SRP1055 Series - Shielded Power Inductors

Features
- Shielded construction
- Unit height of 5.5 mm
- Inductance range: 0.36 μH to 8.8 μH
- Current up to 28 A
- RoHS compliant*

Electrical Specifications

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance L (μH)</th>
<th>I rms (A)</th>
<th>I sat (A)</th>
<th>DCR (mΩ) max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRP1055-R36Y</td>
<td>0.36 ± 30 %</td>
<td>28.0</td>
<td>26.0</td>
<td>1.7</td>
</tr>
<tr>
<td>SRP1055-R80M</td>
<td>0.80 ± 20 %</td>
<td>20.0</td>
<td>18.0</td>
<td>2.5</td>
</tr>
<tr>
<td>SRP1055-1R4M</td>
<td>1.40 ± 20 %</td>
<td>16.0</td>
<td>14.0</td>
<td>3.2</td>
</tr>
<tr>
<td>SRP1055-2R2M</td>
<td>2.20 ± 20 %</td>
<td>12.0</td>
<td>10.0</td>
<td>5.8</td>
</tr>
<tr>
<td>SRP1055-3R2M</td>
<td>3.20 ± 20 %</td>
<td>11.0</td>
<td>9.0</td>
<td>7.2</td>
</tr>
<tr>
<td>SRP1055-4R3M</td>
<td>4.30 ± 20 %</td>
<td>10.0</td>
<td>8.0</td>
<td>8.5</td>
</tr>
<tr>
<td>SRP1055-5R7M</td>
<td>5.70 ± 20 %</td>
<td>7.6</td>
<td>7.0</td>
<td>13.2</td>
</tr>
<tr>
<td>SRP1055-7R2M</td>
<td>7.20 ± 20 %</td>
<td>7.0</td>
<td>6.2</td>
<td>15.5</td>
</tr>
<tr>
<td>SRP1055-8R8M</td>
<td>8.80 ± 20 %</td>
<td>6.0</td>
<td>5.6</td>
<td>17.2</td>
</tr>
</tbody>
</table>

General Specifications

Test Voltage........................................1 V
Test Frequency ..................................100 KHz
Reflow Soldering............................230 °C; 50 sec max.
Operating Temperature ......................-55 °C to +150 °C
(Temperature rise included)
Storage Temperature .........................-55 °C to +150 °C
Resistance to Soldering Heat ..............+260 °C for 10 sec.

Materials
Core............................................Ferrite ER
Wire.............................................Enamelled copper
Terminal.......................................Cu/Ni/Sn
Rated Current..............................Ind. drops 25 % at I sat
Temperature Rise............................40 °C at rated I rms

Packaging.................................300 pcs. per 13-inch reel

Recommended Layout

Electrical Schematic

This series is OBSOLETE and not recommended for new designs.
Applications

- Input/output of DC/DC converters
- Power supplies for:
  - Portable communications equipment
  - Camcorders
  - LCD TVs
  - Car audio systems

SRP1055 Series - Shielded Power Inductors

Soldering Profile

<table>
<thead>
<tr>
<th>Temperature (°C)</th>
<th>Time (Seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>75</td>
<td>50</td>
</tr>
<tr>
<td>125</td>
<td>100</td>
</tr>
<tr>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>190</td>
<td>200</td>
</tr>
<tr>
<td>220</td>
<td>250</td>
</tr>
<tr>
<td>260</td>
<td>300</td>
</tr>
</tbody>
</table>

<1> Maximum of 10 seconds between +255 °C and +260 °C

<1> 255 °C

60 seconds maximum

5 °C/second

Ramp Down

Ramp Up

4 °C/second maximum

Packaging Specifications

Dimensions: MM (INCHES)

REV. 10/15
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.