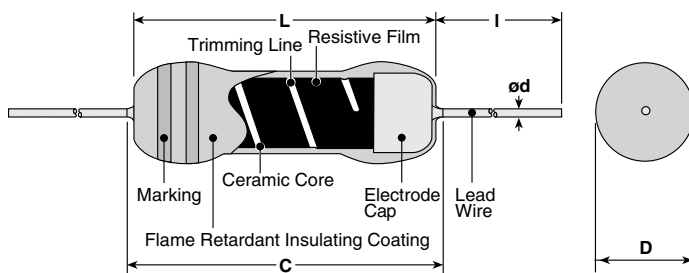


## features

- Functions as a resistor in normal condition
- Quick fusing protects circuit from excessive overload at an abnormal time
- Flame-retardant coating equivalent to UL94 V-0
- Marking: Blue body color with color code marking
- Products meet EU RoHS requirements

## dimensions and construction



Type	Dimensions inches (mm)				
	L	C Max.	D	d(Nominal)	I*
RF16	.125±.008 (3.2±0.2)	.134 (3.4)	.461 <sup>+0.010</sup> <sub>-0</sub> (1.7 <sup>+0.25</sup> <sub>-0</sub> )	.018 (0.45)	1.18±.118 (30±3)
RF25	.248±.020 (6.3±0.5)	.280 (7.1)	.091±.012 (2.3±0.3)	.024 (0.6)	
RF50	.335±.020 (8.5±0.5)	.374 (9.5)	.118±.012 (3.0±0.3)		
RF1	.354±.039 (9.0±1.0)	.437 (11.1)	.138±.020 (3.5±0.5)	.031 (0.8)	
RF2	.610±.039 (15.5±1.0)	.709 (18.0)	.236±.039 (6.0±1.0)		

\* Lead length changes depending on taping and forming type.

## ordering information

RF	25	C	T52	A	100	J
<b>Product Code</b>	<b>Power Rating</b>	<b>Terminal Surface Material</b>	<b>Taping &amp; Forming</b>	<b>Packaging</b>	<b>Nominal Resistance</b>	<b>Resistance Tolerance</b>
	16: 0.17W 25: 0.25W 50: 0.5W 1: 1W 2: 2W	C: SnCu	T26, T52, T521, T631, MHT, VTP, VTE, VT, GT L, M Forming	A: Ammo R: Reel	3 digits	J: ±5%

## ratings

Type	Power Rating	Resistance Range E24 J: ±5%	Fusing Characteristics						T.C.R. ×10 <sup>-6</sup> /K	Dielectric Withstanding Voltage	
			Fusing Power								Fusing Time
RF16C	0.17W	1.0 - 1k	—	—	—	3W 1Ω - 4.7Ω	2.5W 5.1Ω - 1kΩ	—	60 sec Max.	±1000: R≤4.7Ω	250V
RF25C	0.25W	0.1 - 10k	10W 0.1 - 0.18Ω	7.5W 0.2 - 0.43Ω	6.25W 0.47 - 0.91Ω	—	3.75W 1Ω - 4.7Ω 2.4kΩ - 10kΩ	3W 5.1Ω - 2.2kΩ	30 sec Max.		
RF50C	0.5W	0.1 - 15k	—	—	12.5W 0.1 - 0.43Ω	—	7.5W 0.47Ω - 2Ω 1.1kΩ - 15kΩ	6W 2.2Ω - 1kΩ		±350: R≥5.1Ω	300V
RF1C	1W	0.1 - 10k	—	30W 0.1 - 0.18Ω	25W 0.2 - 0.43Ω	—	15W 0.47Ω - 2Ω 1.1kΩ - 10kΩ	12W 2.2Ω - 1kΩ			
RF2C	2W	1.0 - 3k	—	—	—	36W 1Ω - 3.6Ω	30W 1.1kΩ - 3kΩ	24W 3.9Ω - 1kΩ			

Rated Ambient Temperature: +70°C

Operating Temperature Range: -40 - +155°C

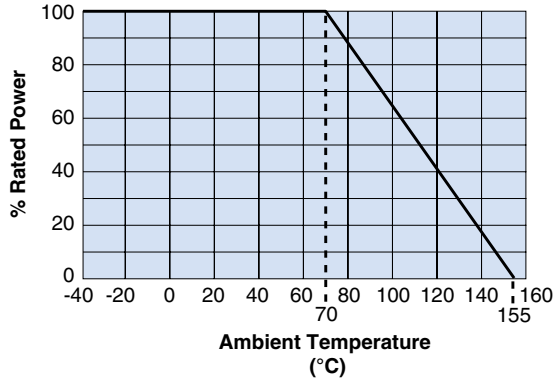
Rated voltage =  $\sqrt{\text{Power Rating} \times \text{Resistance value}}$

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

12/27/13

## environmental applications

### Derating Curve



For resistors operated at an ambient temperature of 70°C or above, a power rating shall be derated in accordance with derating curve on the left.

### Performance Characteristics

Test Items	Performance Requirements $\Delta R \pm (\% +0.05\Omega)$		Test Methods
	Limit	Typical	
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	Room temperature +100°C
Overload (Short Time)	1%	0.5%	Rated voltage $\times$ 2.5 for 5 seconds
Resistance to Soldering Heat	1%	0.5%	350°C $\pm$ 10°C, 3.5s $\pm$ 0.5s or 260°C $\pm$ 5°C, 10s $\pm$ 1s
Rapid Change of Temperature	1%	0.5%	-40°C (30 min.)/ +85°C (30 min.) 5 cycles
Moisture Resistance	5%	2.5%	40°C $\pm$ 2°C, 90% - 95% RH, 1000 hours 1.5h ON/0.5h OFF cycle
Endurance at 70°C	5%	2.5%	70°C $\pm$ 2°C, 1000 hours 1.5h ON/0.5h OFF cycle
Resistance to Solvent	No abnormality in appearance. Marking shall be easily legible.	—	The resistor shall be immersed in IPA for 30 sec.
Flame retardant	No evidence of flaming or self-flaming.	—	Flame test : The test flame shall be applied and removed for each 15 sec respectively to repeat the cycle 5 times. Overload flame retardant: Power corresponding to 2, 4, 8, 16 and 32 times the power rating shall be applied for each 1min. until disconnection occurs.

### Fusing Characteristics

