SRU3028 Series - Shielded SMD Power Inductors

**Features**
- Available in E6 series
- Unit height of 2.8 mm
- Current up to 0.72 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 Number</th>
<th>Inductance @ 100 KHz (µH)</th>
<th>Test Ref.</th>
<th>Stiffness</th>
<th>RDC (mΩ)</th>
<th>I rms Max. (A)</th>
<th>I sat Typ. (A)</th>
<th><strong>K</strong>-Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRU3028-100Y</td>
<td>10.0 ±30</td>
<td>20</td>
<td>10</td>
<td>7.96</td>
<td>160</td>
<td>0.72</td>
<td>0.86</td>
</tr>
<tr>
<td>SRU3028-150Y</td>
<td>15.0 ±30</td>
<td>20</td>
<td>18</td>
<td>2.52</td>
<td>25</td>
<td>0.66</td>
<td>0.72</td>
</tr>
<tr>
<td>SRU3028-220Y</td>
<td>22.0 ±30</td>
<td>20</td>
<td>18</td>
<td>2.52</td>
<td>15</td>
<td>0.66</td>
<td>0.62</td>
</tr>
<tr>
<td>SRU3028-330Y</td>
<td>33.0 ±30</td>
<td>20</td>
<td>20</td>
<td>2.52</td>
<td>10</td>
<td>0.66</td>
<td>0.47</td>
</tr>
<tr>
<td>SRU3028-470Y</td>
<td>47.0 ±30</td>
<td>20</td>
<td>20</td>
<td>2.52</td>
<td>8</td>
<td>0.66</td>
<td>0.32</td>
</tr>
<tr>
<td>SRU3028-680Y</td>
<td>68.0 ±30</td>
<td>20</td>
<td>20</td>
<td>2.52</td>
<td>7</td>
<td>0.66</td>
<td>0.28</td>
</tr>
<tr>
<td>SRU3028-101Y</td>
<td>100.0 ±30</td>
<td>20</td>
<td>20</td>
<td>0.796</td>
<td>5</td>
<td>0.66</td>
<td>0.21</td>
</tr>
</tbody>
</table>

**Core Loss vs. Flux Density**

**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

**Materials**
- Core: ferrite DR and RI core
- Wire: Enameled copper (Class F)
- Terminal: Ag/Ni/Sn
- Rated Current: Ind. drop 35 % typ. at Isat
- Temperature Rise: 40 °C max. at rated Irms

**Product Dimensions**

<table>
<thead>
<tr>
<th>DIMENSIONS:</th>
<th>MM</th>
<th>INCHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3 ± 0.2</td>
<td>(.130 ± .008)</td>
<td></td>
</tr>
<tr>
<td>2.9 ± 0.2</td>
<td>(.115 ± .008)</td>
<td></td>
</tr>
<tr>
<td>0.5 ± 0.2</td>
<td>(.020)</td>
<td></td>
</tr>
</tbody>
</table>

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

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

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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.
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