Features
- Shielded construction
- Inductance range: 1 to 150 µH
- Heating current up to 7 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

SRU1028A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance @ 100 KHz / 1 V</th>
<th>Test Freq. (MHz)</th>
<th>SRF (MHz) Typ.</th>
<th>DCR (mΩ) Max.</th>
<th>I rms (A)</th>
<th>I sat (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRU1028A-1R0Y</td>
<td>1.0 ±30</td>
<td>14</td>
<td>7.96</td>
<td>100</td>
<td>6.5</td>
<td>7.00</td>
</tr>
<tr>
<td>SRU1028A-1R5Y</td>
<td>1.5 ±30</td>
<td>12</td>
<td>7.96</td>
<td>80</td>
<td>10.0</td>
<td>6.50</td>
</tr>
<tr>
<td>SRU1028A-2R2Y</td>
<td>2.2 ±30</td>
<td>12</td>
<td>7.96</td>
<td>65</td>
<td>15.0</td>
<td>5.30</td>
</tr>
<tr>
<td>SRU1028A-3R3Y</td>
<td>3.3 ±30</td>
<td>14</td>
<td>7.96</td>
<td>55</td>
<td>20.0</td>
<td>4.60</td>
</tr>
<tr>
<td>SRU1028A-4R7Y</td>
<td>4.7 ±30</td>
<td>12</td>
<td>7.96</td>
<td>40</td>
<td>23.0</td>
<td>4.50</td>
</tr>
<tr>
<td>SRU1028A-6R0Y</td>
<td>6.8 ±30</td>
<td>12</td>
<td>7.96</td>
<td>30</td>
<td>33.0</td>
<td>3.50</td>
</tr>
<tr>
<td>SRU1028A-8R2Y</td>
<td>8.2 ±30</td>
<td>12</td>
<td>7.96</td>
<td>28</td>
<td>37.0</td>
<td>3.30</td>
</tr>
<tr>
<td>SRU1028A-100Y</td>
<td>10 ±30</td>
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<td>25</td>
<td>53.0</td>
<td>2.80</td>
</tr>
<tr>
<td>SRU1028A-150Y</td>
<td>15 ±30</td>
<td>26</td>
<td>2.52</td>
<td>22</td>
<td>90.0</td>
<td>2.00</td>
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<tr>
<td>SRU1028A-220Y</td>
<td>22 ±30</td>
<td>26</td>
<td>2.52</td>
<td>16</td>
<td>135.0</td>
<td>1.60</td>
</tr>
<tr>
<td>SRU1028A-330Y</td>
<td>33 ±30</td>
<td>24</td>
<td>2.52</td>
<td>12</td>
<td>180.0</td>
<td>1.25</td>
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<tr>
<td>SRU1028A-470Y</td>
<td>47 ±30</td>
<td>20</td>
<td>2.52</td>
<td>11</td>
<td>230.0</td>
<td>1.10</td>
</tr>
<tr>
<td>SRU1028A-560Y</td>
<td>56 ±30</td>
<td>22</td>
<td>2.52</td>
<td>10</td>
<td>270.0</td>
<td>1.10</td>
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<td>SRU1028A-680Y</td>
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<td>2.52</td>
<td>9</td>
<td>300.0</td>
<td>1.00</td>
</tr>
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<td>SRU1028A-820Y</td>
<td>82 ±30</td>
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<td>8</td>
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</tr>
<tr>
<td>SRU1028A-101Y</td>
<td>100 ±30</td>
<td>20</td>
<td>0.796</td>
<td>7</td>
<td>470.0</td>
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</tr>
<tr>
<td>SRU1028A-121Y</td>
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<td>6</td>
<td>560.0</td>
<td>0.70</td>
</tr>
<tr>
<td>SRU1028A-151Y</td>
<td>150 ±30</td>
<td>18</td>
<td>0.796</td>
<td>5</td>
<td>680.0</td>
<td>0.65</td>
</tr>
</tbody>
</table>

General Specifications

Operating Temperature
-40 °C to +125 °C (Temperature rise included)

Storage Temperature
-40 °C to +125 °C

Resistance to Soldering Heat
+250 °C for 10 sec.

Temperature Rise
40 °C typ. at rated I rms

Inductance Drop
35 % typ. at I sat

Materials
Core..............................Ferrite
Wire............................Enameled copper
Terminal Finish .................Ag/Ni/Sn
Packaging.....................1000 pcs. per reel

How to Order

SRU1028A - 100Y

Model
Value Code (see table)

Electrical Schematic

Inductor Connection

Recommended Layout

Dimensions: MM (INCHES)

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

** Bourns considers a product to be “halogen free” if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
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Soldering Profile

L vs. IDC

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**Temperature vs. IDC**

<table>
<thead>
<tr>
<th>Model</th>
<th>Graph</th>
<th>T @ 25 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRU1028A-1R0Y</td>
<td><img src="image1" alt="Graph" /></td>
<td>50.0</td>
</tr>
<tr>
<td>SRU1028A-6R8Y</td>
<td><img src="image2" alt="Graph" /></td>
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</tr>
<tr>
<td>SRU1028A-150Y</td>
<td><img src="image3" alt="Graph" /></td>
<td>60.0</td>
</tr>
<tr>
<td>SRU1028A-101Y</td>
<td><img src="image4" alt="Graph" /></td>
<td>70.0</td>
</tr>
</tbody>
</table>

**Packaging Specifications**

- **Dimensions:**
  - MM
  - INCHES

- **QTY:** 1000 PCS. PER REEL

**REV. 09/13**

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