

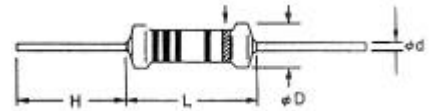
PRECISION FIXED METAL FILM RESISTORS

High Stability

POWER RATING: 1/6W, 1/4W, 1/2W, 1W, 2W

TOLERANCE: 0.1%, 0.25%, 0.5%, 1%, 5%

TEMPERATURE COEFFICIENT: $\pm 15\text{ppm}$, $\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$



DIMENSIONS

TYPE	Dimension (mm)			
	L	D	H	d
MF-1/6W	3.2 \pm 0.3	1.8 \pm 0.2	28 \pm 2.0	0.48 \pm 0.03
MF-1/4W	6.5 \pm 0.5	2.3 \pm 0.3	26 \pm 2.0	0.60 \pm 0.03
MF-1/2W	9.9 \pm 0.5	3.2 \pm 0.5	26 \pm 2.0	0.60 \pm 0.03
MF-1W	12 \pm 1.0	4.5 \pm 0.5	30 \pm 2.0	0.80 \pm 0.03
MF-2W	16 \pm 1.0	5.0 \pm 0.5	28 \pm 2.0	0.80 \pm 0.03

GENERAL SPECIFICATION

TYPE	Mil Style	Power Rating		Max Working Voltage		Max Overload Voltage	
		70°C	125°C	70°C	125°C	70°C	125°C
MF-1/6W	RN-50	0.166W	0.05W	200	150	400	300
MF-1/4W	RN-55	0.25W	0.1W	250	200	500	400
MF-1/2W	RN-60	0.5W	0.125W	350	250	700	500
MF-1W	RN-65	1W	0.25W	500	300	1000	600
MF-2W	RN-70	2W	0.5W	500	350	1000	700

CHARACTERISTICS AND COMPARISON

Requirements	MF Series % Change in Resistance (ΔR)					Mil-R-22684 Style RL Requirement	Mil-R-10509 Chart C,E Requirement
	MF-1/6W	MF-1/4W	MF-1/2W	MF-1W	MF-2W		
Temperature Cycling, -65°C to +150°C (%)	± 0.25	± 0.25	± 0.25	± 0.25	± 0.25	≤ 1.00	≤ 0.25
Low Temperature Operation, -65°C (%)	± 0.25	± 0.25	± 0.25	± 0.25	± 0.25	≤ 0.50	≤ 0.25
Short Time Overload (%)	± 0.25	± 0.20	± 0.20	± 0.25	± 0.20	≤ 0.50	≤ 0.25
Terminal Strength, 5lb. Pull (%)	± 0.20	± 0.20	± 0.20	± 0.15	± 0.15	≤ 0.50	≤ 0.20
Resistance to Soldering Heat, +350°C (%)	± 0.10	± 0.10	± 0.10	± 0.10	± 0.10	≤ 0.50	≤ 0.10
Moisture Resistance, Mil Std. 202 (%)	± 0.50	± 0.50	± 0.50	± 0.50	± 0.50	≤ 1.50	≤ 0.50
Life 1000 Hours (Rated Power) (%)	± 0.50	± 0.50	± 0.50	± 0.50	± 0.50	≤ 2.00	≤ 0.50
Vibration – High frequency, 10-2000Hz (%)	± 0.25	± 0.20	± 0.20	± 0.20	± 0.20	≤ 0.50	≤ 0.25
Insulation Resistance	$\geq 10^{10}\Omega$	$\geq 10^{10}\Omega$	$\geq 10^{10}\Omega$	$\geq 10^{10}\Omega$	$\geq 10^{10}\Omega$	$\geq 10^9\Omega$	$\geq 10^9\Omega$

RESISTANCE RANGE

Type	Tolerance	TC+15ppm / -20ppm	TC \pm 50ppm	Remark
MF-1/6W	$\pm 1\%$ $\pm 0.5\%$ $\pm 0.25\%$ $\pm 0.1\%$	100 Ω - 100K Ω 100 Ω - 100K Ω 100 Ω - 100K Ω 100 Ω - 100K Ω	1 Ω - 10M Ω 51.1 Ω - 200K Ω 51.1 Ω - 200K Ω	*Standard resistance is 10 Ω - 1M Ω Below or over this Resistance on Request
MF-1/4W	$\pm 1\%$ $\pm 0.5\%$ $\pm 0.25\%$ $\pm 0.1\%$	51.1 Ω - 511K Ω 51.1 Ω - 511K Ω 100 Ω - 330K Ω 100 Ω - 100K Ω	1 Ω - 10M Ω 10 Ω - 1M Ω 51.1 Ω - 330K Ω	
MF-1/2W	$\pm 1\%$ $\pm 0.5\%$ $\pm 0.25\%$ $\pm 0.1\%$	51.1 Ω - 1M Ω 51.1 Ω - 1M Ω 100 Ω - 511K Ω 100 Ω - 330K Ω	1 Ω - 10M Ω 10 Ω - 1M Ω 51.1 Ω - 511K Ω	
MF-1W	$\pm 1\%$ $\pm 0.5\%$ $\pm 0.25\%$ $\pm 0.1\%$	51.1 Ω - 1M Ω 51.1 Ω - 1M Ω 100 Ω - 511K Ω 100 Ω - 330K Ω	1 Ω - 10M Ω 10 Ω - 1M Ω 51.1 Ω - 511K Ω	
MF-2W	$\pm 1\%$ $\pm 0.5\%$ $\pm 0.25\%$ $\pm 0.1\%$	51.1 Ω - 1M Ω 51.1 Ω - 1M Ω 100 Ω - 511K Ω 100 Ω - 330K Ω	1 Ω - 10M Ω 10 Ω - 1M Ω 51.1 Ω - 511K Ω	

REMARKS:

Special lead length (H) on request.

Special resistance, temperature coefficient and tolerance on request

Flameproof type also available

Miniature type also available for 1/4W and 1/2W. Type 1/4WS and 1/2WS