

METAL OXIDE RESISTORS, 1/2W to 9W

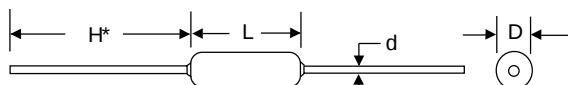
RSF SERIES- Standard RMF SERIES- Miniature



Term.W is
RoHS
compliant
& 260°C
compatible

RCD
RESISTORS • CAPACITORS • COILS • DELAY LINES

- Low cost! Delivery from stock (standard E-24 values, 5%)
- Flameproof construction (UL94V-0)
- 0.1Ω to 1 Meg, standard tolerances: ±1%, ±2%, ±5%
- All sizes avail. on horizontal tape, ½-3W avail. on vertical tape
- Options include increased voltages, custom marking, cut & formed leads, Sn-Pb solder leads (Opt. Q), high pulse (Opt. P), etc.



* Dim. H is for bulk pack, taped leads may be shorter (refer to taping spec). Non-std lengths and cut&form avail

	SERIES RSF	Wattage		Max. Voltage Rating ¹	Opt. P Peak Pulse Voltage ²	Standard Resistance Range	L±.032 [.8]	D±.025 [.6]	d±.004 [.1]	H* (Min.)
		25°C	70°C							
Stock	RSF1A	1.0W	0.7W	300V	2KV	0.1Ω to 1M	.354 [9]	.135 [3.4]	.025 [.65]	.945 [24]
	RSF1B	1.5W	1.0W	350V	2.5KV	0.1Ω to 1M	.433 [11]	.165 [4.2]	.031 [.8]	.945 [24]
Stock	RSF2B	3.0W	2.0W	350V	3KV	0.1Ω to 1M	.590 [15]	.212 [5.4]	.031 [.8]	1.06 [27]
Stock	RSF3B	5.0W	3.0W	500V	4.5KV	0.47Ω to 1M	.950 [24.1]	.320 [8.1]	.031 [.8]	1.25 [31.7]
	RSF5B	7.0W	5.0W	750V	6KV	0.5Ω to 240K	1.585 [40.3]	.320 [8.1]	.031 [.8]	1.375 [35]
	RSF7B	9.0W	7.0W	800V	8KV	2.0Ω to 510K	2.080 [52.8]	.320 [8.1]	.031 [.8]	1.375 [35]

	SERIES RMF	Wattage Rating		Max Voltage Rating ¹	Opt. P Peak Pulse Voltage ²	Standard Resistance Range	L±.032 [.8]	D±.025 [.6]	d±.004 [.1]	H* (Min.)
	RMF1/2	.5W @70°C		250V	2KV	0.1Ω -510K	.250 [6.35]	.090 [2.3]	.024 [.6]	.945 [24]
	RMF1	1W @70°C		300V	2.5KV	0.1Ω -1M	.375 [9.53]	.135 [3.4]	.024 [.6]	.945 [24]
	RMF2	2W @70°C		350V	3KV	0.1Ω -1M	.450 [11.4]	.162 [4.1]	.031 [.8]	.945 [24]
	RMF3	3W @70°C		350V	3.5KV	0.1Ω -1M	.598 [15.2]	.213 [5.4]	.031 [.8]	1.25 [31.7]
	RMF5	5W @70°C		500V	5KV	0.47Ω -1M	.950 [24.1]	.335 [8.5]	.031 [.8]	1.375 [35]
	RMF5S	5W @25°C		500V	4KV	0.47Ω -1M	.695 [17.6]	.250 [6.4]	.031 [.8]	1.25 [31.7]
	RMF7	7W @25°C		500V	5KV	0.47Ω -1M	.950 [24.1]	.335 [8.5]	.031 [.8]	1.375 [35]

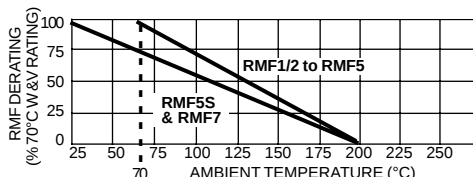
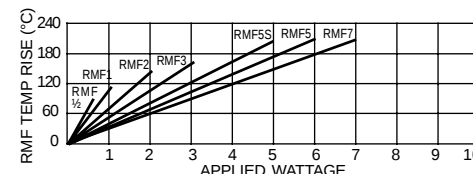
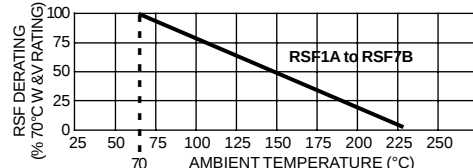
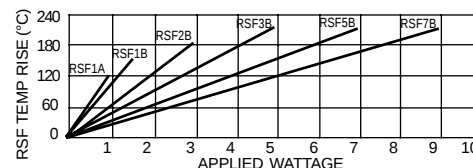
TYPICAL PERFORMANCE CHARACTERISTICS

Temperature Coefficient	±100ppm Typ., ±200 Max.
Insulation Resistance	10,000 MΩ Min.
Load Life (1000 hours)	±2% RSF ₇₀ , ±3% RSF ₂₅ , ±3% RMF
Short-Time Overload	2.5x rated W, 5S, nte 2x rated V
Temperature Cycling	±1.0%
Moisture Resistance	±2.0%
Shock and Vibration	±0.2%
Effect of Soldering	±0.5%
Voltage Coefficient	.001%/ V
Current Noise	<1μV/ V/decade
Dielectric Strength	500V (350V sizes <2W)
Standard Marking (custom marking avail)	Color banded or stamped with resis.value & tol as minimum
Terminal Strength	5 pound pull (minimum)
Operating Temp Range	-55 to +235°C (+200°C RMF)

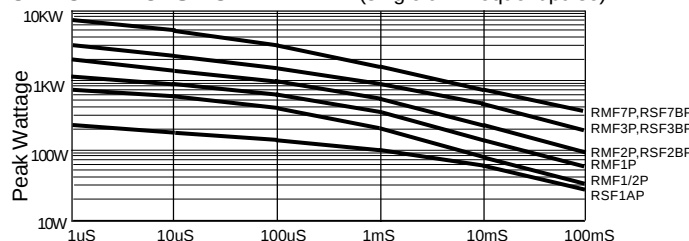
¹ Rated continuous working voltage determined by E=(PR)^{1/2}, E not to exceed max voltage rating. Increased ratings avail.

² Peak voltage is for Opt.P (derate 50% for std parts), single & infrequent pulses (derate 30-50% for frequent pulses), based on 1uS pulse duration (derate 10-30% for longer pulses). Pulse to be ≤ peak wattage and ≤ peak voltage rating. Average pulse power to be ≤ watt rating. Consult factory for assistance, verify samples.

RCD's oxide film resistors are ideally suited for medium-power applications. Surge levels exceed that of other film constructions. A thick complex-oxide material is deposited on a ceramic core for optimum heat dissipation, low inductance, and high stability even after extended periods. Series RMF (mini version) utilizes highest grade cores and special processing for increased power density. Flameproof coating offers excellent environmental protection and is resistant to solvents and humidity. Available bulk or T&R (5Kpcs/reel RMF1/2, 2.5Kpcs RSF1A, 2Kpcs RSF1B & RMF1, 1Kpcs RSF2B & RMF3, 500pcs RSF3B-7B & RMF5-7).



OPTION P PULSE CAPABILITY (single or infrequent pulse)²



P/N DESIGNATION:

RSF2B - 101 - J T W

RCD Type

Option Codes: leave blank if standard

Resis.Code 1%: 3 signif. figures & multiplier,
(R100=1Ω, 1R00=1Ω, 10R0=10Ω, 1000=100Ω, 1001=1K, 1004=1M)

Resis.Code 2%-10%: 2 signif. figures & multiplier,
(R10=0.1Ω, 1R0=1Ω, 100=10Ω, 101=100Ω, 102=1K, 105=1M)

Tolerance Code: J=5% (std), G=2%, F=1%

Packaging: B = Bulk, T = Horizontal Tape & Reel,
APN=Vertical Tape & Box (available up to 3W size)

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