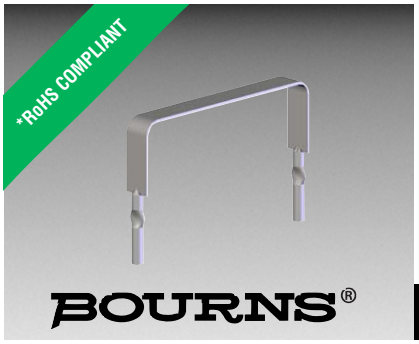


Features

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

Applications

- Power supplies
- UPS
- Motor drives

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.

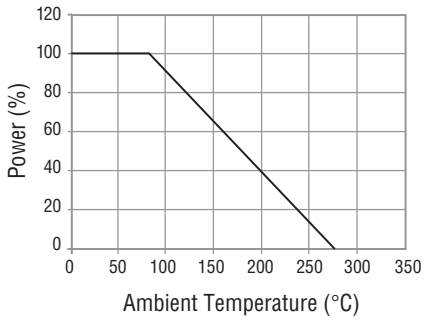
Performance

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

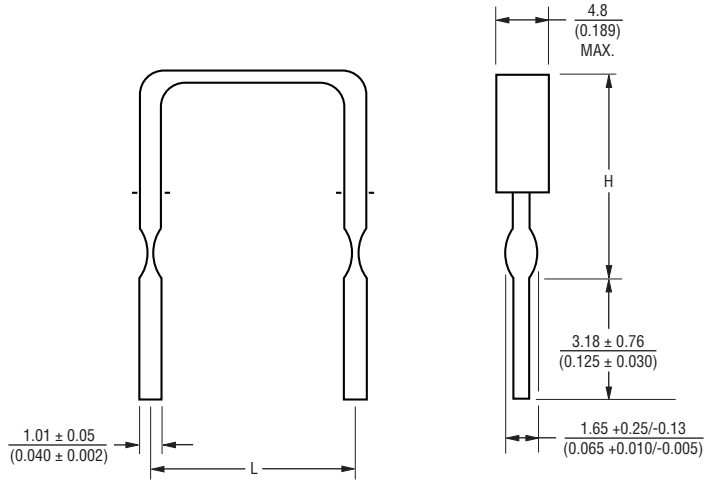
Electrical Specifications

Power Rating @ 85 °C .....1, 3, 5 W (see matrix)
Resistance Range .....0.005 to 0.1 ohms
Tolerances Available.....1 %, 5 %
Temperature Range .....-55 ° to +270 °C
Maximum Working Voltage.....√P*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	11.43 +1.02/-0.51 (0.450 +0.04/-0.02)	7.62 (0.30)	R0050, R0100, R0200, R0250, R0300, R0400, R0500, R1000
3	C	15.24 +1.02/-0.51 (0.60 +0.04/-0.02)	25.4 (1.0)	R0050, R0100, R0150, R0200, R0250, R0300, R0400, R0500, R1000
5	D	20.32 +1.02/-0.51 (0.80 +0.04/-0.02)	25.4 (1.0)	R0050, R0100, R0150, R0200, R0250, R0300, R0500, R1000

Note: Terminal pins are tin plated copper.

DIMENSIONS: MM (INCHES)

How to Order

PWR4412-2S B R0300 J

Model
Version
Resistance Value for All Tolerances
"R" represents decimal point (examples: R0050 = 5 milliohms; R1000 = 100 milliohms)
Absolute Tolerance
J = 5 %
F = 1 %

BOURNS®

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REV. 02/14

*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.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.