

Features

- Formerly a Riedon™ product
- Resistances from 0.005 Ω to 0.10 Ω
- Resistance tolerances as low as ±1 %
- Power rating: 1, 3 or 5 watts
- Resistance wire TCR: ±20 PPM/°C
- For current sensing and shunt applications
- All welded construction
- Low inductance (<10 nH to 50 nH typical)
- Flame resistant non-inductive bare metal element
- Superior pulse capabilities
- RoHS compliant*

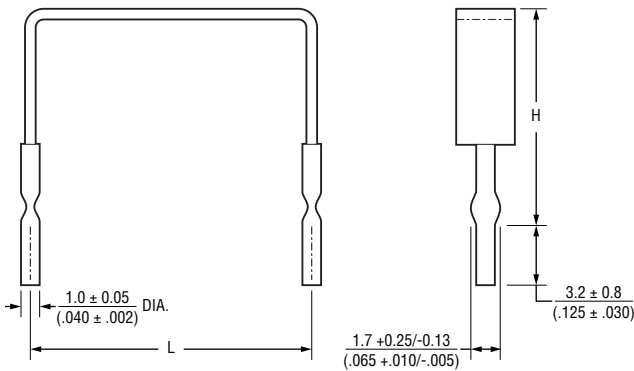
MSR Series – Riedon™ Bare Metal Element Resistors by Bourns

Specifications

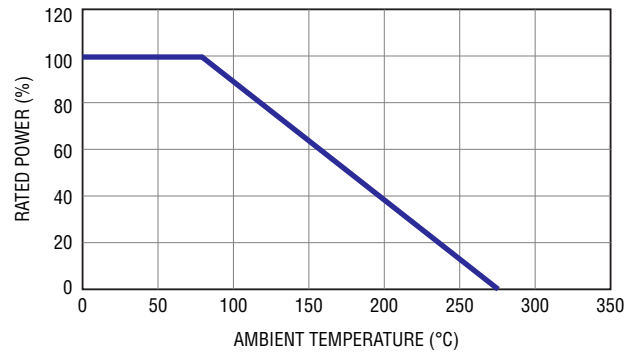
Bourns Model Number	Power Rating @ 85 °C (W)	Resistance (Ω) ¹	Available Tolerances	Operating Temperature (°C)	Dimensions	
					L	H
MSR-1	1	0.005, 0.01, 0.02, 0.025, 0.03, 0.04, 0.05, 0.1	±1 % / ±5 %	-55 to +275	$\frac{11.4 + 1.0 / - 0.5}{(.450 + .039 / -.020)}$	$\frac{5.1 \pm 2.5}{(.201 \pm .098)}$
MSR-3	3	0.005, 0.01, 0.015, 0.02, 0.025, 0.03, 0.04, 0.05, 0.1			$\frac{15.2 + 1.0 / - 0.5}{(.598 + .039 / -.020)}$	$\frac{25.4}{(.100) \text{ MAX.}}$
MSR-5	5	0.005, 0.01, 0.015, 0.02, 0.025, 0.03, 0.05, 0.1			$\frac{20.3 + 1.0 / - 0.5}{(.799 + .039 / -.020)}$	

¹ Other resistance values may be available. Please [contact Bourns](#).
Note: Terminal finish 100 % matte tin over copper

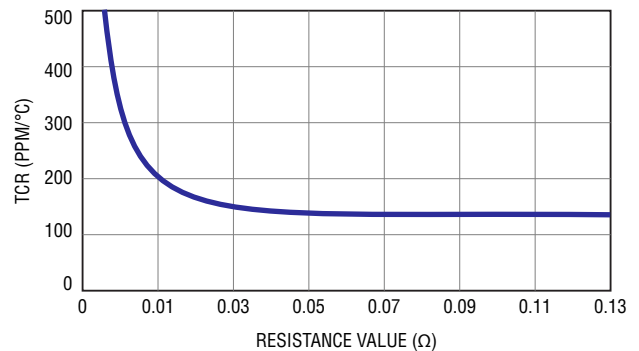
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$



Derating Curve



Temperature Coefficient of Resistance (TCR)



How To Order

Model _____ **MSR 3 - 0R1 F 1**

Power Rating (W) _____
1 3 5

Resistance Code _____
"R" represents decimal point
(Example: 0R1 = 0.1 Ω)

Tolerance _____
F = ±1 % J = ±5 %

Internal Use _____
(Specific TCR values available upon request.)

Packaging Information

Bulk only. 250 per pack.

REV. 10/24

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
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