1.2k ohm ~ 10k ohm			
				+13 to -3	+7.5 to -6	12k ohm ~100k ohm			
				+15 to -3	+10 to -7	120k ohm ~ 1M ohm			

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

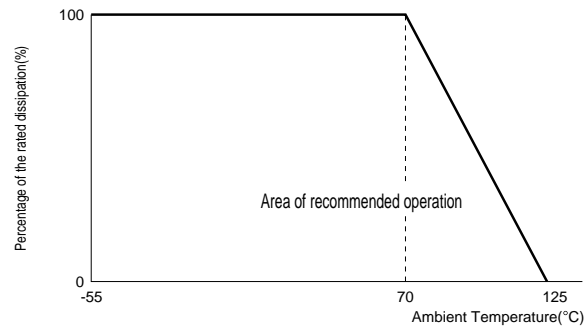
Note2. Limiting Element Voltage can only be applied to resistors when the resistance value is equal to or higher than the critical resistance value.

●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.