

General Information

Performance

Temperature Cycling

Short Time Overload

Power Derating Curve

120

100

80

60

40

20

0

0

50

Power (%)

Electrical Specifications

The Bourns® PWR4412-2S Series is a through-hole resistor designed for

Load Life (1000 Hours @ 70 °C) ... 2.5 %

Moisture No Load 100 Hours 1 %

(-40 °C to +125 °C, 1000 Cycles)...1 %

Power Rating @ 85 °C1, 3, 5 W

Resistance Range0.005 to 0.1 ohms Tolerances Available1 %, 5 % Temperature Range55 ° to +270 °C Maximum Working Voltage√P*R

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.

Features

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

 ΔR

(see matrix)

300 350

250

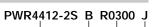


PWR4412-2S Series Bare Metal Element Resistor

Power Rating (W)	Version	Dimension L	Dimension H Max.	Resistance Values		
1	В	<u>11.43 +1.02/-0.51</u> (0.450 +0.04/-0.02)	<u>7.62</u> (0.30)	R0050, R0100, R0200, R0250, R0300, R0400, R0500, R1000		
3	С	<u>15.24 +1.02/-0.51</u> (0.60 +0.04/-0.02)	<u>25.4</u> (1.0)	R0050, R0100, R0150, R0200, R0250, R0300, R0400, R0500, R1000		
5	D	<u>20.32 +1.02/-0.51</u> (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:						

DIMENSIONS: (INCHES)

How to Order



Model – Version

Resistance Value for All Tolerances

"R" represents decimal point (examples: R0050 = 5 milliohms; R1000 = 100 milliohms)

J = 5 % F = 1 %



REV. 09/19

*RoHS Directive 2015/863, Mar 31, 2015 and Annex. Specifications are subject to change without notice.

100 150 200

Ambient Temperature (YC)

Users should verify actual device performance in their specific applications.

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Absolute Tolerance

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HPCR0402F13K0K9 HPCR0402F17K4K9 HPCR0402F1	180KK9 HPCR0402F180RK9 HPCR0402F1K10K9 HPCR0402F220KK9					
HPCR0402F220RK9 HPCR0402F24K0K9 HPCR0402F2	27K0K9 HPCR0402F2K00K9 HPCR0402F33K0K9 HPCR0402F430KK9					
HPCR0402F4K30K9 HPCR0402F4K70K9 HPCR0402F6	580KK9 HPCR0402F680RK9 HPCR0402F390KK9 HPCR0402F39K0K9					
HPCR0402F8K20K9 HPCR0402F560RK9 HPCR0402F2	2K70K9 HPCR0402F360KK9 HPCR0402F36K0K9 HPCR0402F3K00K9					
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