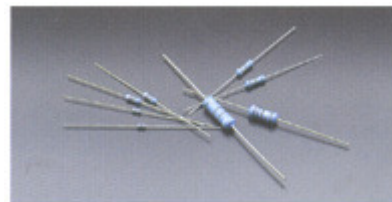


PRECISION METAL FILM FIXED RESISTOR

Features

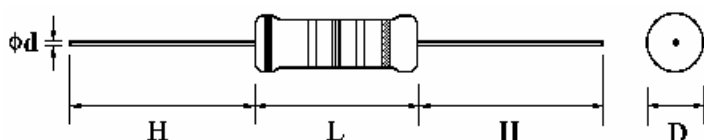
- EIA standard color-coding
- Non - Flame type available
- Low noise & voltage coefficient
- Low temperature coefficient range
- Wide precision range in small package
- Too low or too high ohmic value can be supplied on a case-to-case basis
- Nichrome resistor element provides stable performance in various environments
- Multiple epoxy coating on vacuum-deposited metal film provides superior moisture protection



Ordering Procedure: (Ex.: MFR 1/2W, +/-5%, 200PPM, 10Ω, T/B-1000)

M	F	0	W	2	J	J	0	1	0	0	A	1	0				
Resistor Type: MF = Metal Film Fixed Resistors			Wattage: Normal size: W8=1/8W, W4=1/4W, W2=1/2W, 1W=1W, 2W=2W, 3W=3W Small size: S4=1/4W-S, S2=1/2W-S, 06=0.6W-S Extra small size: U2=1/2W-SS, 04=0.4W-SS			Resistance Value: - E-24 series: the 1st digit is "0", the 2nd & 3rd digits are for the significant figures of the resistance and the 4th indicate the number of zeros following; "J" ~ 0.1, "K" ~ 0.01 Ex.: 4.7Ω ~ 47J, 4.7KΩ ~ 472 - E-96 series: the 1st to 3rd digits are significant figures of resistance and the fourth one denotes number of zeros following; Ex.: 1.33KΩ = 1331			Packing Type: A = Tape/Box T = Tape/Reel B = Bulk/Box P = Tape/Box of PT-26 product			Packing Qty: 1 = 1,000 pcs, 2 = 2,000 pcs, 3 = 3,000 pcs, 4 = 4,000 pcs, 5 = 5,000 pcs, A = 500 pcs, B = 2,500 pcs, 0 = for Bulk/Box packing			Additional Information: P = Panasert type 1 = Avisert type 1 2 = Avisert type 2 3 = Avisert type 3 0 = PT-52 mm 8 = PT-58 mm 9 = PT-64 mm		
Special Feature: 0 = Standard Product F = Non-Flame I = Non-Inductive			Tolerance: B = ±0.1% C = ±0.25% D = ±0.5% F = ±1% G = ±2% J = ±5%			PPM requirement: B = 15PPM C = 25PPM F = 50PPM G = 100PPM J = 200PPM											

Dimension (mm)



PRECISION METAL FILM FIXED RESISTOR

Normal Size

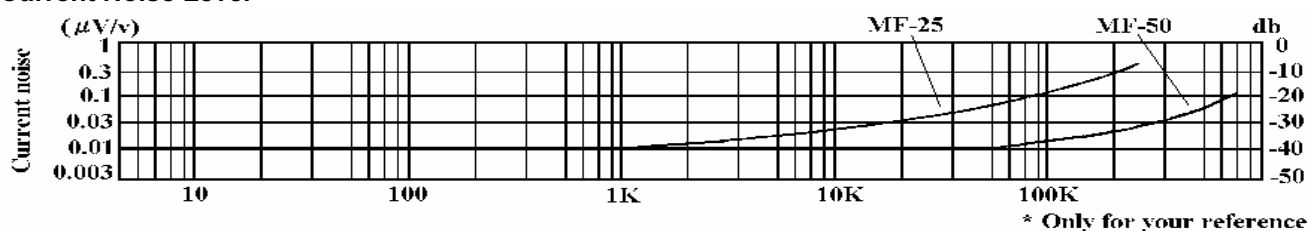
Part No.	Style	Power Rating at 70°C	Dimension (mm)			
			D Max	L Max	d +0.02 - 0.05	H±3
MF0W8	MF-12	1/8W (0.125W)	1.85	3.5	0.5	28
MF0W4	MF-25	1/4W (0.25W)	2.5	6.8	0.6	28
MF0W2	MF-50	1/2W (0.5W)	3.5	10.0	0.6	28
MF01W	MF-100	1W	5.0	12.0	0.8	28
MF02W	MF-200	2W	5.5	16.0	0.8	28
MF03W	MF-300	3W	6.5	17.5	0.8	28

Small Size

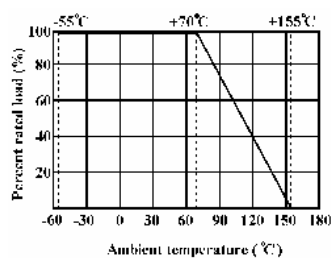
Part No.	Style	Power Rating at 70°C	Dimension (mm)			
			D Max	L Max	d +0.02 - 0.05	H±3
MF0S4	MF-25-S	1/4W (0.25W)	1.85	3.5	0.5	28
MFF04	MF-40-SS	0.4W	1.9	3.7	0.5	28
MF0S2	MF-50-S	1/2W (0.5W)	3.0	9.0	0.6	28
MFFU2	MF-50-SS	1/2W (0.5W)	2.5	6.8	0.6	28
MF006	MF-60-S	0.6W	2.5	6.8	0.6	28

Non-Flammable coating for Extra Small size types (-SS)

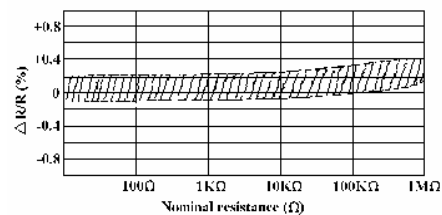
Current Noise Level



Derating Curve



Load Life



PRECISION METAL FILM FIXED RESISTOR

General Specifications

Part No.	Style	Max. Overload Voltage	Max. Working Voltage	Dielectric With - standing V.	Resistance Tolerance	T.C.R.	Resistance Range	Special Order		
								Resistance Tolerance	T. C. R.	Resistance Range
MF0W8 MF0S4	MF-12 MF-25-S	400V	200V	400V	± 5%	±200PPM/°C	1Ω - 1MΩ	±0.25%	±15PPM/°C	51.1Ω-200KΩ
					± 2%	±100PPM/°C	10Ω - 1MΩ	±0.5%	±25PPM/°C	51.1Ω-511KΩ
					± 1%	±50PPM/°C	10Ω - 1MΩ		±50PPM/°C	
MFF04	MF-40-SS	400V	200V	200V						
MF0W4 MF006	MF-25 MF-60-S	500V	250V	500V	± 5%	±200PPM/°C	1Ω - 1MΩ	±0.1%	±15PPM/°C	100Ω-100KΩ
					± 2%	±100PPM/°C	10Ω - 1MΩ	±0.25%	±25PPM/°C	51.1Ω-330KΩ
					± 1%	±50PPM/°C	10Ω - 1MΩ	±0.5%	±50PPM/°C	10Ω-1MΩ
MFFU2	MF-50-SS	500V	250V	250V						
MF0W2 MF0S2	MF-50 MF-50-S	700V	350V	700V	± 5%	±200PPM/°C	1Ω - 1MΩ	±0.1%	±15PPM/°C	100Ω-330KΩ
					± 2%	±100PPM/°C	10Ω - 1MΩ	±0.25%	±25PPM/°C	51.1Ω-511KΩ
					± 1%	±50PPM/°C	10Ω - 1MΩ	±0.5%	±50PPM/°C	10Ω-1MΩ
MF01W MF02W MF03W	MF-100 MF-200 MF-300	1000V	500V	1000V	± 5%	±200PPM/°C	10Ω - 1MΩ	±0.1%	±15PPM/°C	100Ω-330KΩ
					± 2%	±100PPM/°C	51.1Ω - 1MΩ	±0.25%	±25PPM/°C	51.1Ω-511KΩ
					± 1%	±50PPM/°C	51.1Ω - 1MΩ	±0.5%	±50PPM/°C	51.1Ω-1MΩ

Note: MF - xx - ss is Non-Flame coating.

Performance Specifications

Temperature coefficient	Within the maximum temperature coefficient specified
Short-time overload	$\Delta R/R \leq \pm(0.5\% + 0.05\Omega)$, with no evidence of mechanical damage.
Dielectric withstanding voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown.
Pulse overload	$\Delta R/R \leq \pm(1.0\% + 0.05\Omega)$, with no evidence of mechanical damage.
Terminal strength	No evidence of mechanical damage.
Resistance to soldering heat	$\Delta R/R \leq \pm(1.0\% + 0.05\Omega)$, with no evidence of mechanical damage.
Solderability	Min. 95% coverage
Resistance to solvent	No deterioration of protective coating and markings.
Temperature cycling	$\Delta R/R \leq \pm(1.0\% + 0.05\Omega)$, with no evidence of mechanical damage.
Load life in humidity	Normal type: $\Delta R/R \leq \pm 1.5\%$; Non-Flame type: $\Delta R/R \leq \pm 5\%$
Load life	Normal type: $\Delta R/R \leq \pm 1.5\%$; Non-Flame type: $\Delta R/R \leq \pm 5\%$

* For complete details, please see Page 69.