

Metal Flameproof Resistors Type RFM Series

Δ Features

- · Nonflammable, high performance metal film fixed resistors
- · Flame-overload burning-resisting resin
- Excellent electronic performance

∆ Applications

- Suitable for products for high reliability.
- High-precision medical, telecom and consumer electronic equipment

Δ Dimensions



All Liberty Resistors uses the highest quality tin coated copper leads. The leads are rated at the below MAXIMUM soldering temperature and soldering time.

MAXIMUM soldering temperature/time 350°C 3sec 235°C 2min

	Power Rating (W)		Dimensions (mm)				Max Working Voltage		Max Overload Voltage	
Style	70°C	125 °C	L	D	H (min)	d	70 °C	125 °C	70 °C	125 °C
RFM 25	0.25W	0.1W	6.5±0.5	2.3±0.2	27	0.58±0.2	250	200	500	400
RFM 50	0.5W	0.125W	9.0±1	3.5±0.5	27	0.65±0.2	350	250	700	500

Δ Characteristics

Requirements	Characteristics	Test Method
Non-Combustibility	Flame Resistance: Will not burn continuously for more than 5 seconds. Overload Burning: will not fume under the overload of less than 5 times of rated power. The volume of fumes emitted under the overload of more than 5 times of rated power is less than that of stilled fumes emitted by one cigarette. During the test the height of fumes does not go over 3 mm and the burning does not continue for more than 3 seconds.	MIL-STD-202 Method 111 JIS C 5202 7. 12 EIAJ-RC 2658 5. 1

Δ Part Numbering



Fixed Componen

Resistors

And P	
	LIBERTY

Metal Flameproof Resistors Type RFM Series

$\boldsymbol{\Delta}$ Characteristics

Characteristic	Specification	Test Method		
		All resistance measurements should be		
		performed after stabilication or consitioning		
		periods.		
DC Resistance	Within Specified Tolerance	MIL-STD-202 Method 303		
	As Buyer Requested			
Temperature Coefficient	±25ppm/°C ±100ppm/°C	MIL-STD-202 Method 304		
-	±50ppm/°C ±200ppm/°C			
		MIL-STD-202 Method 301		
Dielectric Strength	No Flashover or Damage	1/8W 300V 1 Minute, 1/4 500V 1 Minute		
-	_	1/8W 300V 1 Minute, 1/4 500V 1 Minute		
		MIL-STD-202 Method 302		
Insulation Resistance	At Least 1,000MΩ	100V 1 Minute		
	Below 10KΩ Below 0.05µV/V			
Current Noise Test	10KΩ - Below 0.1µV/V	MIL-STD-202 Method 308		
	Below 1M7 Below 0.2µV/V			
		MIL-STD-202 Method 201 10Hz		
Vibration	ΔR Within ± (0.25% 0.05 Ω)	X.Y.Z. 3 Directions 2 Hours each		
Torminal Strength	Lead does not break or loosen	MIL-STD-202 Method 211		
		MIL-STD-202 Method 210		
Resistance to Soldering Heat	ΔR Within ± (0.25% 0.05Ω)	350°C, 3 ± 0.05Sec.		
O a la la calcului		MIL-STD-202 Method 208		
Solderability	At Least 95% Coverage	230°C. 0.05Sec.		
		MIL-STD-202 Method 107		
Thermal Shock	ΔR Within ± (0.5% 0.05Ω)	-55°C +155°C		
		5 Cycles		
		MIL-R-10509 PARA, 4,6,6,		
Short Time Overload	ΔR Within ± (0.5% 0.05Ω)	2.5 Times Rated Working Voltage,		
		5 Secs		
	ΔR Within ± (1% 0.05Ω)	MIL-STD-202 Method 103		
Humidity	No Mechanical Damage	40°C, RH95% 500		
		MIL-R-10509 PARA, 4,6,5,		
Low Temperature Operation	ΔR Within ± (0.5% 0.05Ω)	Rated Working Voltage, at -65°C		
		45 Minutes		
		MIL-STD-202 Method 108 Rated Working		
Load Life	ΔR Within ± (1% 0.05Ω)	Voltage 1 1/2 Hours on 1/2 Hours Off		
-		For Total 1000Hours		
	Color Bands Legible No			
Resistance To Solvent	Mechanical Damage	MIL-STD-202 Method 215		

Δ Current Noise

