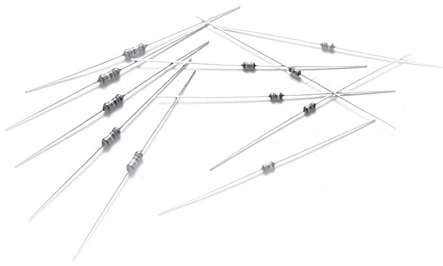


Metal Film Resistors

Professional Type

Miniature Style [MF0 Series]



INTRODUCTION

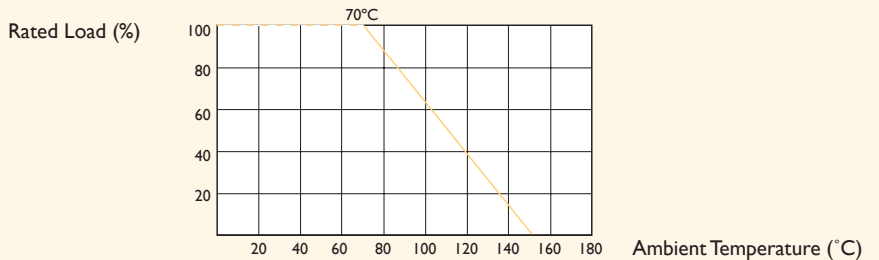
The MF0 Series Metal Film Professional Resistors are manufactured using vacuum sputtering system to deposit multiple layers of mixed metals alloy and passivative materials onto a carefully treated high grade ceramic substrate. After a helical groove has been cut in the resistive layer; tinned connecting leads of electrolytic copper are welded to the end-caps. The resistors are coated with layers of blue color lacquer.

FEATURES

Power Rating	0.4W, 0.6W
Resistance Tolerance	±1%
T.C.R.	±50ppm/°C

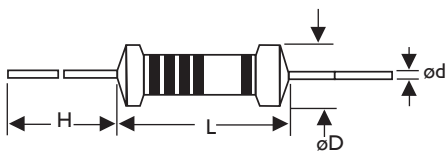
DERATING CURVE

For resistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with the curve below.



DIMENSIONS

Unit : mm



STYLE	DIMENSION			
	L	øD	H	ød
Miniature				
MF0204	3.4±0.3	1.9±0.2	28±2.0	0.45±0.05
MF0207	6.3±0.5	2.4±0.2	28±2.0	0.55±0.05



Note :

ELECTRICAL CHARACTERISTICS

STYLE	MF0204	MF0207
Power Rating at 70 °C	0.4W	0.6W
Maximum Working Voltage	250V	350V
Maximum Overload Voltage	500V	700V
Dielectric Withstanding Voltage	300V	500V
Resistance Range	1 Ω ~ 10MΩ & 0 Ω for E24 & E96 series value	
Operating Temp. Range	- 55°C to + 155°C	
Temperature Coefficient	±50ppm/°C	

* Below or over this resistance range on request.

ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD	APPRAISE
Short Time Overload	JIS-C-5202 5.5 2.5 Times RCWV for 5 Seconds	±(0.25%+0.05 Ω)
Dielectric Withstanding Voltage	JIS-C-5202 5.7 in V-Block for 60 Seconds	by Type
Temperature Coefficient	JIS-C-5202 5.2 -55°C to +155°C	by Type
Insulation Resistance	JIS-C-5202 5.6 in V-Block	> 10000MΩ
Solderability	JIS-C-5202 6.5 260°C ±5°C for 5 ±0.5 Seconds	95% Min. Coverage
Resistance to Solvent	JIS-C-5202 6.9 IPA for 1 Min. with Ultrasonic	No deterioration of Coatings and Markings
Terminal Strength	JIS-C-5202 6.1 Direct load for 10 Sec. In the Direction of the Terminal Leads	≥2.5kg (24.5N)
Pulse Overload	JIS-C-5202 5.8 4 Times RCWV 10000 Cycles (1 Sec. On, 25 Sec. off)	±1.0%+0.05 Ω
Load Life in Humidity	JIS-C-5202 7.9 40±2°C , 90~95% RH at RCWV for 1,000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off)	±1.5%+0.05 Ω
Load Life	JIS-C-5202 7.10 70°C at RCWV for 1,000 Hrs. (1.5 Hrs. on 0.5 Hrs. off)	±1.5%+0.05 Ω
Temperature Cycling	JIS-C-5202 7.4 -55°C→Room Temp.→+155°C→Room Temp. for 5 Cycles	±0.75%+0.05 Ω
Resistance to Soldering Heat	JIS-C-5202 6.4 350°C ±10°C for 3±0.5 Seconds	±0.25%+0.05 Ω

* Rated Continuous Working Voltage (RCWV)= $\sqrt{\text{Power Rating} \times \text{Resistance Value}}$