**Features**
- Semi-shielded construction
- Inductance range: 1 to 22 µH
- Rated current up to 2.1 A
- AEC-Q200 qualified
- Low profile: 1.0 mm max.
- RoHS compliant* and halogen free**

**SRN3010TA Series - Semi-shielded Power Inductors**

**Electrical Specifications @ 25 °C**

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance @ 1 MHz / 0.1 V</th>
<th>Q @ 1 MHz</th>
<th>SRF (MHz)</th>
<th>DCR (Ω) ±20 %</th>
<th>Irms (A) Typ.</th>
<th>Isat (A) Typ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRN3010TA-1R0Y</td>
<td>1.0 ±30</td>
<td>10</td>
<td>170</td>
<td>0.055</td>
<td>2.1</td>
<td>1.8</td>
</tr>
<tr>
<td>SRN3010TA-1R5Y</td>
<td>1.5 ±30</td>
<td>12</td>
<td>150</td>
<td>0.07</td>
<td>1.9</td>
<td>1.5</td>
</tr>
<tr>
<td>SRN3010TA-2R2M</td>
<td>2.2 ±20</td>
<td>15</td>
<td>100</td>
<td>0.09</td>
<td>1.7</td>
<td>1.3</td>
</tr>
<tr>
<td>SRN3010TA-3R3M</td>
<td>3.3 ±20</td>
<td>18</td>
<td>85</td>
<td>0.13</td>
<td>1.5</td>
<td>1.1</td>
</tr>
<tr>
<td>SRN3010TA-4R7M</td>
<td>4.7 ±20</td>
<td>20</td>
<td>80</td>
<td>0.17</td>
<td>1.3</td>
<td>0.9</td>
</tr>
<tr>
<td>SRN3010TA-6R8M</td>
<td>6.8 ±20</td>
<td>20</td>
<td>55</td>
<td>0.26</td>
<td>1</td>
<td>0.77</td>
</tr>
<tr>
<td>SRN3010TA-100M</td>
<td>10 ±20</td>
<td>22</td>
<td>40</td>
<td>0.35</td>
<td>0.8</td>
<td>0.63</td>
</tr>
<tr>
<td>SRN3010TA-150M</td>
<td>15 ±20</td>
<td>22</td>
<td>35</td>
<td>0.51</td>
<td>0.7</td>
<td>0.54</td>
</tr>
<tr>
<td>SRN3010TA-220M</td>
<td>22 ±20</td>
<td>22</td>
<td>30</td>
<td>0.75</td>
<td>0.6</td>
<td>0.43</td>
</tr>
</tbody>
</table>

**General Specifications**

- **Operating Temperature**: -40 °C to +125 °C (Temperature rise included)
- **Storage Temperature (Component)**: -40 °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

**Materials**
- Core: Ferrite
- Wire: Enameled copper
- Terminal Finish: Magnetic epoxy resin
- Coating: Sn

**How to Order**

SRN3010TA - 2R2M

Model
Value Code (see table)

**Recommended Layout**

**Product Dimensions**

**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.
Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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SRN3010TA Series - Semi-shielded Power Inductors

Soldering Profile

Preheating  Soldering  Natural Cooling

<table>
<thead>
<tr>
<th>Temperature (°C)</th>
<th>Preheating</th>
<th>Soldering</th>
<th>Natural Cooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.0 ± 0.1</td>
<td>(0.157 ± 0.004)</td>
<td>(245 °C, 20–40 Sec.)</td>
<td></td>
</tr>
<tr>
<td>4.0 ± 0.05</td>
<td>(0.157 ± 0.002)</td>
<td>(260 °C, 10 Sec. Max.)</td>
<td></td>
</tr>
<tr>
<td>8.0 ± 0.1</td>
<td>(0.315 ± 0.004)</td>
<td>(217 °C)</td>
<td></td>
</tr>
<tr>
<td>1.2 ± 0.2</td>
<td>(0.047 ± 0.008)</td>
<td>(150 °C)</td>
<td>(60–180 Sec.)</td>
</tr>
<tr>
<td>3.2 ± 0.2</td>
<td>(0.126 ± 0.008)</td>
<td>(480 Sec. Max.)</td>
<td></td>
</tr>
<tr>
<td>8.4 ± 1.0</td>
<td>(0.331 ± 0.004)</td>
<td>(178 ± 2.0)</td>
<td>(7.008 ± 0.079)</td>
</tr>
<tr>
<td>50.0</td>
<td>(1.969)</td>
<td>MIN.</td>
<td></td>
</tr>
<tr>
<td>178 ± 2.0</td>
<td>(7.008 ± 0.079)</td>
<td>(60–150 Sec.)</td>
<td></td>
</tr>
</tbody>
</table>

Packaging Specifications

QTY: 2000 PCS. PER REEL
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