SRP0310 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 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>SRP0310-R47K</td>
<td>0.47</td>
<td>18</td>
<td>25.2</td>
<td>90</td>
<td>22.5</td>
<td>26.5</td>
<td>5.6</td>
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<tr>
<td>SRP0310-R68K</td>
<td>0.68</td>
<td>18</td>
<td>25.2</td>
<td>70</td>
<td>30.5</td>
<td>35.5</td>
<td>4.6</td>
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<tr>
<td>SRP0310-1R0K</td>
<td>1.00</td>
<td>16</td>
<td>7.96</td>
<td>64</td>
<td>49.0</td>
<td>58.5</td>
<td>3.4</td>
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<tr>
<td>SRP0310-1R5K</td>
<td>1.50</td>
<td>16</td>
<td>7.96</td>
<td>56</td>
<td>88.0</td>
<td>105.0</td>
<td>2.4</td>
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<tr>
<td>SRP0310-2R2K</td>
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<td>7.96</td>
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<td>118.0</td>
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<td>SRP0310-3R3K</td>
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<td>12</td>
<td>7.96</td>
<td>32</td>
<td>135.0</td>
<td>160.0</td>
<td>2.1</td>
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<tr>
<td>SRP0310-4R7K</td>
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<td>7.96</td>
<td>25</td>
<td>183.0</td>
<td>215.0</td>
<td>1.8</td>
</tr>
</tbody>
</table>

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Product Dimensions

Electrical Schematic

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
- Packaging: 4000 pcs. per 13-inch reel

How to Order

SRP0310 - 4R7K

Model

Value Code (see table)

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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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L vs. I Charts

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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

REV. 05/20
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