

Features

- High current capability
- Low inductance (less than 10 nH)
- Radial leads
- Low ohmic

Applications

- Power supplies
- UPS
- Motor drives



This series is currently available but not recommended for new designs.

PWR4412-2S Series Bare Metal Element Resistor

General Information

The Bourns® PWR4412-2S Series is a through-hole resistor designed for current shunt and current sensing applications such as power supplies of different kinds, motor drives and many other applications. The resistor is quite rugged, consisting of a special metal alloy welded to tinned copper leads.

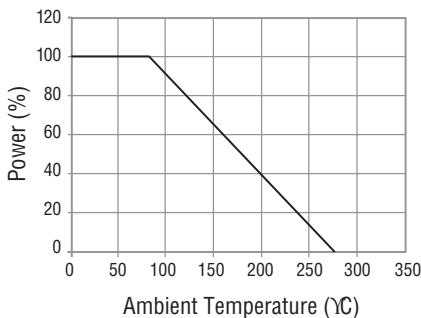
Performance

Load Life (1000 Hours @ 70 °C) ... ΔR 2.5 %
 Moisture No Load 100 Hours 1 %
 Temperature Cycling
 (-40 °C to +125 °C, 1000 Cycles)...1 %

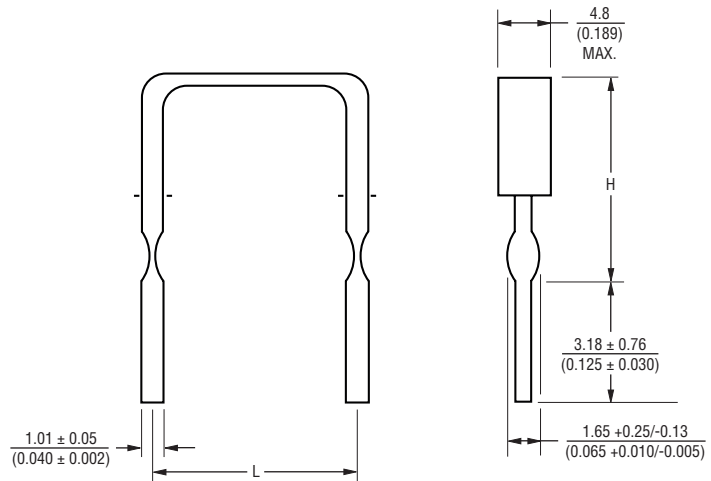
Electrical Specifications

Power Rating @ 85 °C1, 3, 5 W
 (see matrix)
 Resistance Range0.005 to 0.1 ohms
 Tolerances Available.....1 %, 5 %
 Temperature Range-55 ° to +270 °C
 Maximum Working Voltage..... $\sqrt{P \cdot R}$
 Short Time Overload
 5 x Rated Power for 5 seconds
 Temperature Coefficient of Resistance
 Wire ± 20 ppm/°C
 Packaging.....250 pcs./bag

Power Derating Curve



Product Dimensions



Power Rating (W)	Version	Dimension L	Dimension H Max.	Resistance Values
1	B	$\frac{11.43 + 1.02/-0.51}{(0.450 + 0.04/-0.02)}$	$\frac{7.62}{(0.30)}$	R0050, R0100, R0200, R0250, R0300, R0400, R0500, R1000
3	C	$\frac{15.24 + 1.02/-0.51}{(0.60 + 0.04/-0.02)}$	$\frac{25.4}{(1.0)}$	R0050, R0100, R0150, R0200, R0250, R0300, R0400, R0500, R1000
5	D	$\frac{20.32 + 1.02/-0.51}{(0.80 + 0.04/-0.02)}$	$\frac{25.4}{(1.0)}$	R0050, R0100, R0150, R0200, R0250, R0300, R0500, R1000

Note: Terminal pins are tin plated copper.

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

How to Order

Model _____ **PWR4412-2S** _____ **B** _____ **R0300** _____ **J**
 Version _____
 Resistance Value for All Tolerances _____
 "R" represents decimal point (examples: R0050 = 5 milliohms; R1000 = 100 milliohms)
 Absolute Tolerance _____
 J = 5 %
 F = 1 %

REV. 09/18

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
 Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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