SRP5020CC Series - Shielded Power Inductors

Features
- Shielded construction
- Carbonyl powder core
- High saturation current
- Low radiation
- Low buzz noise
- RoHS compliant* and halogen free**

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Additional Information
Click these links for more information:
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- TECHNICAL LIBRARY
- INVENTORY
- SAMPLES
- CONTACT

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 I rms
- Rated Current
- Moisture Sensitivity Level: 1
- ESD Classification (HBM): N/A

Materials
- Core: Carbonyl powder
- Wire: Enameled copper
- Terminal Finish: Sn
- Packaging: 3000 pcs. per 13-inch reel

Soldering Profile

<table>
<thead>
<tr>
<th>Profile Feature</th>
<th>Pb Free Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preheat</td>
<td></td>
</tr>
<tr>
<td>- Temperature Min. (T_s(min))</td>
<td>150 °C</td>
</tr>
<tr>
<td>- Temperature Max. (T_s(max))</td>
<td>200 °C</td>
</tr>
<tr>
<td>- Time(t_s) from T_s(min) to T_s(max)</td>
<td>60-120 seconds</td>
</tr>
<tr>
<td>Ramp-up Rate (T_L to T_p)</td>
<td>3 °C/second max.</td>
</tr>
<tr>
<td>Liquidous temperature (T_L)</td>
<td>217 °C</td>
</tr>
<tr>
<td>Time (t_L) maintained above T_L</td>
<td>60-150 seconds</td>
</tr>
<tr>
<td>Peak package body temperature (T_p)</td>
<td>260 °C</td>
</tr>
<tr>
<td>Time within 5 °C of Actual Peak Temp</td>
<td>&lt;30 seconds</td>
</tr>
<tr>
<td>Ramp-Down Rate (T_p to T_L)</td>
<td>6 °C/second max.</td>
</tr>
<tr>
<td>Time 25 °C to Peak Temperature</td>
<td>8 minutes max.</td>
</tr>
</tbody>
</table>

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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Product Dimensions

<table>
<thead>
<tr>
<th>TOP VIEW</th>
<th>SIDE VIEW</th>
<th>BOTTOM VIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.7 ± 0.3</td>
<td>1.8 ± 0.2</td>
<td>1.1 ± 0.3</td>
</tr>
<tr>
<td>(.224 ± .012)</td>
<td>(.071 ± .008)</td>
<td>(.043 ± .012)</td>
</tr>
<tr>
<td>5.2 ± 0.2</td>
<td>2.5 ± 0.3</td>
<td></td>
</tr>
<tr>
<td>(.205 ± .008)</td>
<td>(.098 ± .012)</td>
<td></td>
</tr>
</tbody>
</table>

Recommended Layout

<table>
<thead>
<tr>
<th>DIMENSIONS: MM</th>
<th>DIMENSIONS: INCHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2</td>
<td>.244</td>
</tr>
<tr>
<td>2.2</td>
<td>.087</td>
</tr>
<tr>
<td>2.8</td>
<td>.110</td>
</tr>
</tbody>
</table>

Electrical Schematic

How to Order

Model: SRP5020CC - R10Y

Value Code (see table)

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Packaging Specifications

Dimensions:
- Cover Tape: 12.4 ± 0.1 (0.488 ± 0.004)
- Embossed Carrier: 13 ± 0.2 (0.512 ± 0.008)
- Diameter: 3.0 ± 0.1 (0.118 ± 0.004)

User Direction of Feed:
QTY: 3000 PCS. PER REEL

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EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com
The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com
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