

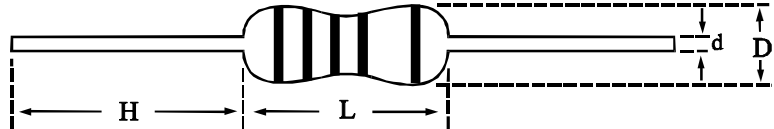
Metal Film Resistors

I PRODUCT FEATURES :

1. Low noise
2. Low T.C.R. 100ppm, 50ppm, 25ppm, 15ppm, 10ppm, 5ppm.
3. High precision 1%, 0.5%, 0.25%, 0.1%

I POWER、RATINGS、DIMENSIONS

- ☒ Standard Type: 1/16W ~2W
 - ☒ Miniature Type: 1/4Ws~3Ws
- Dimensions



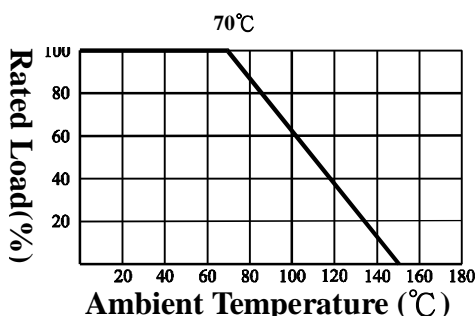
STYLE		DIMENSIONS(mm)				Comment
Normal	Miniature	L	D	H	d	
MF-1/8W	MF1/4Ws	$3.3 \pm \begin{smallmatrix} 0.4 \\ 0.2 \end{smallmatrix}$	1.8 ± 0.3	29 ± 2.0	0.45 ± 0.03	
MF-1/8W	MF1/4Ws	$3.3 \pm \begin{smallmatrix} 0.7 \\ 0.2 \end{smallmatrix}$	1.8 ± 0.3	29 ± 2.0	0.45 ± 0.03	
MF-1/4W	MF1/2Ws	6.3 ± 0.5	2.3 ± 0.3	28 ± 2.0	0.55 ± 0.03	
MF-1/2W	MF1Ws	9.0 ± 0.5	3.2 ± 0.5	26 ± 2.0	0.65 ± 0.03	
MF-1W	MF2Ws	11.5 ± 1.0	4.5 ± 0.5	35 ± 2.0	0.78 ± 0.03	
MF-2W	MF3Ws	15.5 ± 1.0	5.0 ± 0.5	32 ± 2.0	0.78 ± 0.03	

I ELECTRICAL CHARACTERISTICS

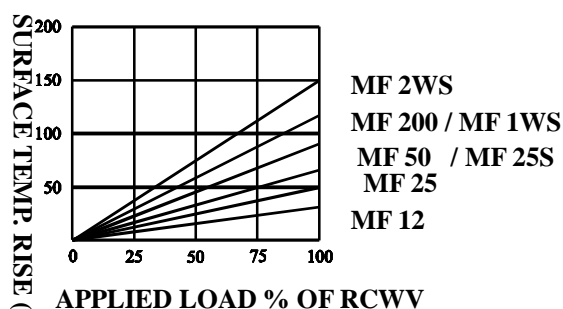
Power rating at 70°C	0.125W	0.25W	0.25W	0.5W	0.5W	1W	1W	2W	2W	3W
STYLE	MF-12	MF-25S	MF-25	MF-50S	MF-50	MF-1WS	MF-100	MF2WS	MF-200	MF3WS
Operating Temp. Range	-55°C to +155°C									
Max. Working Voltage	200V	250V	250V	300V	350V	400V	450V	500V	500V	500V
Max. Overload Voltage	400V	400V	500V	600V	700V	800V	1000V	1000V	1000V	1000V
Dielectric Withstanding volt.	300V	400V	500V	500V	500V	700V	1000V	1000V	1000V	1000V
TEMP. COEFFICIENT	±15ppm/°C , ±25ppm/°C , ±50ppm/°C , ±100ppm/°C									
Value Range. ±1%/±0.5%						0.1 Ω ~ 1 MΩ		E96 series		
Value Range. ±0.25%/±0.1%						10 Ω ~ 100KΩ		E192 series		

☆ Value Range for standard resistance , below or over this resistance on request.

I POWER GRAPH



I HOT-SPOT TEMPERATURE



I ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD	APPRAISE
SHORT TIME OVERLOAD	JIS-C-5202 5.5 2.5 times RCWV for 5 seconds	±(0.25%+0.05Ω)
TEMPERATURE COEFFICIENT(T.C.R.)	Resistance value at room Temperature and room Temperature+100℃	By Type
DIELECTRIC WITHSTANDING VOLTAGE	JIS-C5202 5.7 In V-Block for 60 seconds	By Type
PULSE OVERLOAD	JIS-C5202 5.8 4 times RCWV for10000cycles(1sec.on , 25secs.off)	±(0.75%+0.05Ω)
INSULATION RESISTANCE	JIS-C5202 5.6 In V-Block	> 10000MΩ
LOAD LIFE	JIS-C5202 7.10 70℃ at RCWV for1000hrs.(1.5hrs. on , 0.5hrs.off)	±(1.5%+0.05Ω)
LOAD LIFE IN HUMIDITY	JIS-C5202 7.9 40±2℃ 90~95%RH at RCWV for1000hrs. (1.5hrs. on , 0.5hrs.off)	±(1.5%+0.05Ω)
SOLDER ABILITY	JIS-C5202 6.5 260±5℃ for 2±0.5 seconds	95% min. coverage
RESISTANCE TO SOLVENT	JIS-C5202 6.9 Trichroethane for 1 min. with ultrasonic	No deterioration of coatings and markings
TERMINAL STRENGTH	Direct load for 10 sec. In the direction off the terminal leads.	Tensile: ≥2.5kg

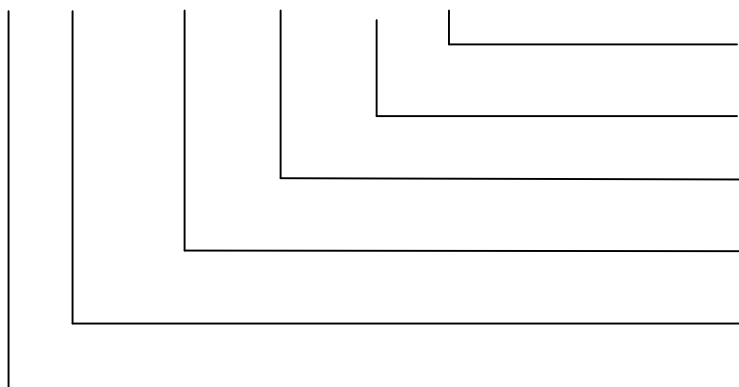
Rated continuous Working Voltage (RCWV) = $\sqrt{POWER.RATING. * RESISTANCE.VALUE}$

I Resistor body color

1. Normal size----- Blue
2. Small size----- Blue

I PART NUMBER:

MF -1/4W - VALUE - F - T.C.R. FORMING TYPE



TB = BU / T/B / T/R / F / FC / FKK / M / MK / PANA-T or R

200ppm — B、100ppm — C、50ppm — E、25ppm — G、15ppm — H、10ppm — K、5ppm — L

RES. TOLERANCE 1% / 0.1% = F / B

RESISTANCE 0R1 1R 10R 100R 1K 10K 100K 1M 10M

DIN SIZE , BODY SIZE

METAL FILM RESISTOR