SRU1038 Series - Shielded SMD Power Inductors

Features
- Available in E6 series
- Unit height of 3.8 mm
- Current up to 7.2 A
- RoHS compliant*

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

Electrical Specifications

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance 100 KHz (µH)</th>
<th>Tol. %</th>
<th>Q Ref.</th>
<th>Test Freq. (MHz)</th>
<th>SRF Typ. (MHz)</th>
<th>RDC Max. (mΩ)</th>
<th>Isr Typ. (A)</th>
<th>Isat Typ. (A)</th>
<th>**K-Factor</th>
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<tbody>
<tr>
<td>SRU1038-1R5Y</td>
<td>1.5 ± 30</td>
<td>14</td>
<td>7.96</td>
<td>65.0</td>
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<td>7.96</td>
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<td>15.0</td>
<td>5.50</td>
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<td>3.90</td>
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</table>

**K-Factor: To calculate core flux density, \( B_{p-p} \) (gauss) = \( K \times L(\mu H) \times I \) (peak-to-peak ripple current, A), determine core loss from Core Loss vs. Flux Density plot on page 2.

Electrical Schematic

Recommended Layout

General Specifications
- Test Voltage: 1 V
- Rework Soldering: 230 °C, 50 sec. max.
- Operating Temperature: -40 °C to +125 °C (Temperature rise included)
- Storage Temperature: -40 °C to +125 °C
- Rated Current: Ind. drop 35 % typ. at Isat
- Temperature Rise: 40 °C max. at rated Irms
- Moisture Sensitivity Level: 1
- ESD Classification (HBM): N/A

Materials
- Core: Ferrite DR and RI core
- Wire: Enamelled copper
- Terminals: Ag/Ni/Sn
- Packaging: 800 pcs. per reel

Product Dimensions

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

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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SRU1038 Series - Shielded SMD Power Inductors

Core Loss vs. Flux Density

![Graph showing Core Loss vs. Flux Density for different frequencies.](image)

Packaging Specifications

![Diagram showing packaging specifications for SRU1038 Series.](image)

QTY: 800 PCS. PER REEL

DIMENSIONS: MM (INCHES)

REV. 09/20

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