Features
- Low height of only 5.0 mm
- Inductance as low as 0.9 µH
- High current up to 20 amps
- RoHS compliant *

Applications
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

SRR1305 Series - Shielded SMD High Power Inductors

Electrical Characteristics

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance 1 kHz / 1 V</th>
<th>SRF Min. (MHz)</th>
<th>RDC. (mΩ)</th>
<th>I rms (L1)Max. (A)</th>
<th>I sat Typ. (A)</th>
<th>**K- Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRR1305-R90ZL</td>
<td>0.9</td>
<td>0.75</td>
<td>± 25</td>
<td>95</td>
<td>2.5</td>
<td>20.0</td>
</tr>
<tr>
<td>SRR1305-1R4ZL</td>
<td>1.4</td>
<td>1.25</td>
<td>± 25</td>
<td>70</td>
<td>3.4</td>
<td>16.0</td>
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<tr>
<td>SRR1305-2R0ZL</td>
<td>2.0</td>
<td>1.80</td>
<td>± 25</td>
<td>60</td>
<td>4.6</td>
<td>13.0</td>
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<tr>
<td>SRR1305-2R7ZL</td>
<td>2.7</td>
<td>2.50</td>
<td>± 25</td>
<td>50</td>
<td>9.5</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**K-Factor:** To calculate core flux density, Bp-p (gauss) = K x (L/µH) x x I (peak-to-peak ripple current, A), determine core loss from Core Loss vs. Flux Density plot.

Core Loss vs. Flux Density

![Core Loss vs. Flux Density graph](image)

General Specifications
- Reflow Soldering: 230 °C, 50 sec. max.
- Operating Temperature: -40 °C to +125 °C (Temperature rise included)
- Storage Temperature: -40 °C to +125 °C
- Moisture Sensitivity Level: 1
- ESD Classification (HBM): N/A

Materials
- Core: Ferrite ER and SB
- Wire: Ultra-fine rectangular enameled copper
- Terminal: Cu/Sn
- Adhesive: Epoxy resin
- Rated Current: Ind. drop 20 % max. at (L1) Isat
- Temperature Rise: 45 °C max. at rated Irms
- Packaging: 600 pcs. per reel

Product Dimensions

![Product Dimensions diagram](image)

WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.
SRR1305 Series - Shielded SMD High Power Inductors

Inductance vs. DC Superposition Characteristics

![Graph showing inductance vs. DC superposition characteristics for different values of resistance.]

Packaging Specifications

![Diagram showing the dimensions and layout of the packaging.]

- QTY: 600 PCS. PER REEL

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