**SRN5040TA Series - Semi-shielded Power Inductors**

**Features**
- Semi-shielded construction
- Inductance range: 0.6 to 100 µH
- Rated current up to 8 A
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

**Applications**
- DC/DC converters
- Power supplies

**Specifications**
- Operating Temperature: -55 °C to +125 °C (Temperature rise included)
- Storage Temperature (Component): -55 °C to +125 °C
- Temperature Rise: 40 °C at rated Irms
- Rated Current: Inductance drops 30% at Isat
- Moisture Sensitivity Level: 1
- ESD Classification (HBM): N/A

**Electrical Specifications @ 25 °C**

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance @ 100 kHz / 1 V L (µH)</th>
<th>Q @ 100 kHz Min.</th>
<th>SRF (MHz) Typ.</th>
<th>DCR (Ω) ±20 %</th>
<th>Irms (A) Typ.</th>
<th>Isat (A) Typ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRN5040TA-R60M</td>
<td>0.60 ±20</td>
<td>15</td>
<td>250</td>
<td>0.008</td>
<td>8.00</td>
<td>11.00</td>
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<tr>
<td>SRN5040TA-1R0M</td>
<td>1.0 ±20</td>
<td>15</td>
<td>140</td>
<td>0.012</td>
<td>5.00</td>
<td>7.50</td>
</tr>
<tr>
<td>SRN5040TA-1R5M</td>
<td>1.5 ±20</td>
<td>15</td>
<td>112</td>
<td>0.015</td>
<td>4.50</td>
<td>6.50</td>
</tr>
<tr>
<td>SRN5040TA-2R2M</td>
<td>2.2 ±20</td>
<td>15</td>
<td>62</td>
<td>0.021</td>
<td>3.80</td>
<td>5.70</td>
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<tr>
<td>SRN5040TA-3R3M</td>
<td>3.3 ±20</td>
<td>15</td>
<td>48</td>
<td>0.024</td>
<td>3.50</td>
<td>4.40</td>
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<tr>
<td>SRN5040TA-4R7M</td>
<td>4.7 ±20</td>
<td>15</td>
<td>36</td>
<td>0.032</td>
<td>3.20</td>
<td>3.90</td>
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<tr>
<td>SRN5040TA-6R8M</td>
<td>6.8 ±20</td>
<td>15</td>
<td>32</td>
<td>0.043</td>
<td>2.50</td>
<td>3.30</td>
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<tr>
<td>SRN5040TA-100M</td>
<td>10 ±20</td>
<td>15</td>
<td>26</td>
<td>0.056</td>
<td>2.20</td>
<td>2.52</td>
</tr>
<tr>
<td>SRN5040TA-150M</td>
<td>15 ±20</td>
<td>15</td>
<td>22</td>
<td>0.08</td>
<td>1.80</td>
<td>2.00</td>
</tr>
<tr>
<td>SRN5040TA-220M</td>
<td>22 ±20</td>
<td>15</td>
<td>16</td>
<td>0.123</td>
<td>1.50</td>
<td>1.62</td>
</tr>
<tr>
<td>SRN5040TA-330M</td>
<td>33 ±20</td>
<td>15</td>
<td>13</td>
<td>0.18</td>
<td>1.20</td>
<td>1.30</td>
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<td>SRN5040TA-470K</td>
<td>47 ±10</td>
<td>15</td>
<td>11</td>
<td>0.27</td>
<td>1.00</td>
<td>1.10</td>
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<tr>
<td>SRN5040TA-680K</td>
<td>68 ±10</td>
<td>15</td>
<td>10</td>
<td>0.4</td>
<td>0.80</td>
<td>0.90</td>
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<tr>
<td>SRN5040TA-101K</td>
<td>100 ±10</td>
<td>15</td>
<td>7</td>
<td>0.56</td>
<td>0.72</td>
<td>0.75</td>
</tr>
</tbody>
</table>

**How to Order**

SRN5040TA - 2R2M

Model: SRN5040TA - Value Code (see table)

**Recommended Layout**

**General Specifications**

**Materials**

Core: Ferrite Enamelled copper
Terminal Finish: Sn Magnetic epoxy resin
Packaging: 1500 pcs. per 13-inch reel

**Product Dimensions**

![Product Dimensions Diagram]

**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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Inductance vs. Current

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Inductance vs. Current (Continued)

Soldering Profile

Preheating  Soldering  Natural Cooling

Temperature (°C)

Time (Seconds)

Reflow 3 times max.

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Packaging Specifications

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