

# METAL FILM

METAL FILM FIXED RESISTORS

**R** Power Resistors

**MF**  
Series

## INTRODUCTION

The MF series Metal Film Resistors are manufactured using vacuum sputtering system to deposit multiple layers of mixed metals and passivated materials onto a carefully treated high grade ceramic substrate, the resistors are coated with layers of light-blue lacquer.

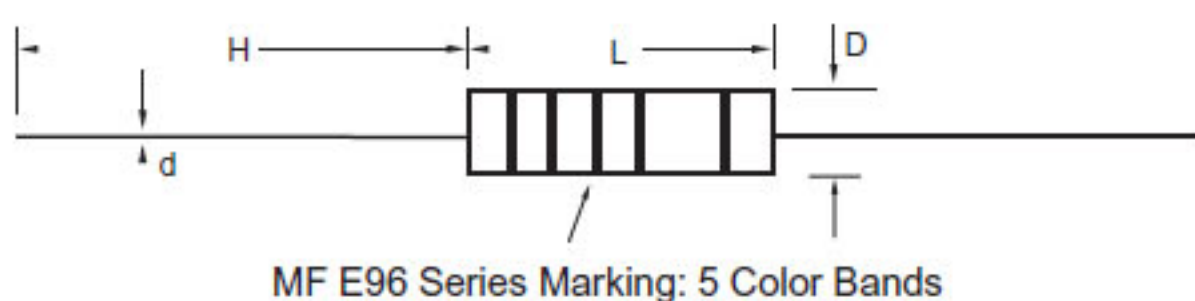
## FEATURES

- MIL-R-1059F
- RN-50, RN-55, RN-60, RN65, RN-70, RN-75 (MF-12, MF-25, MF-50, MF-100, MF-200, MF-300)
- TCR = 10ppm/C°, 25ppm/C°, 50ppm/C°, 100ppm/C°

## DIMENSIONS (mm)

Type	L	D	H	d
MF-12 MF-25s	3.2 ± 0.2	1.5 ± 0.2	28 ± 2.0	0.45 ± 0.05
MF-25 MF-50s	6.5 ± 0.5	2.3 ± 0.3	28 ± 2.0	0.56 ± 0.05
MF-50 MF-100s	9.5 ± 0.5	3.2 ± 0.5	26 ± 2.0	0.60 ± 0.05
MF-100 MF-200s	12 ± 1.0	4.5 ± 0.5	35 ± 3.0	0.80 ± 0.05
MF-200 MF-300s	16 ± 1.0	5.5 ± 0.5	35 ± 3.0	0.80 ± 0.05
MF-300	17 ± 1.0	6.5 ± 0.5	35 ± 3.0	0.80 ± 0.05

• FMF Type: MF Series with Flame-Proof Coating, Others Unchanged.



# METAL FILM

METAL FILM FIXED RESISTORS

**R** Power Resistors

**MF**  
Series

## POWER CHARACTERISTIC

ITEM	Power Rated					
	MF-12 0.125 W	MF-25 MF-25S 0.25 W	MF-50 MF-50S 0.5W	MF-100 MF-100S 1 W	MF-200 MF-100S 2 W	MF-300 MF-300S 3 W
Max Overload Voltage	200 V	250 V	350 V	500V	500V	500V
Max Overload Voltage	400 V	500 V	700 V	1000V	1000V	1000V
Max Intermittence Overload Voltage	250 V	300 V	500 V	1000V	1000V	1000V
Dielectric Withstanding Voltage	300 V (AC)	500 V (AC)	700 V (AC)	1000 V (AC)	1000 V (AC)	1000 V (AC)
Resistance Tolerance	±0.1% ±0.5% ±1%	±0.1% ±0.5% ±1%	±0.1% ±0.5% ±1%	±0.1% ±0.5% ±1%	±0.1% ±0.5% ±1%	±0.1% ±0.5% ±1%
Resistance Range (Ω)	10 ~ 1.0M	10 ~ 1.0 M	10 ~ 1.0M	10 ~ 1.0M	10 ~ 1.0M	10 ~ 1.0M

NOTE1. Rated Continuous Working Voltage (RCWV) Shall Be Determined From  
 $RCWV = \sqrt{\text{Power Rating} \times \text{Resistance Value}}$

## POWER DERATING CURVE

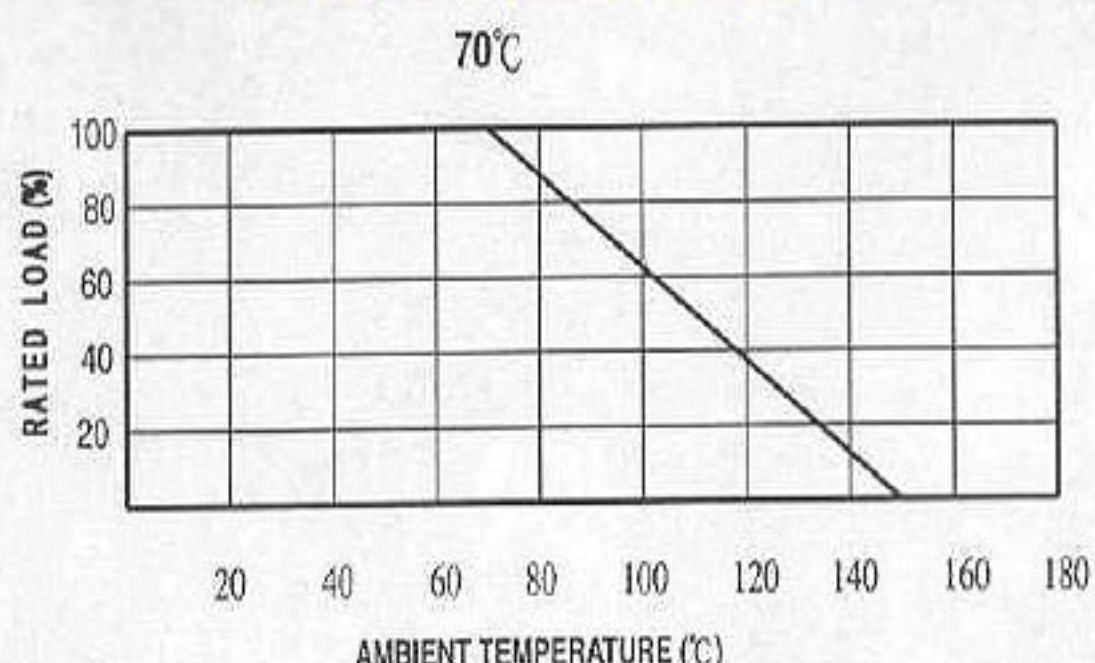


FIG.2 HOT-SPOT TEMPERATURE

