

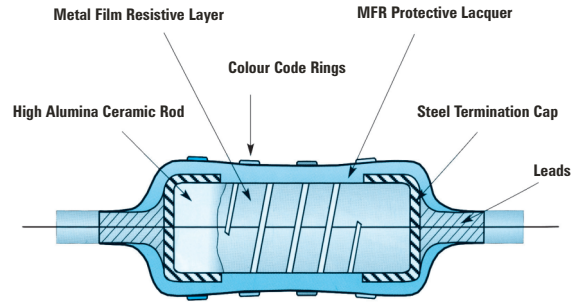
## METAL FILM RESISTORS

**Series:** MF / MFS

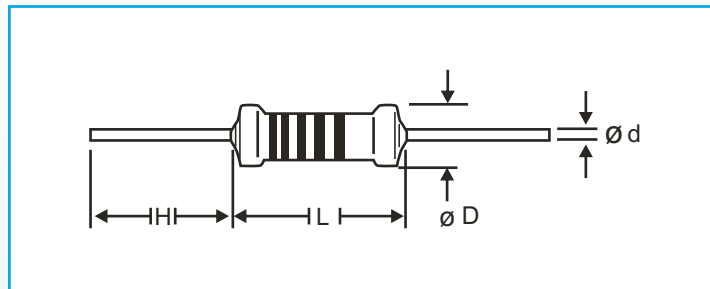
**Construction:**

**Features:**

- ▶ Meet performance requirements of JSS Std. & MIL Std.
- ▶ Flameproof Coating available on request.
- ▶ Miniature Size available for Space savings.
- ▶ TCR Available 25,50,100 ppm/° C.
- ▶ Available ranges from 10 Ohm ~ 1M Ohms.
- ▶ Value below above ranges available on request.



**Dimension:**



**Physical Data :**

TYPE	POWER RATING	TOL (±)	DIMENSION (mm)				Max. Working Voltage	Max.Overload Voltage
			L	D	H (min)	d		
MF 125	0.125W	1%,2%,5%	3.3 ± 0.5	1.7 ± 0.2	28	0.45 ± 0.05	200V	400V
MFS 40	0.4W	1%	3.3 ± 0.5	1.7 ± 0.2	28	0.45 ± 0.05	200V	400V
MF 25	0.25W	1%,2%,5%	6.5 ± 0.5	2.3 ± 0.2	25	0.60 ± 0.05	250V	500V
MFS 60	0.6W	1%	6.5 ± 0.5	2.3 ± 0.2	25	0.60 ± 0.05	250V	500V
MF 50	0.5W	1%,2%,5%	9.5 ± 1	3.5 ± 0.5	25	0.60 ± 0.05	350V	700V
MFS 100	1W	1%,5%	9.5 ± 1	3.5 ± 0.5	25	0.60 ± 0.05	350V	700V
MF 100	1W	1%,5%	12 ± 1	4.5 ± 0.5	25	0.80 ± 0.05	500V	1000V
MFS 200	2W	1%,5%	12 ± 1	4.5 ± 0.5	25	0.80 ± 0.05	500V	1000V

## Performance Data :

TEST	PROCEDURE	SPEC.
Dielectric Withstanding Voltage	V- Block Method, 3X Rated Voltage Duration : 1 Min.	$\Delta R = ( 0.25\% + 0.05 \text{ Ohm} )$
Insulation Resistance	V- Block Method, DC 500V Duration : 1 Min.	$> 10,000 \text{ M Ohm}$
Temp. Cycling	5 cycles of - 65° C, 25° C, +155° C, 25° C	$\Delta R = ( 1\% + 0.05 \text{ Ohm} )$
Short Time Overload	2.5 X Rated Voltage Duration : 5 sec.	$\Delta R = ( 0.25\% + 0.05 \text{ Ohm} )$
Damp Heat Steady State	40°C 95% relative humidity, Duration : 56 Days.	$\Delta R = ( 1\% + 0.05 \text{ Ohm} )$
Load Life	Rated Voltage at 70°C ambient Duration : 2000 Hrs.	$\Delta R = ( 1\% + 0.05 \text{ Ohm} )$
Robustness of Terminations	Tensile :10N Duration: 10 Sec. Bending :180°, > 3 Bends Torsion :3 Rotation of 360° Each	$\Delta R = ( 0.25\% + 0.05 \text{ Ohm} )$
Resistance to Soldering Heat	Temp. 260° C $\pm$ 5° C Duration :10 Sec.	$\Delta R = ( 0.25\% + 0.05 \text{ Ohm} )$
Shock ( Medium Impact )	1 Km/S <sup>2</sup>	$\Delta R = ( 0.25\% + 0.05 \text{ Ohm} )$
Vibration ( High Frequency )	10 to 2000 Hz : m/S <sup>2</sup>	$\Delta R = ( 0.25\% + 0.05 \text{ Ohm} )$
Low Temp. Exposure	At -65° C Duration :2 Hrs.	$\Delta R = ( 0.25\% + 0.05 \text{ Ohm} )$
High Temp. Exposure	At +155° C Duration :16 Hrs.No Load Condition	$\Delta R = ( 1\% + 0.05 \text{ Ohm} )$
Solderability	Dip Method, Solder Bath Temp. 230° C $\pm$ 5° C. Duration 5 Sec.	95% Coverage
Resistance to Solvent	Solvent : Trichloroethylene Duration :3 Min.	Marking should be legible

