### Features
- Shielded construction
- Flat wire
- Unit height of 1.2 mm
- Inductance range: 0.22 to 1.5 μH
- Rated current up to 9 A
- RoHS compliant* and halogen free**

### SRP4012 Series - Shielded Power Inductors

### Electrical Specifications

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Inductance L (μH) ±20 %</th>
<th>I rms (A)</th>
<th>I sat (A)</th>
<th>DCR (mΩ) Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRP4012-R22M</td>
<td>0.22</td>
<td>9</td>
<td>10</td>
<td>9.3</td>
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<tr>
<td>SRP4012-R47M</td>
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<td>6.5</td>
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<td>20</td>
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<td>SRP4012-R56M</td>
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<td>8</td>
<td>25</td>
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<tr>
<td>SRP4012-1R0M</td>
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<td>4.8</td>
<td>6.3</td>
<td>33.6</td>
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<td>SRP4012-1R2M</td>
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<td>3</td>
<td>6</td>
<td>45</td>
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<tr>
<td>SRP4012-1R5M</td>
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<td>3</td>
<td>5.5</td>
<td>50</td>
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</tbody>
</table>

### General Specifications
- Test Voltage: 0.25 V
- Test Frequency: 100 KHz
- Reflow Soldering: 230 °C; 50 sec. max.
- Operating Temperature: -55 °C to +125 °C (Temperature rise included)
- Storage Temperature: -55 °C to +125 °C

### Materials
- Core: Iron
- Wire: Enamelled copper
- Terminal: Cu/Sn
- Rated Current: Ind. drops 20 % at Isat
- Temperature Rise: 40 °C at rated Irms
- Packaging: 2000 pcs. per 13-inch reel

### Soldering Profile

- Ramp Up: 4 °C/second maximum
- Ramp Down: 5 °C/second
- Maximum of 10 seconds between +255 °C and +260 °C

### Product Dimensions

- Dimensions: 4.7 MAX (185)
- 4.0 × 0.2 (157 ± 0.008)
- 0.0 - 0.3 (0.03 - 0.012)

### Electrical Schematic

### Recommended Layout

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**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. Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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SRP4012 Series - Shielded Power Inductors

Packaging Specifications

QTY: 2000 PCS. PER REEL

USER DIRECTION OF FEED

TOP COVER TAPE

PEEL SPEED: APPROX. 300 MM / MINUTE
PEEL FORCE: 0.3 TO 1.5 N

DIAMETERS:
- 1.50 ±0.1/-0.0
  (.059 +.004/-.000) DIA.
- 0.40 ±0.05
  (.016 ±.002)
- 4.3 ±0.1
  (.169 ±.004)
- 4.6 ±0.1
  (.183)
- 4.65
  (.183)
- 1.7 ±0.1
  (.067 ±.004)
- 1.50 +0.1/-0.0
  (.059 +.004/-.000) DIA.

MIN. DIA.
- 12.6 ±0.3
  (.50 ±.012)

165 ~ 180°

REV. 05/19

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