Features
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- RoHS compliant* and halogen free**

SRP0612 Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance @ 100 kHz / 1 V Typ. (µH)</th>
<th>Q Test Freq. (MHz)</th>
<th>SRF (MHz) Typ.</th>
<th>DCR (mΩ) Typ.</th>
<th>DCR (mΩ) Max.</th>
<th>Irms (A) Typ.</th>
<th>Isat (A) Typ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRP0612-R47K</td>
<td>0.47</td>
<td>21</td>
<td>25.2</td>
<td>68</td>
<td>14.8</td>
<td>17.1</td>
<td>7.7</td>
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<td>SRP0612-R68K</td>
<td>0.68</td>
<td>21</td>
<td>25.2</td>
<td>55</td>
<td>20.0</td>
<td>22.3</td>
<td>7.0</td>
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<td>SRP0612-1R0K</td>
<td>1.00</td>
<td>54</td>
<td>7.96</td>
<td>42</td>
<td>23.8</td>
<td>27.5</td>
<td>6.2</td>
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<tr>
<td>SRP0612-1R5K</td>
<td>1.50</td>
<td>42</td>
<td>7.96</td>
<td>22</td>
<td>28.5</td>
<td>32.8</td>
<td>6.0</td>
</tr>
<tr>
<td>SRP0612-2R2K</td>
<td>2.20</td>
<td>22</td>
<td>7.96</td>
<td>32</td>
<td>33.2</td>
<td>38.8</td>
<td>5.5</td>
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<tr>
<td>SRP0612-3R3K</td>
<td>3.30</td>
<td>28</td>
<td>7.96</td>
<td>18</td>
<td>43.1</td>
<td>50.0</td>
<td>5.0</td>
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<tr>
<td>SRP0612-4R7K</td>
<td>4.70</td>
<td>32</td>
<td>7.96</td>
<td>15</td>
<td>70.0</td>
<td>82.0</td>
<td>3.9</td>
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<tr>
<td>SRP0612-6R8K</td>
<td>6.80</td>
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<td>7.96</td>
<td>14</td>
<td>107.0</td>
<td>125.0</td>
<td>3.0</td>
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<td>SRP0612-100K</td>
<td>10.0</td>
<td>26</td>
<td>2.52</td>
<td>10</td>
<td>135.0</td>
<td>157.0</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Product Dimensions

Recommended Layout

General Specifications
Operating Temperature ........................................40 °C to +125 °C (Temperature rise included)
Storage Temperature (Component).................................40 °C to +125 °C
Rated Current ..........................................................Inductance drops 30 % at Isat
Temperature Rise ..................................................4 °C at rated Irms
Rated Voltage .........................................................50 V
Moisture Sensitivity Level ...................................1 ESD Classification (HBM) ........................................N/A

Materials
Core........................................Metal alloy powder
Wire ........................................Enamelled copper
Terminal Finish ......................................................Sn
Packaging ..................................................2500 pcs. per 13-inch reel

How to Order

<table>
<thead>
<tr>
<th>Model</th>
<th>Value Code (see table)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRP0612</td>
<td>- 4R7K</td>
</tr>
</tbody>
</table>

** Bourns considers a product to be “halogen free” if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
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Soldering Profile

Peak Temperature: 260 °C max.
Max. Peak Temperature -5 °C: 30 sec. max.
Max. Time Above 217 °C: 60~150 sec. max.

Temperature Rising Area
-4.0 °C/Sec. Max.

Preheat Area
150~200 °C / 60~120 Sec.

Reflow Area
+3.0 °C/Sec. Max.

Forced Cooling Area
(1.0~5.0) °C/Sec. Max.

Temperature (°C)

Time (Seconds)
SRP0612 Series - Shielded Power Inductors

Packaging Specifications

DIMENSIONS: MM (INCHES)

QTY: 2,500 PCS PER REEL

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The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com
www.bourns.com
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