SRN3010C Series – Semi-shielded Power Inductors

**Features**
- Semi-shielded construction
- Miniature size
- Low profile: 1.0 mm
- Inductance range: 1 to 47 µH
- Rated current up to 3.4 A
- RoHS compliant* and halogen free**

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**Electrical Specifications @ 25 °C**

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance @ 100 kHz / 1 V typ. (µH)</th>
<th>Q @ 100 kHz / 1 V typ.</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>SRN3010C-1R0M</td>
<td>1.0</td>
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<td>10</td>
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<td>60</td>
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</table>

**Additional Information**
Click these links for more information:
- PRODUCT SELECTOR
- TECHNICAL LIBRARY
- INVENTORY
- SAMPLES
- CONTACT

**General Specifications**

- Operating Temperature: -40 °C to +125 °C (Temperature rise included)
- Storage Temperature (Component on board): -40 °C to +125 °C
- Temperature Rise: 40 °C at rated Irms1
- Moisture Sensitivity Level: 1
- ESD Classification (HBM): N/A

1 Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Users should verify part temperature in their end applications.

**Materials**
- Core: Ferrite
- Wire: Enamelled copper
- Terminal Finish: Ag/Ni/Sn
- Coating: Magnetic resin
- Packaging: 3000 pcs. per 7-inch reel

**How to Order**

Model: SRN3010C - 1R0M

**Recommended Layout**

**Electrical Schematic**

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**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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SRN3010C Series – Semi-shielded Power Inductors

Soldering Profile

Profile Feature | Pb Free Assembly
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Preheat
- Temperature Min. (Tsmin) | 150 °C
- Temperature Max. (Tsmax) | 200 °C
- Time (ts) from Tsmin to Tsmax | 60-120 seconds
Ramp-up Rate (TL to Tp) | 3 °C/second max.
Liquidous temperature (TL) | 217 °C
Time (tL) maintained above TL | 60-150 seconds
Peak package body temperature (Tp) | 260 °C
Time within 5 °C of Actual Peak Temperature (tp) | < 30 seconds
Ramp-Down Rate (Tp to TL) | 6 °C/second max.
Time 25 °C to Peak Temperature | 8 minutes max.

Temperature vs. Time

REFLOW TIMES: 3 TIMES MAX.

L vs. I Charts

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L vs. I Charts (continued)

SRN3010C-150M

SRN3010C-220M

SRN3010C-330M

SRN3010C-470M

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