

## Features

- High current capability
- Low inductance
- 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.

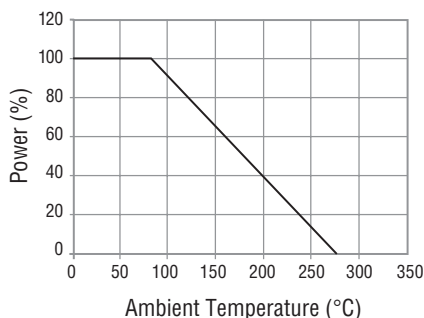
### Performance

Load Life (1000 Hours @ 70 °C) ...  $\frac{\Delta R}{R}$  2.5 %  
 Moisture No Load 100 Hours ..... 1 %  
 Temperature Cycling  
 (-40 °C to +125 °C, 1000 Cycles)... 1 %

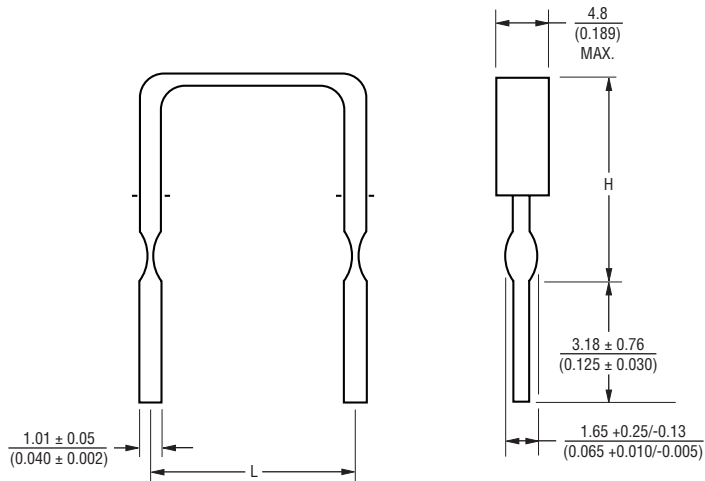
### Electrical Specifications

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 .....  $\sqrt{P \cdot R}$   
 Short Time Overload  
 ..... 5 x Rated Power for 5 seconds  
 Temperature Coefficient of Resistance  
 Wire .....  $\pm 20$  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:  $\frac{MM}{(INCHES)}$

### 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 %



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REV. 03/09

\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications