Features
- Shielded construction
- Unit height of 5.6 mm
- Inductance range: 0.3 to 7.2 μH
- Current up to 18 A
- RoHS compliant*

SRP1205 Series - Shielded Power Inductors

Electrical Specifications

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Initial Inductance L0 (μH)</th>
<th>Inductance at Flat Point L1 (μH)</th>
<th>Flat Point Ref. (A)</th>
<th>SRF typ. (MHz)</th>
<th>l rms (A)</th>
<th>L sat (A)</th>
<th>DCR (mΩ) Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRP1205-R30Y</td>
<td>0.54 ±25 %</td>
<td>0.30 ±25 %</td>
<td>5.00</td>
<td>160</td>
<td>18.0</td>
<td>35.0</td>
<td>1.8</td>
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<tr>
<td>SRP1205-R60Y</td>
<td>0.85 ±25 %</td>
<td>0.60 ±25 %</td>
<td>5.00</td>
<td>95</td>
<td>16.0</td>
<td>27.0</td>
<td>2.5</td>
</tr>
<tr>
<td>SRP1205-1R0Y</td>
<td>1.25 ±25 %</td>
<td>1.00 ±25 %</td>
<td>5.00</td>
<td>75</td>
<td>14.0</td>
<td>22.0</td>
<td>3.4</td>
</tr>
<tr>
<td>SRP1205-1R8Y</td>
<td>2.00 ±25 %</td>
<td>1.80 ±25 %</td>
<td>2.00</td>
<td>55</td>
<td>13.0</td>
<td>16.0</td>
<td>3.4</td>
</tr>
<tr>
<td>SRP1205-2R5Y</td>
<td>2.70 ±25 %</td>
<td>2.50 ±25 %</td>
<td>2.00</td>
<td>40</td>
<td>11.5</td>
<td>12.0</td>
<td>3.4</td>
</tr>
<tr>
<td>SRP1205-3R3Y</td>
<td>3.50 ±25 %</td>
<td>3.30 ±25 %</td>
<td>2.00</td>
<td>40</td>
<td>11.0</td>
<td>11.8</td>
<td>5.4</td>
</tr>
<tr>
<td>SRP1205-4R0Y</td>
<td>4.20 ±25 %</td>
<td>4.00 ±25 %</td>
<td>3.00</td>
<td>35</td>
<td>10.5</td>
<td>16.0</td>
<td>3.4</td>
</tr>
<tr>
<td>SRP1205-5R6Y</td>
<td>5.80 ±25 %</td>
<td>5.60 ±25 %</td>
<td>2.00</td>
<td>30</td>
<td>8.5</td>
<td>8.0</td>
<td>11.4</td>
</tr>
<tr>
<td>SRP1205-7R2Y</td>
<td>7.40 ±25 %</td>
<td>7.20 ±25 %</td>
<td>2.00</td>
<td>30</td>
<td>8.3</td>
<td>7.5</td>
<td>13.5</td>
</tr>
</tbody>
</table>

Electrical Schematic

Recommended Layout

L vs I Charts

General Specifications

Test Voltage..............................1 V
Test Frequency......................... 100 KHz
Reflow Soldering ..................... 230 °C; 50 sec. max.
Operating Temperature ...................-40 °C to +125 °C (Temperature rise included)
Storage Temperature .....................-40 °C to +125 °C
Resistance to Soldering Heat ............+260 °C for 10 sec.
Moisture Sensitivity Level.............1
ESD Classification (HBM)...............N/A

Materials
Core ........................................Ferrite ER
Wire .......................................Enameled copper
Terminal ..................................Cu/Ni/Sn
Rated Current ....................... Ind. drops 20 % at Isat
Temperature Rise ......................40 °C at rated Irms
Packaging ..............................600 pcs. per 13-inch reel

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

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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Applications

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

SRP1205 Series - Shielded Power Inductors

Soldering Profile

[Graph showing soldering profile with temperature and time specifications]

Packaging Specifications

[Diagram showing packaging specifications with dimensions]

REV. 03/20

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