**Features**
- Maximum height of 2.0 mm
- Current up to 3.6 A
- RoHS compliant*

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

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**SRU6018 Series - Shielded SMD Power Inductors**

**Electrical Specifications**

<table>
<thead>
<tr>
<th>Bourns Part Number</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>I rms Max. (A)</th>
<th>I sat Typ. (A)</th>
<th>K-Factor</th>
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<tbody>
<tr>
<td>SRU6018-1R2Y</td>
<td>1.2 ±30</td>
<td>8</td>
<td>7.96</td>
<td>130</td>
<td>25</td>
<td>3.60</td>
<td>2.80</td>
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<tr>
<td>SRU6018-1R8Y</td>
<td>1.8 ±30</td>
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<td>7.96</td>
<td>90</td>
<td>28</td>
<td>3.00</td>
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<td>SRU6018-3R3Y</td>
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<td>SRU6018-4R7Y</td>
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<td>SRU6018-6R8Y</td>
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<td>7.96</td>
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<td>1.90</td>
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<tr>
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*K-Factor: To calculate core flux density, Bp-p (gauss) = K x LμH x ΔI (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]

**General Specifications**
- **Test Voltage**: 0.1 V
- **Reflow Soldering**: 230 °C, 50 sec. max.
- **Operating Temp.**: -40 °C to +125 °C (Temperature rise included)
- **Storage Temp.**: -40 °C to +125 °C
- **Moisture Sensitivity Level**: 1

**Materials**
- Core: Ferrite DR and RI core
- Wire: Enamelled copper
- Terminal: Ag/Ni/Sn
- Rated Current: Ind. drop 35 % typ. at I_sat
- Temp. Rise: 30 °C max. at rated I_rms
- Packaging: 800 pcs. per reel

**Product Dimensions**

![Product Dimensions Diagram]

**Recommended Layout**

![Recommended Layout Diagram]

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**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
SRU6018 Series - Shielded SMD Power Inductors

Packaging Specifications

REV. 03/18
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