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

**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**
\[
\delta R = \begin{cases} 
2.5 \% & \text{Load Life (1000 Hours @ 70 °C)} \\
1 \% & \text{Moisture No Load 100 Hours} \\
1 \% & \text{Temperature Cycling (-40 °C to +125 °C, 1000 Cycles)}
\end{cases}
\]

**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: \(\sqrt{P \times R}\)
- Short Time Overload: 5 x Rated Power for 5 seconds
- Temperature Coefficient of Resistance Wire: \(\pm 20 \text{ ppm/°C}\)

**Packaging**
250 pcs./bag

**Power Derating Curve**

**Product Dimensions**

<table>
<thead>
<tr>
<th>Power Rating (W)</th>
<th>Version</th>
<th>Dimension L</th>
<th>Dimension H Max.</th>
<th>Resistance Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>11.43</td>
<td>7.62</td>
<td>R0050, R0100, R0200, R0250, R0300, R0400, R0500, R1000</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>15.24</td>
<td>25.4</td>
<td>R0050, R0100, R0150, R0200, R0250, R0300, R0400, R0500, R1000</td>
</tr>
<tr>
<td>5</td>
<td>D</td>
<td>20.32</td>
<td>25.4</td>
<td>R0050, R0100, R0150, R0200, R0250, R0300, R0400, R0500, R1000</td>
</tr>
</tbody>
</table>

Note: Terminal pins are tin plated copper.

**How to Order**
PWR4412-2S B R0300 J

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**WARNING** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

REV. 06/21

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