### Electrical Specifications

<table>
<thead>
<tr>
<th>Bourns</th>
<th>Inductance @ 100 KHz</th>
<th>Q Ref.</th>
<th>Test Freq. (MHz)</th>
<th>SRF Min. (MHz)</th>
<th>RDC (μH)</th>
<th>I rms Max. (A)</th>
<th>I sat Typ. (A)</th>
<th><strong>K-Factor</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>SRU5011-1R5Y</td>
<td>1.5 ±30</td>
<td>8</td>
<td>7.96</td>
<td>195.0</td>
<td>32</td>
<td>1.80</td>
<td>1.50</td>
<td>904</td>
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<tr>
<td>SRU5011-2R5Y</td>
<td>2.5 ±30</td>
<td>8</td>
<td>7.96</td>
<td>125.0</td>
<td>52</td>
<td>1.30</td>
<td>1.10</td>
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<tr>
<td>SRU5011-3R3Y</td>
<td>3.3 ±30</td>
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<td>7.96</td>
<td>110.0</td>
<td>66</td>
<td>1.15</td>
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<tr>
<td>SRU5011-4R7Y</td>
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<td>7.96</td>
<td>85.0</td>
<td>95</td>
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<td>SRU5011-6R8Y</td>
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<td>7.96</td>
<td>70.0</td>
<td>130</td>
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<tr>
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<td>50.0</td>
<td>170</td>
<td>0.70</td>
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<tr>
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<td>2.52</td>
<td>42.0</td>
<td>250</td>
<td>0.60</td>
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<td>SRU5011-330Y</td>
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<td>2.52</td>
<td>30.0</td>
<td>550</td>
<td>0.38</td>
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<td>0.22</td>
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<td>SRU5011-101Y</td>
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<td>0.796</td>
<td>15.0</td>
<td>1600</td>
<td>0.20</td>
<td>0.18</td>
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</tr>
</tbody>
</table>

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

### Core Loss vs. Flux Density

![Graph showing core loss vs. flux density](image)

### General Specifications

- **Test Voltage:** 0.1 V
- **Reflow Soldering:** 230 °C, 50 sec. max.
- **Operating Temp.:** -40 °C to +125 °C
- **Storage Temperature:** -40 °C to +125 °C
- **Resistance to Soldering Heat:** +260 °C for 10 sec.
- **Moisture Sensitivity Level:** 1
- **ESD Classification (HBM):** N/A

### Materials

- Core: Ferrite DR and RI core
- Wire: Enamelled copper
- Terminal: Ag/Ni/Sn
- Rated Current: Ind. drop 35 % typ. at Isat
- Temp. Rise: 25 °C max. at rated Irms

### Recommended Layout

![Recommended layout diagram](image)

### Electrical Schematic

![Electrical schematic diagram](image)

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**Features**
- Available in E6 series
- Unit height of 1.1 mm
- Current up to 1800 mA
- RoHS compliant*

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*RoHS Directive 2015/863, Mar 31, 2015 and Annex. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

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**WARNING** Cancer and Reproductive Harm

www.P65Warnings.ca.gov

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This series is currently available but not recommended for new designs.
Applications
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

SRU5011 Series - Shielded SMD Power Inductors

Packaging Specifications

DIMENSIONS:

<table>
<thead>
<tr>
<th>QTY: 1500 PCS. PER REEL</th>
</tr>
</thead>
</table>

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