

MF SERIES

METAL FILM FIXED RESISTOR

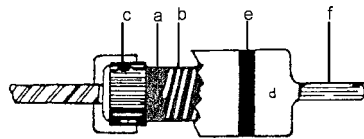


STANDARD TYPE MF(1/6W,1/4W,1/2W,3/5W,1W,2W)

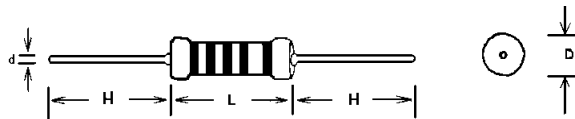
FEATURES:

- SPEC PER IEC 115-1, 115-4, MIL-R-10509F.
- STANDARD TOLERANCE: $\pm 0.5\%$ (D), $\pm 1\%$ (F), $\pm 2\%$ (G) & $\pm 5\%$ (J).
- LOW NOISE, LOW T.C.R.
- HIGH RELIABILITY.

CONSTRUCTION



- A) CERAMIC CORE (HIGH CONDUCTIVITY)
- B) METAL FILM (HIGH STABILITY)
- C) END CAP (TINNED IRON)
- D) EPOXY RESIN (INSULATIVE LACQUER, SOLVENT-PROOF)
- E) COLOR CODE PER IEC & EIA STANDARDS (5 RINGS, EXCEPT 4 RINGS FOR $\pm 2\%$ & $\pm 5\%$).
- F) TINNED COPPER WIRE (RELIABLE SOLDERABILITY)



DIMENSIONS:

TYPE NO.	DIMENSION				
	WATT	L ± 0.5 mm	D ± 0.5 mm	d ± 0.05 mm	H ± 3.0 mm
MF16	1/6W	3.4 ± 0.5	1.7	0.45	28
MF20	1/4W	3.4 ± 0.5	1.7	0.45	28
MF25	1/4W	6.0 ± 0.5	2.3	0.6	27
MF60	3/5W	6.0 ± 0.5	2.3	0.6	27
MF50	1/2W	9.0 ± 1.0	3.2	0.6	27
MF100	1W	11.0 ± 1.0	4.3	0.8	35
MF200	2W	15.0 ± 1.0	4.8	0.8	35

SPECIAL SIZES, VALUES AND SPECIFICATIONS NOT LISTED AVAILABLE ON SPECIAL ORDER.

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CHARACTERISTICS:

ITEM	POWER RATED (70°C)	MF16	MF20	MF25	MF50	MF60	MF100	MF200
		1/6W	1/4W	1/4W	1/2W	3/5W	1W	2W
MAX WORKING VOLTAGE		200V	200V	250V	350V	250V	500V	500V
MAX OVERLOAD VOLTAGE		400V	400V	500V	700V	500V	1000V	1000V
MAX INTERMITTENCE OVERLOAD VOLTAGE		500V	500V	750V	1000V	750V	1500V	1500V
DIELECTRIC WITHSTANDING VOLTAGE		300V	300V	500V	700V	500V	1000V	1000V
RESISTANCE TOLERANCE		± 1% ± 5%	± 1% ± 5%	± 0.5% ± 1% ± 2% ± 5%	± 0.5% ± 1% ± 2% ± 5%	± 1% ± 2% ± 5%	± 1% ± 5%	± 1% ± 5%
RESISTANCE RANGE	MIN	10R	10R	1R	10R	1R	10R	10R
	MAX	1M	1M	10M	4M7	10M	1M	1M

NOTE: RATED CONTINUOUS WORKING VOLTAGE (RCWV) SHALL BE DETERMINED FROM

$$RCWV = \sqrt{\text{POWER RATING} \times \text{RESISTANCE VALUE}}$$

PERFORMANCE SPECIFICATIONS :

CHARACTERISTIC	SPECIFICATIONS	TEST METHODS
DC RESISTANCE	± 1%	AT 25°C
T.C.R.	± 50PPM & ± 100PPM	RESISTANCE VALUE AT ROOM TEMPERATURE AND ROOM TEMPERATURE + 100°C
SHORT TIME OVER LOAD	± (0.25% ± 0.05R)	2.5 TIME RCWV 5 SEC.
INSULATION RESISTANCE	1000M OR MORE	V-BLOCK
LOAD LIFE	± (1% ± 0.05R)	70°C , 1000 HRS.
LOAD LIFE IN HUMIDITY	± (1% ± 0.05R)	40°C , 90-95%RH, 1000 HRS.
TEMPERATURE CYCLING	± (0.25% ± 0.05R)	- 25°C / 105°C , 5 CYCLING.
RESISTANCE TO SOLDERING HEAT	± (0.25% ± 0.05R)	350 °C , 3.5 SEC. 260 °C , 10 SEC.
SOLDERABILITY	95% COVERAGE MINIMUM	235 °C , 2 SEC.