Features
- Shielded construction
- Unit height of 4 mm
- Inductance range: 0.5 to 1.8 μH
- Current up to 13 A
- RoHS compliant*

SRP1204 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.</th>
<th>I rms (A)</th>
<th>I sat (A)</th>
<th>DCR (mΩ) Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRP1204-R50M</td>
<td>0.75 ±20 %</td>
<td>0.55 ±20 %</td>
<td>2.0</td>
<td>13.0</td>
<td>14.0</td>
<td>3.0</td>
</tr>
<tr>
<td>SRP1204-1R1M</td>
<td>1.30 ±20 %</td>
<td>1.10 ±20 %</td>
<td>2.0</td>
<td>12.0</td>
<td>13.0</td>
<td>4.5</td>
</tr>
<tr>
<td>SRP1204-1R8M</td>
<td>2.00 ±20 %</td>
<td>1.80 ±20 %</td>
<td>2.0</td>
<td>10.0</td>
<td>11.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

L vs I Charts

<table>
<thead>
<tr>
<th>DC Current (A)</th>
<th>Inductance (μH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2.0</td>
</tr>
<tr>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>10</td>
<td>1.0</td>
</tr>
<tr>
<td>15</td>
<td>0.5</td>
</tr>
</tbody>
</table>

General Specifications

Test Voltage ........................................... 1 V
Test Frequency ..................................... 100 KHz
Reflow Soldering .................................... 120 °C; 50 sec. max.
Operating Temperature .................................. 230 °C; 50 sec. max.
Storage Temperature .................................. 260 °C; 50 sec. max.
Resistance to Soldering Heat ......................... +245 °C for 10 sec.
Moisture Sensitivity Level ............................. 1
ESD Classification (HBM) .............................. N/A

Materials

- Core: Ferrite ER
- Wire: Enamelled copper
- Terminal: Cu/Ni/Sn

Rated Current ........................................... 1
Ind. drops 20 % at Isat
Temperature Rise ....................................... 40 °C at rated Irms

Packaging .............................................. 800 pcs. per 13-inch reel

Product Dimensions

<table>
<thead>
<tr>
<th>DIMENSIONS:</th>
<th>MM (INCHES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.50 ± 0.30</td>
<td>(0.492 ± 0.012)</td>
</tr>
<tr>
<td>12.50 ± 0.30</td>
<td>(0.492 ± 0.012)</td>
</tr>
</tbody>
</table>

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

SRP1204 Series - Shielded Power Inductors

Soldering Profile

Peak Temperature: 245 °C max.
Time Above 245 °C: 30 sec. max.
Time Above 217 °C: 60 ~ 150 sec. max.

Packaging Specifications

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Users should verify actual device performance in their specific applications.
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