SRP0620 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</th>
<th>Q Test Freq. (MHz)</th>
<th>SRF (MHz)</th>
<th>DCR (mΩ)</th>
<th>DCR (mΩ)</th>
<th>Irms (A)</th>
<th>Isat (A)</th>
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<tbody>
<tr>
<td>SRP0620-R47K</td>
<td>0.47 10 19 25.2 63 4.6 5.5 15.5 25.0</td>
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<td>SRP0620-1R0K</td>
<td>1.00 10 40 7.96 41 9.0 10.6 11.0 15.7</td>
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<td>SRP0620-6R8K</td>
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<td>SRP0620-100K</td>
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</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... 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..... 1500 pcs. per 13-inch reel

How to Order

SRP0620 - 4R7K

** 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.

<table>
<thead>
<tr>
<th>Temperature Rising Area</th>
<th>Preheat Area</th>
<th>Reflow Area</th>
<th>Forced Cooling Area</th>
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</thead>
<tbody>
<tr>
<td>≤-4.0 °C/Sec. Max.</td>
<td>150-200 °C / 60-120 Sec.</td>
<td>≤+3.0 °C/Sec. Max.</td>
<td>≤(1.0-5.0) °C/Sec. Max.</td>
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</tbody>
</table>

Peak Temperature: 260 °C

- 60-150 Sec.
- 60 Sec. Max.
- 60-120 Sec.

217 °C
SRP0620 Series - Shielded Power Inductors

Packaging Specifications

REV. 04/20

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