PRECISION METAL FILM RESISTORS

RESISTORS • CAPACITORS • COILS • DELAY LINES

MF SERIES

Term.W is RoHS compliant & 260°C compatible

- ❒ Wide resistance range: 1.0Ω to 22.1 Meg
- ❒ TC ±25 to ±100ppm standard, matching to 10ppm
- ❒ Precision quality, excellent stability, low cost
- ❒ Meets performance requirements of MIL-R-10509 and EIA RS-460 (screening per Mil-PRF-55182 available)
- ❒ Extremely low noise, reactance, voltage coefficient
- ❒ Available on exclusive ***SWIFT*** ™ delivery program!
- ❒ All sizes available on Tape & Reel

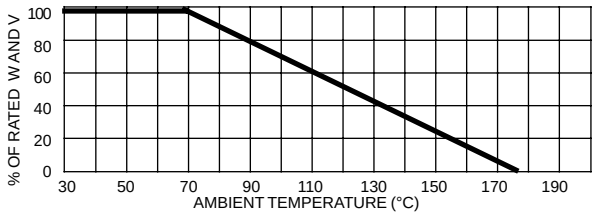
OPTIONS

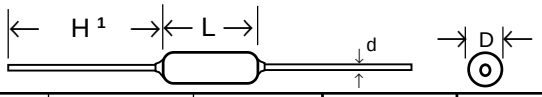
Custom marking, formed leads, matched sets, burn-in, increased power/voltage/pulse capability, flameproof, etc.

Military-grade performance at commercial grade price!

RCD MF Series metal film resistors have been designed to meet or surpass the performance levels of MIL-R-10509 characteristics D, C, and E. The film is a nickel-chrome alloy, evaporated onto a high grade substrate using a high vacuum process to ensure low TC's and superb stability. The resistors are coated or encased with a high-temp epoxy to ensure utmost moisture and solvent protection. Stringent controls are used in each step of production to ensure 'built-in' reliability and consistent quality. Resistors are available with alpha-numeric or color band marking.

DERATING





RCD Type	L (Max.)	D (Max.)	d (Max.)	H[1] (Min.)
MF50	.168 [4.3]	.075 [1.9]	.020 [.5]	1.00 [25]
MF55	.285 [7.2]	.102 [2.6]	.026 [.66]	1.00 [25]
MF60	.404 [10.3]	.160 [4.06]	.026 [.66]	1.10 [28]
MF65	.598 [15.2]	.211 [5.36]	.028 [.7]	1.16 [29.5]
MF70	.724 [18.4]	.264 [6.7]	.033 [.85]	1.16 [29.5]
MF75	1.114 [28.3]	.409 [10.4]	.033 [.85]	1.16 [29.5]

[1] Longer leads available

RCD Type	MIL TYPE[1]	Wattage Rating @ 70°C	Maximum Working Voltage [2]	TCR PPM/°C[3]	Standard Resistance Range 1%	Standard Resistance Range .5%, .25%, .1%
MF50	RN50	1/8W	200V	100, 50, 25	10Ω to 1.0MΩ	10Ω to 562K
MF55	RN55	1/4W	250V	100, 50	1.0Ω to 22.1MΩ	10Ω to 1.2MΩ
				25	10Ω to 1.0MΩ	10Ω to 1.2MΩ
MF60	RN60	1/2W	300V	100, 50	2.5Ω to 5.1MΩ	10Ω to 1.5MΩ
				25	10Ω to 1.0MΩ	10Ω to 1.5MΩ
MF65	RN65	3/4W	350V	100, 50	10Ω to 10MΩ	20Ω to 5.1MΩ
				25	20Ω to 5.1MΩ	20Ω to 5.1MΩ
MF70	RN70	1W	400V	100, 50	10Ω to 15MΩ	20Ω to 10MΩ
				25	20Ω to 10MΩ	20Ω to 10MΩ
MF75	RN75	2W	500V	100, 50	20Ω to 15MΩ	20Ω to 10MΩ
				25	20Ω to 10MΩ	20Ω to 10MΩ

[1] MIL type given for reference only and does not imply MIL qualification or exact interchangeability. [2] Rated voltage = $(PR)^{1/2}$ or Max. Voltage Rating, whichever is less.
[3] TC is measured at -20 to +85°C, referenced to 25°C. TC's to 10ppm available.

PERFORMANCE CHARACTERISTICS*

Load Life (1000 hrs, full Mil equiv power @25°C)	0.10%
Short Time Overload (2.5x RCWV, 5 Sec, NTE 1.5x VR)	0.05%
Temp. Cycling (-55 to +85°C, 5 cycles, 1/2 hr)	0.10%
Moisture Resistance** (MIL-STD-202, M.106)	0.10%
Effect of Solder (260°C, 10 Sec)	0.02%
Low Temperature Operation (-65°, 1 hr)	0.02%
Shock, Vibration (per MIL-PRF-55182)	0.01%
Dielectric Strength (up to 1KV available)	500V (MF50=300V)
Operating Temperature Range	-65 to +175°C

* Data is representative of typical performance levels from 10Ω–100K (consult factory for performance data outside this range).
**To ensure utmost reliability, care should be taken to avoid potential sources of ionic contamination.

P/N DESIGNATION:

MF55 ☐ - 1002 - B T 25 W

RCD Type

Option Code: assigned by RCD (leave blank if standard)

Resis. Code: 3 signif. digits & multiplier, e.g. R100= 0.1Ω, 1R00= 1Ω, 10R0=10Ω, 1000=100Ω, 1001=1K, 1002=10K, 1003=100K, 1004=1M, 1005=10M

Tolerance Code: F= 1%, D= 0.5%, C= 0.25%, B= 0.1%

Packaging: B = Bulk, T = Tape & Reel

Temperature Coefficient: 25= 25ppm, 50= 50ppm, 101= 100ppm

Termination: W= Lead-free, Q= Tin/Lead (leave blank if either is acceptable, in which case RCD will select based on lowest price and quickest delivery

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