Features

- Maximum height of 1.05 mm
- Current up to 1.0 A
- RoHS compliant*

The SRU3009 Series is OBSOLETE and not recommended for new designs.

SRU3009 Series - Shielded SMD Power Inductors

### Electrical Specifications

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance 100 KHz (µH)</th>
<th>Q Ref.</th>
<th>Test Freq. (MHz)</th>
<th>SRF Typ. Max. (MHz)</th>
<th>RDC Max. (mΩ)</th>
<th>Irms Max. (A)</th>
<th>Isat Typ. (A)</th>
<th>Marking</th>
<th>**K-Factor</th>
<th>Tol. %</th>
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</thead>
<tbody>
<tr>
<td>SRU3009-1R3Y</td>
<td>1.3 ±30</td>
<td>10</td>
<td>7.96</td>
<td>210</td>
<td>1.00</td>
<td>1.10</td>
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<tr>
<td>SRU3009-2R2Y</td>
<td>2.2 ±30</td>
<td>8.5</td>
<td>7.96</td>
<td>150</td>
<td>0.80</td>
<td>0.85</td>
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<tr>
<td>SRU3009-3R3Y</td>
<td>3.3 ±30</td>
<td>8</td>
<td>7.96</td>
<td>130</td>
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<tr>
<td>SRU3009-4R7Y</td>
<td>4.7 ±30</td>
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<td>7.96</td>
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<td>0.48</td>
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<tr>
<td>SRU3009-6R8Y</td>
<td>6.8 ±30</td>
<td>8</td>
<td>7.96</td>
<td>85</td>
<td>0.40</td>
<td>0.43</td>
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<td>SRU3009-100Y</td>
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<td>2.52</td>
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<td>0.35</td>
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<tr>
<td>SRU3009-220Y</td>
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<td>2.52</td>
<td>40</td>
<td>0.22</td>
<td>0.25</td>
<td>G</td>
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</tbody>
</table>

**K-Factor:** To calculate core flux density, Bp-p (gauss) = K x L(µH) 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](image)

### 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

### Materials

- Core: Ferrite DR and RI core
- Wire: Enameled copper
- Terminal: Ag/Ni/Sn
- Rated Current: Ind. drop 35 % typ. at Isat
- Temperature Rise: Ind. drop 35 % typ.

### Recommended Layout

![Recommended Layout Diagram](image)

### Product Dimensions

![Product Dimensions](image)

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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.
Applications

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

SRU3009 Series - Shielded SMD Power Inductors

Packaging Specifications

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