SRP0612 Series - Shielded Power Inductors

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

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance @ 100 kHz / 1 V</th>
<th>Q Typ.</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>
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<tr>
<td>SRP0612-R47K</td>
<td>0.47</td>
<td>10</td>
<td>21</td>
<td>25.2</td>
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<td>14.8</td>
<td>17.1</td>
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<td>54</td>
<td>7.96</td>
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<td>42</td>
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<td>SRP0612-2R2K</td>
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<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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<td>28</td>
<td>7.96</td>
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<td>43.1</td>
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<td>SRP0612-100K</td>
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<td>10</td>
<td>135.0</td>
<td>157.0</td>
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</tbody>
</table>

Product Dimensions

Recommended Layout

Electrical Schematic

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 ... 40 °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 ....................... Enameled copper
Packaging ..... 2500 pcs. per 13-inch reel

How to Order

SRP0612 - 4R7K

Value Code (see table)

WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

** 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.
SRP0612 Series - Shielded Power Inductors

Packaging Specifications

DIMENSIONS:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover Tape</td>
<td>360 (14.173)</td>
<td>End</td>
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<tr>
<td>Leader No Component</td>
<td>360 (14.173)</td>
<td>Min.</td>
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<tr>
<td>Components</td>
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<tr>
<td>Trailer No Component</td>
<td>360 (14.173)</td>
<td>Min.</td>
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<tr>
<td>User Direction of Feed</td>
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<td>QTY: 2,500 PCS PER REEL</td>
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<tr>
<td>Dimensions</td>
<td>MM (INCHES)</td>
<td></td>
</tr>
</tbody>
</table>

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www.bourns.com

REV. 06/22
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