

Metal Film Resistors

Introduction:

Deposit metal alloy onto the special treated ceramic in the ultra high vacuum. It gives ultra low figure with low temperature coefficient (T.C.) in three classes : 100ppm, 50ppm, 25ppm/°C . Popular requirements of tolerance is 1%, and some require precision 0.5%, 0.25%, 0.1%. It is suitable for following applications: audio & video appliances, digital and analog computerized systems, precision instrument bridge circuits, auto controlled equipment, military devices and space program applications.

Features:

- ◇ Low noise & stable temperature
- ◇ High precision & reliable
- ◇ MIL-R-10509E approved.
- ◇ Variety of packaging: bulk, taped, tape and reel

Dimension (mm):



General Specifications:

Type	Dimension (mm)				Power Rating	Maximum Working Voltage	Maximum Overload Voltage	Resistance Range +-1% (Ω)	
	L	D	H	D±0.05				TC + 50ppm TC + 100ppm	TC + 15ppm TC + 25ppm
MF-1/6W	3.2±0.2	1.5±0.2	28±1	0.48	1/6W	200	400	10~1M	100~100K
MF-1/4W	5.7±0.5	2.3±0.3	28±1	0.58	1/4W	250	500	10~1M	51.1~511M
MF-1/2W	9.0±0.5	3.0±0.5	28±1	0.58	1/2W	350	700	10~1M	51.1~1M
MF-1W	11±1.0	4.0±0.5	35±3	0.70	1W	500	1000	10~1M	51.1~1M
MF-2W	15±1.0	5.0±0.5	35±3	0.80	2W	500	1000	10~1M	51.1~1M

* Standard resistance is 10~1MΩ, below or over this resistance can be supplied on request.

Characteristic:

Test Items	Condition	MAXΔR
Operating Temp.	-65°C~+175°C	-
Dielectric Withstanding	Max Overload Voltage V Block 1 minute	0.25%
Insulation Resistance	DC.500V V Block 1 minute	10,000MΩ
Temp. Cycle	-65°C,25°C,150°C,25°C, 5 cycles.	0.25%
Low Temp. Oper.	-65°C Rated Voltage 45 minutes	0.25%
Moisture Resistance	10 cycles per MIL-STD-202 Method 106	0.5%
Short Time Overload	2.5 times of rated voltage for 5 sec.	0.25%
Load Life	70°C on-off cycles 1,000 hrs.	0.5%
Solder Pot	270°C 3 sec.	0.1%
Vibration	MIL-STD-202 Method 204	0.2%
Terminal Strength	Direct Load. Twist test	0.1%

*Total resistance change:(ΔR%+0.05Ω)