SRP0520 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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</thead>
<tbody>
<tr>
<td>SRP0520-R47K</td>
<td>0.47</td>
<td>10</td>
<td>19</td>
<td>25.2</td>
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<td>5.9</td>
<td>7.2</td>
<td>12.5</td>
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<td>SRP0520-R68K</td>
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<td>17</td>
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<td>56</td>
<td>7.8</td>
<td>9.0</td>
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<td>10</td>
<td>54</td>
<td>7.96</td>
<td>51</td>
<td>11.8</td>
<td>14.2</td>
<td>8.5</td>
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<tr>
<td>SRP0520-1R5K</td>
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<td>49</td>
<td>7.96</td>
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<td>46</td>
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<td>12</td>
<td>130.0</td>
<td>152.0</td>
<td>2.4</td>
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</tbody>
</table>

**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: 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: Sn

**Product Dimensions**

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

DIMENSIONS:

QTY: 2,500 PCS PER REEL
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