SRN2512 Series - Semi-shielded Power Inductors

**Features**
- Semi-shielded construction
- Miniature size
- Low profile: 1.2 mm
- Inductance range: 0.24 to 2.2 µH
- Rated current up to 4.7 A
- RoHS compliant* and halogen free**

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

### Electrical Specifications @ 25 °C

<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>SRN2512-R24M</td>
<td>0.24</td>
<td>20</td>
<td>7</td>
<td>1</td>
<td>330</td>
<td>0.024</td>
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<tr>
<td>SRN2512-R33M</td>
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<td>20</td>
<td>7</td>
<td>1</td>
<td>300</td>
<td>0.032</td>
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<td>SRN2512-R47M</td>
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<td>8</td>
<td>1</td>
<td>190</td>
<td>0.032</td>
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<tr>
<td>SRN2512-R68M</td>
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<td>20</td>
<td>9</td>
<td>1</td>
<td>140</td>
<td>0.043</td>
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<tr>
<td>SRN2512-1R0M</td>
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<td>10</td>
<td>1</td>
<td>120</td>
<td>0.057</td>
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<tr>
<td>SRN2512-1R5M</td>
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<td>10</td>
<td>1</td>
<td>90</td>
<td>0.096</td>
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<tr>
<td>SRN2512-2R2M</td>
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<td>20</td>
<td>11</td>
<td>1</td>
<td>80</td>
<td>0.102</td>
</tr>
</tbody>
</table>

**Soldering Profile**
- Peak Temperature: 260 °C max.
- Max. Peak Temperature 260 °C: 40 sec. max.
- Max. Time Above 217 °C: 60~150 sec. max.

**Operating Temperature**
- -55 °C to +125 °C (Temperature rise included)
- Storage Temperature: -40 °C to +85 °C
- Resistance to Solder Heat: +260 °C for 40 sec.
- Temperature Rise: 40 °C at rated Irms

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

**Recommended Layout**

**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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www.bourns.com
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**L vs. IDC**

<table>
<thead>
<tr>
<th>Inductance (μH)</th>
<th>DC Current (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2 ± 0.1</td>
<td>0</td>
</tr>
<tr>
<td>0.4 ± 0.1</td>
<td>2</td>
</tr>
<tr>
<td>0.8 ± 0.1</td>
<td>4</td>
</tr>
<tr>
<td>1.6 ± 0.1</td>
<td>6</td>
</tr>
<tr>
<td>3.2 ± 0.1</td>
<td>8</td>
</tr>
</tbody>
</table>

**Packaging Specifications**

- **QTY:** 2000 PCS. PER REEL
- **DIMENSIONS:** MM (INCHES)

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