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

SRP0320 Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance @ 100 kHz / 1 V L (μH)</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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<tbody>
<tr>
<td>SRP0320-R47K</td>
<td>0.47</td>
<td>19</td>
<td>25.2</td>
<td>85</td>
<td>12.5</td>
<td>14.6</td>
<td>7.4</td>
<td>12.0</td>
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<td>SRP0320-R68K</td>
<td>0.68</td>
<td>8</td>
<td>25.2</td>
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<td>12.6</td>
<td>14.8</td>
<td>7.4</td>
<td>6.7</td>
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<td>SRP0320-1R0K</td>
<td>1.00</td>
<td>34</td>
<td>7.96</td>
<td>44</td>
<td>40.5</td>
<td>47.0</td>
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<td>SRP0320-1R5K</td>
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<td>7.96</td>
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<td>7.96</td>
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<td>7.96</td>
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</tr>
</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

Note 1: Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

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

Please consult Bourns® Model SRP-A Series Visual Inspection Guide for detailed construction, processing and testing information.

How to Order

SRP0320 - 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: 280 °C max.
Max. Peak Temperature -5 °C: 30 sec. max.
Max. Time Above 217 °C: 60–150 sec. max.

Temperature Rising Area
Preheat Area
Reflow Area
Forced Cooling Area

Peak Temperature: 260 °C
217 °C
60–150 Sec.
60 Sec. Max.
60–120 Sec.

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