

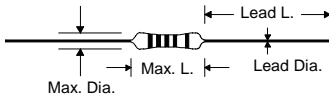


MF-SERIES

GENERAL PURPOSE METAL FILM RESISTORS

PRECISION RESISTIVE PRODUCTS, INC.
 202 MACK LANE, MEDIAPOLIS, IA 52637
 (319)394-9131 FAX (319)394-9280
 E-Mail info@prpinc.com
 PRP HOME PAGE <http://www.prpinc.com>

- Small Size
- Low Cost
- Resistance Tolerances 0.5%, 1% & 5% @ 25°C
- Temperature Coefficients 25, 50 & 100PPM/°C
- Conformal Coating
- Color Band Marking
- Packaging is Tape & Reel



Dimensions Inches (mm)

Style	Max. L.	Max. Dia.	Lead Dia.	Lead L.
MF-12	.146 ±.016 (3.70 ±0.40)	.059 ±.008 (1.50 ±0.20)	.017 ±.002 (0.43 ±0.05)	.984 (25.0)
MF-25	.256 ±.020 (6.50 ±0.50)	.091 ±.008 (2.31 ±0.20)	.0236 ±.0004 (0.60 ±0.01)	.984 (25.0)
MF-50	.354 ±.039 (9.00 ±0.99)	.138 ±.020 (3.50 ±0.50)	.0236 ±.0004 (0.60 ±0.01)	.984 (25.0)
MF-100	.472 ±.039 (11.99 ±0.99)	.177 ±.020 (4.50 ±0.50)	.031 ±.002 (0.79 ±0.05)	.984 (25.0)
MF-200	.630 ±.039 (16.0 ±0.99)	.217 ±.020 (5.51 ±0.05)	.031 ±.002 (0.79 ±0.05)	.984 (25.0)

* MF-25 & MF-50 are also available with .022 inch Diameter Leads

Specifications

Style	Power Rating @ 70°C	T100 & TC50 Range (Ω)	TC25 Range (Ω)	Voltage Max. Working	Voltage Max. Overload
MF-12	1/8W	51.1R - 511K	100R - 100K	200V	400V
MF-25	1/4W	5.11R - 2.4M	5.11R - 511K	250V	500V
MF-50	1/2W	5.11R - 2.4M	5.11R - 1M	350V	700V
MF-100	1W	10R - 1M	10R - 1M	500V	1000V
MF-200	2W	10R - 1M	10R - 1M	500V	1000V

Operating Temperature Range -55°C to 155°C

Lead Tape Packaging Per EIA RS-296

Available Resistance Values

- 0.5% = E192
- 1% = E96
- 5% = E24 & E48

How to Order

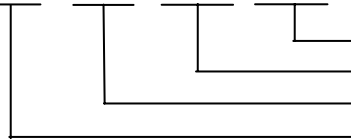
[Standard Decade Values](#)

Sample Part Number

[Color Codes](#)

MF25 T100 47R ±1%

[Packaging](#)



Resistance Tolerance
Resistance Value
Temperature Coefficient
Style

Add "T" at the end of the Style portion of the part number for lead free termination.



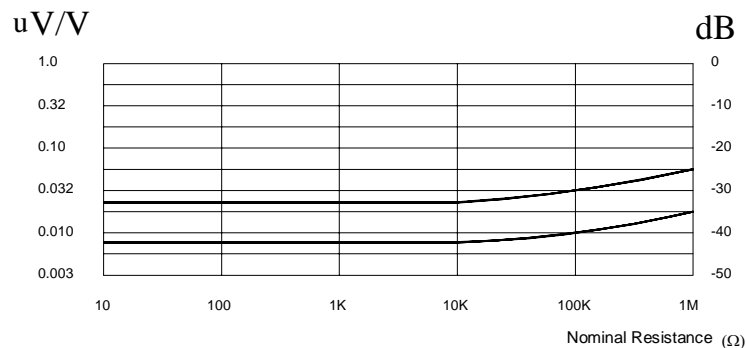
DEDICATION TO EXCELLENCE

Subject to change without notice

Rev. H 4/19/05

Characteristic	Specification	Test Method
		(All resistance measurements should be performed after stabilization or conditioning periods.)
DC RESISTANCE	Within specified tolerance.	MIL-STD-202 Method 303
TEMPERATURE COEFFICIENT	As buyer requested $\pm 25\text{PPM}/^\circ\text{C}$ $\pm 100\text{PPM}/^\circ\text{C}$ $\pm 50\text{PPM}/^\circ\text{C}$ $\pm 200\text{PPM}/^\circ\text{C}$	MIL-STD-202 Method 304
DIELECTRIC STRENGTH	No flashover or damage	MIL-STD-202 Method 301 1/8W 300V 1 minute 1/4W 500V 1 minute 1/2W 700V 1 minute 1, 2W 750V 1 minute
INSULATION RESISTANCE	At least 1000M Ω	MIL-STD-202 Method 302 100V 1 minute
CURRENT NOISE TEST	below 10K Ω below 0.05 $\mu\text{V}/\text{V}$ 10K Ω ~below 0.1 $\mu\text{V}/\text{V}$ below 1M Ω below 0.2 $\mu\text{V}/\text{V}$	MIL-STD-202 Method 308
VIBRATION	ΔR within $\pm(0.25\% + 0.05\Omega)$	MIL-STD-202 Method 201 10~ Hz X.Y.Z. 3 directions 2 hours each.
TERMINAL STRENGTH	No broken or loosened terminals.	MIL-STD-202 Method 211
RESISTANCE TO SOLDERING HEAT	ΔR within $\pm(0.25\% + 0.05\Omega)$	MIL-STD-202 Method 210 350 $^\circ\text{C}$, 3 ± 0.05 seconds
SOLDERABILITY	At least 95% coverage	MIL-STD-202 Method 208 230 $^\circ\text{C}$, 5 seconds
THERMAL SHOCK	ΔR within $\pm(0.5\% + 0.05\Omega)$	MIL-STD-202 Method 107 -55 $^\circ\text{C}$, +155 $^\circ\text{C}$ 5 cycles
SHORT TIME OVERLOAD	ΔR within $\pm(0.05\% + 0.05\Omega)$	MIL-R-10509 Para, 4.6.6 2.5 times rated working voltage, 5 seconds
HUMIDITY	ΔR within $\pm(1\% + 0.05\Omega)$ NO mechanical damage	MIL-STD-202 Method 103 40 $^\circ\text{C}$, RH 95% 500
LOW TEMPERATURE OPERATION	ΔR within $\pm(0.5\% + 0.05\Omega)$	MIL-R-10509 Para 4.6.5 Rated working voltage, @ -65 $^\circ\text{C}$ 45 minutes.
LOAD LIFE	ΔR within $\pm(1\% + 0.05\Omega)$	MIL-STD-202 Method 108 Rated working Voltage 1 1/2 hours on. 1/2 hour off for total 1000 hours
RESISTANCE TO SOLVENT	Color bands legible. No mechanical damage.	MIL-STD-202 Method 215

CURRENT NOISE



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