ULTRA PRECISION METAL FILM RESISTORS

PMF SERIES

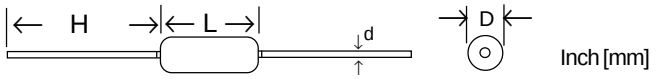
RoHS Term.W is RoHS compliant & 260°C compatible

- ❒ Tolerances to ±0.01%, TC's to ±3ppm/°C
- ❒ Exceptional performance levels
- ❒ Extremely low noise, reactance, voltage coefficient
- ❒ All sizes available on Tape & Reel

OPTIONS

- ❒ Option S: miniature size
- ❒ Option ER: 100 hour burn-in (full rated $W_{25°C}$)
- ❒ Also available: matched sets, axial and vertical cut & formed leads, hi-rel screening, special marking, hermetic seal, non-standard values, increased power & voltage, etc. Customized components are an RCD speciality!

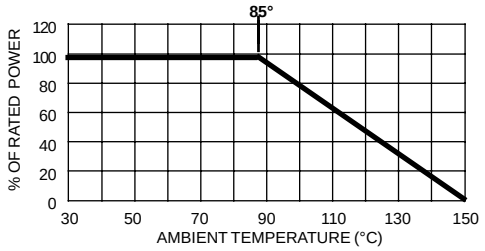
RCD's PMF Series meets the need for ultra-precision performance when product reliability is a must. Stability levels (comparable to those of precision wirewound resistors), coupled with the excellent high-frequency performance of film resistors, makes the PMF Series the universal choice. State-of-the-art deposition and trim equipment enables the industry's widest resistance range. The exceptional performance of this series provides new opportunities for circuit designers to obtain the utmost in long term reliability without the need for post circuit trimming.



Inch [mm]

DERATING:

Derate W and V per graph when ambient temp exceeds 85°C



DIMENSIONS

RCD Type	L ± .032 [.8]	D ± .025 [.6]	d ± .003 [.08]	H (Min.)
PMF1/20	.150 [3.8]	.065 [1.7]	.018 [.45]	.94 [24]
PMF1/10	.280 [7.1]	.105 [2.7]	.025 [.6]	1.1 [28]
PMF1/8S	.280 [7.1]	.105 [2.7]	.025 [.6]	1.1 [28]
PMF1/8	.380 [9.6]	.140 [3.5]	.025 [.6]	1.16 [29.5]
PMF1/4S	.380 [9.6]	.140 [3.5]	.025 [.6]	1.16 [29.5]
PMF1/4	.578 [14.7]	.189 [4.8]	.025 [.6]	1.16 [29.5]
PMF1/2	.736 [18.7]	.250 [6.35]	.031 [.8]	1.16 [29.5]
PMF1	.79 [20] Max	.315 [8] Max	.031 [.8]	1.30 [33]

TYPICAL PERFORMANCE

Temp.Coefficient (-20 to +85°C, Ref 25°C)	25ppm/°C (std), 15ppm, 10ppm, 5ppm, 3ppm
Thermal Shock (-55~ +85°C, 5cyc 1/2hr)	0.02%
Moisture Resist.* (MIL-STD-202, M.106)	0.08%
Resistance to Solder Heat (260°C, 10S)	0.02%
Short Time Overload (2.5x RCWV, 5S, NTE 1.5xVR)	0.01% (.02% Opt.S)
Life (1000 hrs., full power)	0.02% (.05% Opt.S)
Shelf Life (Max. per year)	50 PPM
Dielectric Strength	500V (300V PMF1/20)
Operating Temperature	-55 to +150°C

* To ensure utmost reliability, care should be taken to avoid potential sources of ionic contamination.

SPECIFICATIONS

RCD Type	Wattage @ 85°C	Voltage Rating*	Resistance Range
PMF1/20	1/20	200	10Ω to 604K
PMF1/10	1/10	250	10Ω to 1.5Meg
PMF1/8S	1/8	250	10Ω to 1.5Meg
PMF1/8	1/8	300	10Ω to 2 Meg
PMF1/4S	1/4	300	10Ω to 2 Meg
PMF1/4	1/4	350	10Ω to 5 Meg
PMF1/2	1/2	400	10Ω to 10 Meg
PMF1	1	500	10Ω to 15 Meg

* Maximum working voltage determined by $E = (PR)^{1/2}$, E not to exceed value listed in column above.

MATCHED SETS AND NETWORKS

RCD's experience in matching resistors for sets and networks can result in an economical solution for many circuits. Cost savings up to 50% can be achieved by allowing relatively loose absolute tolerances but tight matching requirements by pair or set. Resistance matching is available to 0.01% and T.C. tracking to ±1ppm/°C.

P/N DESIGNATION: PMF1/10 ☐ - 1001 - Q B 5 W

RCD Type

Options: S, ER, etc. (leave blank if standard)

Resis. Code: 3 signif. figures & multiplier, e.g. 1R00= 1Ω, 10R0=10Ω, 1000= 100Ω, 1001=1KΩ, 1002=10KΩ, 1003=100KΩ, 1004=1MΩ,1005=10MΩ

Tol. Code: F=1%, D=.5%, C=.25%,B=.1%, A=.05%, Q=.02%, T=.01%

Packaging: B = Bulk, T = Tape & Reel

Temp. Coefficient: (5=5ppm, 10=10ppm, 25=25ppm, etc.)

Termination: W= Lead-free, Q= Tin/Lead (leave blank if either is acceptable