SRU8043 Series - Shielded SMD Power Inductors

Features
- Available in E6 series
- Unit height of 4.3 mm
- Current up to 5.4 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 No.</th>
<th>Inductance 100 KHz (µH)</th>
<th>Tolerance %</th>
<th>Test Freq. (MHz)</th>
<th>SRF Min. (MHz)</th>
<th>RDC (mΩ)</th>
<th>Irms Max. (A)</th>
<th>Isat Typ. (A)</th>
<th>**K-Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRU8043-2R2Y</td>
<td>2.2 ± 30</td>
<td>15</td>
<td>7.96</td>
<td>65.0</td>
<td>11.2</td>
<td>5.40</td>
<td>5.20</td>
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</tr>
<tr>
<td>SRU8043-3R9Y</td>
<td>3.9 ± 30</td>
<td>15</td>
<td>7.96</td>
<td>42.0</td>
<td>14.6</td>
<td>4.80</td>
<td>4.00</td>
<td>191</td>
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<tr>
<td>SRU8043-4R7Y</td>
<td>4.7 ± 30</td>
<td>13</td>
<td>7.96</td>
<td>36.0</td>
<td>17.0</td>
<td>4.60</td>
<td>3.60</td>
<td>171</td>
</tr>
<tr>
<td>SRU8043-6R8Y</td>
<td>6.8 ± 30</td>
<td>12</td>
<td>7.96</td>
<td>30.0</td>
<td>22.4</td>
<td>3.80</td>
<td>3.10</td>
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</tr>
<tr>
<td>SRU8043-100Y</td>
<td>10 ± 30</td>
<td>27</td>
<td>2.52</td>
<td>20.0</td>
<td>30.0</td>
<td>3.50</td>
<td>2.70</td>
<td>120</td>
</tr>
<tr>
<td>SRU8043-120Y</td>
<td>12 ± 30</td>
<td>15</td>
<td>2.52</td>
<td>15.0</td>
<td>30.0</td>
<td>2.80</td>
<td>2.20</td>
<td>110</td>
</tr>
<tr>
<td>SRU8043-150Y</td>
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<td>40.0</td>
<td>2.70</td>
<td>2.00</td>
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<td>SRU8043-180Y</td>
<td>18 ± 30</td>
<td>15</td>
<td>2.52</td>
<td>15.0</td>
<td>30.0</td>
<td>2.30</td>
<td>1.70</td>
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</tr>
<tr>
<td>SRU8043-220Y</td>
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<td>24</td>
<td>2.52</td>
<td>12.0</td>
<td>40.0</td>
<td>2.30</td>
<td>1.70</td>
<td>79</td>
</tr>
<tr>
<td>SRU8043-270Y</td>
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<td>2.52</td>
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<td>30.0</td>
<td>1.80</td>
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<td>SRU8043-330Y</td>
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<td>100.0</td>
<td>1.70</td>
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<td>66</td>
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<td>SRU8043-470Y</td>
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<td>120.0</td>
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<td>55</td>
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<td>SRU8043-680Y</td>
<td>68 ± 30</td>
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<td>2.52</td>
<td>7.0</td>
<td>192.0</td>
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<td>1.00</td>
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<tr>
<td>SRU8043-101Y</td>
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<td>0.796</td>
<td>6.0</td>
<td>287.0</td>
<td>1.00</td>
<td>0.80</td>
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</tbody>
</table>

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

Core Loss vs. Flux Density

![Graph of Core Loss vs. Flux Density](image)

Materials
- Core: Ferrite DR and RI core
- Wire: Enamelled copper
- Terminal: Ag/Ni/Sn
- Rated Current: Ind. drop 35% typ. at Isat
- Temperature Rise: 40 °C max. at rated Irms
- Packaging: 1000 pcs. per reel

General Specifications
- Test Voltage: 1 V
- Reflow Soldering: 230 °C, 50 sec. max.
- Operating Temperature: -40 °C to +125 °C
- Storage Temperature: -40 °C to +125 °C
- Moisture Sensitivity Level: 1
- ESD Classification (HBM): N/A

Product Dimensions

![Product Dimensions Diagram](image)

Electrical Schematic

![Electrical Schematic](image)

Inductor Connection

![Inductor Connection](image)

Recommended Layout

![Recommended Layout](image)

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![WARNING](image)

Cancer and Reproductive Harm
www.P65Warnings.ca.gov
SRU8043 Series - Shielded SMD Power Inductors

Packaging Specifications

QTY: 1000 PCS. PER REEL

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