SRU2011 Series - Shielded SMD Power Inductors

**Electrical Specifications**

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance 100 KHz (μH)</th>
<th>Test Freq. (MHz)</th>
<th>SRF Typ. (MHz)</th>
<th>RDC Max. (mΩ)</th>
<th>Irms Max. (A)</th>
<th>Isat Typ. (A)</th>
<th>Marking</th>
<th><strong>K</strong>-Factor</th>
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</thead>
<tbody>
<tr>
<td>SRU2011-1R0Y</td>
<td>1.0 ±30</td>
<td>6</td>
<td>7.96</td>
<td>150</td>
<td>1.65</td>
<td>1.50</td>
<td>A</td>
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<td>SRU2011-2R2Y</td>
<td>2.2 ±30</td>
<td>6</td>
<td>7.96</td>
<td>120</td>
<td>1.20</td>
<td>0.90</td>
<td>C</td>
<td>1678</td>
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<tr>
<td>SRU2011-3R3Y</td>
<td>3.3 ±30</td>
<td>6</td>
<td>7.96</td>
<td>80</td>
<td>0.90</td>
<td>0.76</td>
<td>E</td>
<td>1410</td>
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<td>SRU2011-4R7Y</td>
<td>4.7 ±30</td>
<td>6</td>
<td>7.96</td>
<td>70</td>
<td>0.73</td>
<td>0.58</td>
<td>F</td>
<td>1137</td>
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<td>SRU2011-6R8Y</td>
<td>6.8 ±30</td>
<td>6</td>
<td>7.96</td>
<td>60</td>
<td>0.70</td>
<td>0.54</td>
<td>G</td>
<td>953</td>
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<tr>
<td>SRU2011-100Y</td>
<td>10 ±30</td>
<td>10</td>
<td>2.52</td>
<td>45</td>
<td>0.52</td>
<td>0.40</td>
<td>H</td>
<td>750</td>
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<tr>
<td>SRU2011-150Y</td>
<td>15 ±30</td>
<td>10</td>
<td>2.52</td>
<td>40</td>
<td>0.38</td>
<td>0.34</td>
<td>I</td>
<td>641</td>
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<tr>
<td>SRU2011-220Y</td>
<td>22 ±30</td>
<td>12</td>
<td>2.52</td>
<td>25</td>
<td>0.33</td>
<td>0.27</td>
<td>J</td>
<td>511</td>
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<tr>
<td>SRU2011-330Y</td>
<td>33 ±30</td>
<td>12</td>
<td>2.52</td>
<td>24</td>
<td>0.22</td>
<td></td>
<td>K</td>
<td>425</td>
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</tbody>
</table>

**Core Loss vs. Flux Density**

Core Loss (mW) = K x Lu(μH) x A I (peak-to-peak ripple current, A)

<table>
<thead>
<tr>
<th>Flux Density Bp-p (gauss)</th>
<th>Core Loss (mW)</th>
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<tbody>
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</table>

**Recommended Layout**

**Features**
- Maximum height of 1.2 mm
- Current up to 1.65 A
- RoHS compliant*

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

**General Specifications**

Test Voltage: 0.1 V
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 DR and RI core
Terminal: Ag/Ni/Sn
Rated Current: Ind. drop 35% typ. at Isat
Temperature Rise: 40 °C max. at rated Irms
Packaging: 1,500 pcs. per reel

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*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

**WARNING** Cancer and Reproductive Harm

www.P65Warnings.ca.gov
SRU2011 Series - Shielded SMD Power Inductors

Packaging Specifications

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