Features
- Semi-shielded construction
- High rated current
- Component height: 4 mm
- Inductance range: 0.5 to 100 µH
- Rated current up to 10 A
- RoHS compliant* and halogen free**

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

SRN8040 Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance @ 100 KHz / 1 V L (µH) Tol. %</th>
<th>Q (Ref.)</th>
<th>Test Freq. (MHz)</th>
<th>SRF (MHz) Typ.</th>
<th>DCR (Ω) Max.</th>
<th>Irms (A)</th>
<th>Isat (A)</th>
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</thead>
<tbody>
<tr>
<td>SRN8040-R50Y</td>
<td>0.5 ± 30%</td>
<td>13</td>
<td>7.96</td>
<td>125</td>
<td>0.007</td>
<td>10</td>
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<td>SRN8040-1R0Y</td>
<td>1.0 ± 30%</td>
<td>13</td>
<td>7.96</td>
<td>75</td>
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<td>13</td>
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<td>SRN8040-2R2Y</td>
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<td>40</td>
<td>0.013</td>
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<td>0.033</td>
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</tr>
</tbody>
</table>

Soldering Profile

Operating Temperature
-40 °C to +125 °C

Storage Temperature
-40 °C to +125 °C

Resistance to Solder Heat
+250 °C for 10 sec.

Temperature Rise
40 °C at rated Irms

Rated Current
Inductance drops 30 % at Isat

How to Order
SRN8040 - 100M

Material
Core: Ferrite
Wire: Enamelled copper
Terminal Finish: Sn/Ag/Cu
Coating: Magnetic epoxy resin

Packaging
1000 pcs. per 13-inch reel

Electrical Schematic

Recommended Layout

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

**Bourns follows the prevailing definition of "halogen free" in the industry. 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. Specifications are subject to change without notice.
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Packaging Specifications

DIMENSIONS: MM (INCHES)

REV. 05/15
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