



# MF Series Metal Film Resistors

## METAL FILM RESISTORS

### MF Series

1/6W; 1/8W, 1/4W, 1/2W, 1W, 2W,  
1/4WS, 1/2WS, 1WS, 2WS, 3WS  
MF-12, MF-25, MF-50, MF-100, MF-200

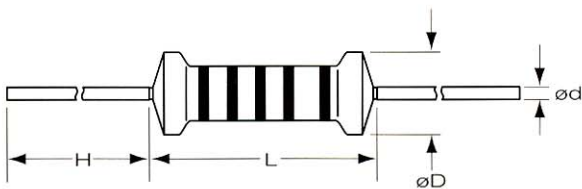
### INTRODUCTION

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

### FEATURES

- MIL-R-1059F.
- MF-12, MF-25, MF-50, MF-100, MF-200 (RN-50, RN-55, RN-60, RN-65, RN-70)
- Resistance Tolerance :  
±0.05%, ±0.1%, ±0.25%, ±0.5%, ±1%
- T.C.R. :  
±15ppm, ±25ppm, ±50ppm, ±100ppm

### DIMENSIONS:



STYLE	DIMENSION (mm)				POWER RATING (Watt)	VALUE RANGE
	L	øD	H	ød		
MF-12	3.2±0.2	1.8±0.3	28±2	0.43±0.02	1/6W; 1/8W, 1/4WS	1Ω~10M
MF-25	6.0±0.2	2.3±0.3	28±2	0.5±0.02	1/4W, 1/2WS	1Ω~10M
MF-50	9.0±0.5	3.2±0.3	26±2	0.6±0.02	1/2W, 1WS	1Ω~10M
MF-100	11.0±0.5	4.5±0.5	35±2	0.7±0.02	1W, 2WS	1Ω~10M
MF-200	15.0±0.5	5.0±0.5	32±2	0.8±0.02	2W, 3WS	1Ω~10M
MF-300	17.0±0.5	6.0±0.5	32±2	0.8±0.02	3W, 5WS	1Ω~10M

### ELECTRICAL CHARACTERISTICS:

Style	MF-12	MF-25	MF-50	MF-100	MF-200	—
Power Rating 70°C	1/6; 1/8W, 1/4WS	1/4W, 1/2WS	1/2W, 1WS	1W, 2WS	2W, 3WS	—
Operating Temp. Range	-55°C ~ +155°C					
Max. Working Voltage	200V	250V	350V	500V	500V	—
Max. Overload Voltage	400V	600V	700V	1000V	1000V	—
Dielectric Withstanding Voltage (AC)	300V	500V	700V	1000V	1000V	—
Max. Intermittence Overload Voltage	400V	600V	700V	1000V	1000V	—
Value Range ±0.25%, ±0.5%, ±1%	10Ω~1MΩ					
Value Range ±0.05%, ±0.1%	100Ω~100KΩ					
Temp. Coefficient (by Type)	±15ppm, ±25ppm, ±50ppm, ±100ppm					

FIG.1 DERATING CURVE

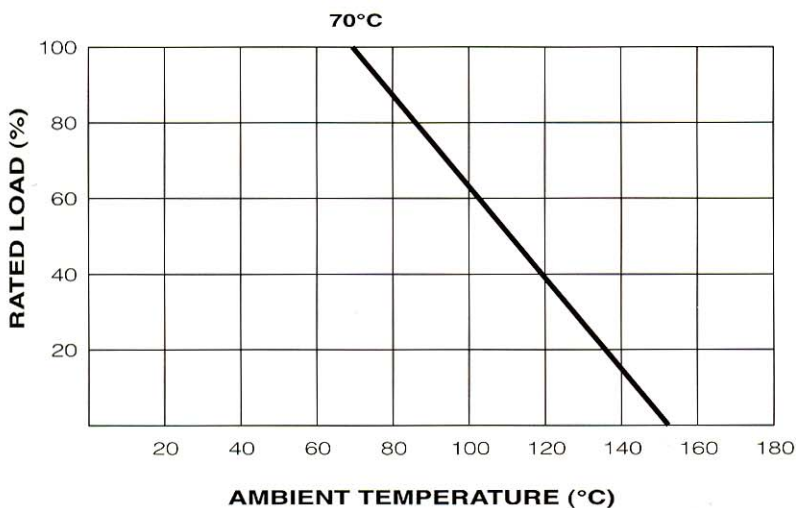


FIG.2 HOT-SPOT TEMPERATURE

