

Metal Film Resistors - MF/FMF Series

FEATURES

- Power Rating: 1/8W to 2W at 70°C
- Superior electrical performance
- Standard T.C.: ± 50 PPM (available 15/25 ppm)
- Standard Tolerance: $\pm 1\%$ (available 0.1% - 5%)
- Standard Value: 10R-1Meg in E24/E96 series
- Body Color: blue
- Color band marking
- Flameproof coating available (As FMF type)
- Mini size available (As MF-S type)
- Operating Temperature : -55°C ~+155°C

GENERAL SPECIFICATION

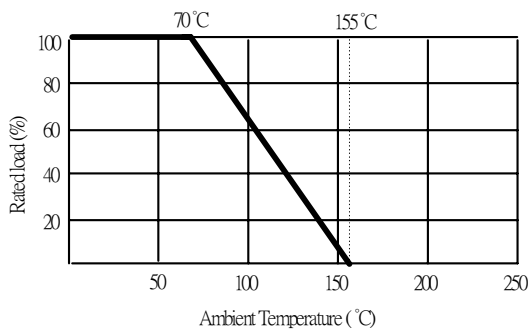
TYPE	DIMENSION (mm)				POWER	MAXIMUM WORKING VOLTAGE*	MAXIMUM OVERLOAD VOLTAGE**	RESISTANCE RANGE $\pm 1\%, \pm 5\%^{***}$
	L	D	H	d				
(F)MF1/8W	3.2 ± 0.2	1.6 ± 0.2	27 ± 3.0	0.45 ± 0.05	1/8W	200V	400V	10 Ω ~1M Ω
(F)MF1/4W	6.0 ± 0.5	2.3 ± 0.3	27 ± 3.0	0.55 ± 0.05	1/4W	250V	500V	10 Ω ~1M Ω
(F)MF1/2W	9.0 ± 0.5	3.0 ± 0.5	27 ± 3.0	0.59 ± 0.05	1/2W	350V	700V	10 Ω ~1M Ω
(F)MF1W	11 ± 1.0	4.0 ± 0.5	33 ± 3.0	0.80 ± 0.05	1W	500V	1000V	10 Ω ~1M Ω
(F)MF2W	15 ± 1.0	5.0 ± 0.5	33 ± 3.0	0.80 ± 0.05	2W	500V	1000V	10 Ω ~1M Ω

* Maximum Working Voltage determined by $E = \sqrt{P \times R}$, where E should not exceed value listed in column above.

** Maximum Overload Voltage equals to 2.5xE, but should not exceed value listed in column above

*** Consult factory for resistance out of above range

DERATING CURVE



CHARACTERISTIC

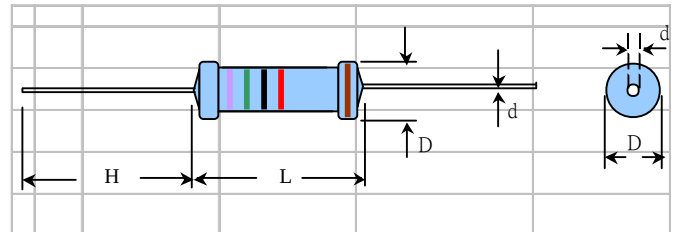
Temperature Coefficient	± 50 ppm (100ppm if R<10 ohm)
Insulation Resistance	10,000M Ω Min.
Load Life (1000 hours)	$< \pm 2\%$
Shorttime Overload	$\pm 0.25\%$ Max.
Temperature Cycling	$\pm 0.25\%$ Max.
Moisture Resistance	$\pm 1.5\%$ Max.
Shock & Vibration	$\pm 0.25\%$ Max.
Resistance of Soldering Heat	$\pm 0.5\%$ Max.

* Total maximum resistance change is $\Delta R \pm 0.05R$

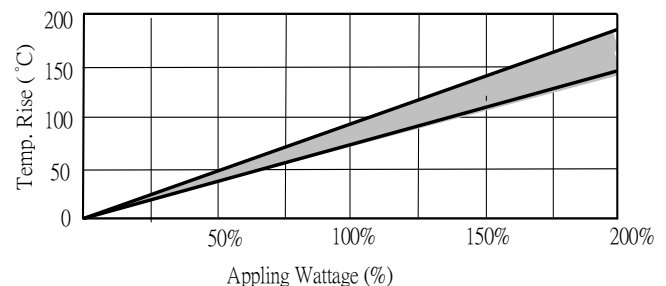
MATERIAL

- Element: Vacuum-deposited Ni-Cr Alloy
- Core: High purity ceramic Al₂O₃
- Termination: Standard solder-plated copper lead
- Coating: Epoxy, (FMF is grey silicone)

DIMENSION



TEMPERATURE RISE



HOW TO ORDER :

MF ***W	*****	F	T
TYPE	Resistance	Tolerance	Package
MF1/8W	10R=10 ohm	J=5%	B=axial bulk
MF1/4W	10k=10k ohm	G=2%	T=tape/box
MF1/2W	1M=1M ohm	F=1%	R=tape/reel
MF 1W		D=0.5%	
MF 2W		C=0.25%	
		B=0.1%	