

CODIGO

MF50S-XX

DESCRIPCION

Metal film 1/2W 1%

Metal Film Resistors -

RoHS Compliant Product

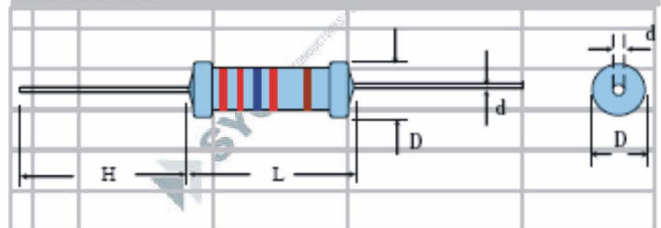
FEATURES

- Power Rating: 1/8W to 3W at 70°C
- Superior electrical performance
- Standard T.C.: $\pm 50\text{ppm}$ for $10\Omega \sim 1\text{M}\Omega$ (15/25ppm available)
- $\pm 100\text{ppm}$ for IR - 9R9, 1M1 - 10M
- Standard Tolerance: $\pm 1\%$ (available 0.1% - 5%)
- Standard Value: 10R-1Meg in E24/E96 series
- Body Color: Light blue (MFR300 is Grey color)
- Color band marking
- Flameproof coating available (As FMFR-S type)
- Operating Temperature : $-55^\circ\text{C} \sim +155^\circ\text{C}$

MATERIAL

- Element: Vacuum-deposited Ni-Cr Alloy
- Core: High purity ceramic Al_2O_3
- Termination: Standard solder-plated cooper lead
- Coating: Epoxy (FMFR is grey silicone)

DIMENSION



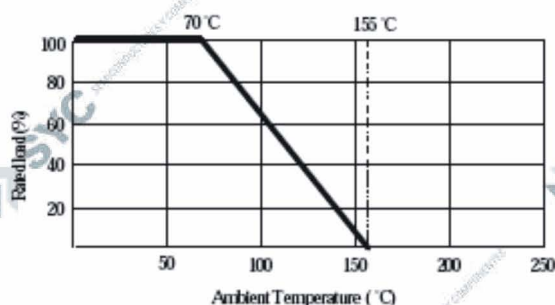
GENERAL SPECIFICATION

TYPE	DIMENSION (mm)				POWER	MAXIMUM WORKING VOLTAGE*	MAXIMUM OVERLOAD VOLTAGE**	RESISTANCE RANGE $\pm 1\%$
	L	D	H	$d \pm 0.05$				
MFR125	3.2 \pm 0.2	1.5 \pm 0.2	28 \pm 1.0	0.45	1/8W	200V	400V	10 Ω ~1M Ω
MFR025S	3.2 \pm 0.2	1.5 \pm 0.2	28 \pm 1.0	0.45	1/4WS	250V	500V	10 Ω ~1M Ω
MFR025	6.0 \pm 0.5	2.3 \pm 0.3	28 \pm 1.0	0.55	1/4W	250V	500V	10 Ω ~1M Ω
MFR050S	6.0 \pm 0.5	2.3 \pm 0.3	28 \pm 1.0	0.55	1/2WS	350V	700V	10 Ω ~1M Ω
MF050	9.0 \pm 0.5	3.2 \pm 0.5	28 \pm 1.0	0.65	1/2W	350V	700V	10 Ω ~1M Ω
MFR060S	6.0 \pm 0.5	2.3 \pm 0.3	28 \pm 1.0	0.55	0.6WS	350V	700V	10 Ω ~1M Ω
MFR100S	9.0 \pm 0.5	3.2 \pm 0.5	28 \pm 1.0	0.65	1WS	500V	1000V	10 Ω ~1M Ω
MFR100	11 \pm 1.0	4.0 \pm 0.5	35 \pm 3.0	0.75	1W	500V	1000V	10 Ω ~1M Ω
MFR200S	11 \pm 1.0	4.0 \pm 0.5	35 \pm 3.0	0.75	2WS	500V	1000V	10 Ω ~1M Ω
MFR200	15 \pm 1.0	5.0 \pm 0.5	35 \pm 3.0	0.75	2W	500V	1000V	10 Ω ~1M Ω
MFR300	17 \pm 1.0	6.0 \pm 0.5	35 \pm 3.0	0.75	3W	500V	1000V	10 Ω ~1M Ω

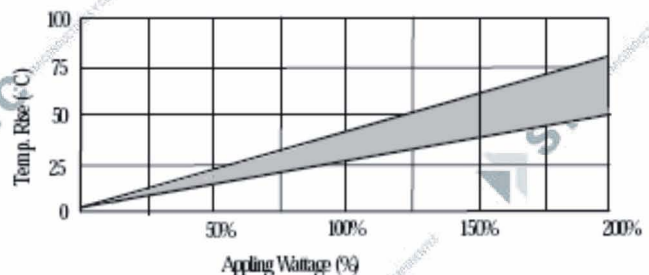
* Maximum Working Voltage determined by $E = \sqrt{P \times R}$, where E should not exceed value listed in column above.

** Maximum Overload Voltage equals to $2.5 \times E$, but should not exceed value listed in column above

DERATING CURVE



TEMPERATURE RISE



Temperature Coefficient	$\pm 50\text{ppm}$ (15ppm, 25ppm available)
Insulation Resistance	10,000M Ω Min.
Load Life (1000 hours)	$< \pm 0.5\%$
Shorttime Overload	$\pm 0.25\%$ Max.
Temperature Cycling	$\pm 0.25\%$ Max.

Moisture Resistance	$\pm 0.5\%$ Max.
Shock & Vibration	$\pm 0.25\%$ Max.
Effect of Soldering	$\pm 0.1\%$ Max.

* Total maximum resistance change is $\Delta R \pm 0.01R$