Features
- Semi-shielded construction
- Miniature size
- Low profile: 1.0 mm
- Inductance range: 0.24 to 2.2 µH
- Rated current up to 4.4 A
- RoHS compliant* and halogen free**

Applications
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cellphones
- Televisions, LCD displays

SRN2010 Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 ºC

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance @ 1 MHz / 0.1 V Q (Ref.)</th>
<th>Test Freq. (MHz)</th>
<th>SRF (MHz) Min.</th>
<th>DCR (Ω) Max.</th>
<th>Irms (A)</th>
<th>Isat (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRN2010-R24M</td>
<td>0.24 20 8 1</td>
<td>370</td>
<td>0.028</td>
<td>4.4</td>
<td>5.1</td>
<td></td>
</tr>
<tr>
<td>SRN2010-R47M</td>
<td>0.47 20 9 1</td>
<td>230</td>
<td>0.042</td>
<td>3.3</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>SRN2010-R68M</td>
<td>0.68 20 10 1</td>
<td>200</td>
<td>0.055</td>
<td>2.8</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>SRN2010-1R0M</td>
<td>1.00 20 11 1</td>
<td>150</td>
<td>0.072</td>
<td>2.4</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>SRN2010-2R2M</td>
<td>2.20 20 14 1</td>
<td>100</td>
<td>0.170</td>
<td>1.7</td>
<td>2.0</td>
<td></td>
</tr>
</tbody>
</table>

Soldering Profile

Operating Temperature
-55 ºC to +125 ºC (Temperature rise included)

Storage Temperature
-40 ºC to +85 ºC

Resistance to Solder Heat
+260 ºC for 40 sec.

Temperature Rise
40 ºC at rated Irms

Rated Current
Inductance drops 30 % at Isat

Materials
Core: Ferrite
Wire: Enamelled copper
Terminal Finish: Sn
Coating: Magnetic epoxy resin
Packaging: 2000 pcs. per 7-inch reel

General Specifications

Core: Ferrite
Wire: Enamelled copper
Terminal Finish: Sn
Coating: Magnetic epoxy resin
Packaging: 2000 pcs. per 7-inch reel

Recommended Layout

Dimensions: MM (INCHES)

2.4 (0.094)
0.8 (0.031)
1.9 (0.071)

How to Order
SRN2010 - R68M

Model
Value Code (see table)

Bourns Part No.

Electrical Schematic

Asia-Pacific: Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116
EMEA: Tel: +36 88 520 390 • Fax: +36 88 520 211
The Americas: Tel: +1-951 781-5500 • Fax: +1-951 781-5700
www.bourns.com

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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SRN2010 Series - Semi-shielded Power Inductors

L vs. IDC

<table>
<thead>
<tr>
<th>Model</th>
<th>DC Current (A)</th>
<th>Inductance (μH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRN2010-R24M</td>
<td>0 1 2 3 4 5</td>
<td>0 0.1 0.2 0.3 0.4</td>
</tr>
<tr>
<td>SRN2010-R47M</td>
<td>0 1 2 3 4 5</td>
<td>0 0.4 0.6 0.8 1.0</td>
</tr>
<tr>
<td>SRN2010-R68M</td>
<td>0 1 2 3 4 5</td>
<td>0 0.2 0.4 0.6 0.8</td>
</tr>
<tr>
<td>SRN2010-1R0M</td>
<td>0 0.5 1.0 1.5 2.0</td>
<td>0 0.5 1.0 1.5 2.0</td>
</tr>
<tr>
<td>SRN2010-2R2M</td>
<td>0 0.5 1.0 1.5 2.0 2.5</td>
<td>0 0.2 0.4 0.6 0.8</td>
</tr>
</tbody>
</table>

Packaging Specifications

<table>
<thead>
<tr>
<th>Dimension</th>
<th>MM</th>
<th>(INCHES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.4 ± 1.0</td>
<td>(.331 ± .04)</td>
<td></td>
</tr>
<tr>
<td>4.0 ± 0.1</td>
<td>(.157 ± .004)</td>
<td></td>
</tr>
<tr>
<td>2.0 ± 0.05</td>
<td>(.079 ± .002)</td>
<td></td>
</tr>
<tr>
<td>0.23 ± 0.05</td>
<td>(.009 ± .002)</td>
<td></td>
</tr>
<tr>
<td>13.0 ± 0.8</td>
<td>(.512 ± .031)</td>
<td></td>
</tr>
<tr>
<td>2.0 ± 0.1</td>
<td>(.079 ± .004)</td>
<td></td>
</tr>
<tr>
<td>1.40 ± 0.1</td>
<td>(.055 ± .004)</td>
<td></td>
</tr>
<tr>
<td>2.0 ± 0.1</td>
<td>(.079 ± .004)</td>
<td></td>
</tr>
<tr>
<td>178 ± 2.0</td>
<td>(7.008 ± .079)</td>
<td></td>
</tr>
</tbody>
</table>

QTY: 2000 PCS. PER REEL

REV. 12/14

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