**Features**

- Shielded construction
- Metal alloy powder core
- High saturation current
- Inductance range 0.15 to 10 µH
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

### SRP3012TA Series – Shielded Power Inductors

#### SRP3012TA Series

- **Part Number**
- **Inductance**
  - @ 100 kHz / 1 V SRF
  - (MHz)
    - Typ.
  - DCR
    - (mΩ)
    - Typ.
  - I rms
    - (A)
    - Typ.
  - I sat
    - (A)
    - Typ.

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>L (µH)</th>
<th>Tol. %</th>
<th>SRF (MHz)</th>
<th>Typ.</th>
<th>DCR (mΩ)</th>
<th>Max.</th>
<th>I rms (A)</th>
<th>Typ.</th>
<th>I sat (A)</th>
<th>Typ.</th>
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<tr>
<td>SRP3012TA-R15Y</td>
<td>0.15</td>
<td>± 30 %</td>
<td>195</td>
<td>9.6</td>
<td>11</td>
<td>10</td>
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<td>± 20 %</td>
<td>170</td>
<td>14</td>
<td>17</td>
<td>6.5</td>
<td>10</td>
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<td>± 20 %</td>
<td>150</td>
<td>16</td>
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<td>9.2</td>
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<td>125</td>
<td>18.5</td>
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<td>8.5</td>
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<td>31</td>
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<td>34</td>
<td>40</td>
<td>4.0</td>
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<td>60</td>
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<td>± 20 %</td>
<td>55</td>
<td>71</td>
<td>85</td>
<td>3.0</td>
<td>4.0</td>
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<td>± 20 %</td>
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<td>115</td>
<td>2.7</td>
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<td>± 20 %</td>
<td>40</td>
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<td>210</td>
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<td>± 20 %</td>
<td>32</td>
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<td>360</td>
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<td>2.2</td>
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<td>SRP3012TA-6R8M</td>
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<td>± 20 %</td>
<td>29</td>
<td>360</td>
<td>400</td>
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<td>2.0</td>
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<td>± 20 %</td>
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<td>420</td>
<td>463</td>
<td>1.2</td>
<td>1.7</td>
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<td>550</td>
<td>1.0</td>
<td>1.4</td>
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</table>

#### General Specifications

- **Operating Temperature**
  - -40 °C to +150 °C (Temperature rise included)
- **Storage Temperature (Component)**
  - -40 °C to +150 °C
- **Rated Current**
  - Inductance drops 30% at Isat
- **Temperature Rise**
  - 40 °C at rated Irms

#### MSL

- N/A

#### Note 1:

- Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

#### Materials

- Core: Metal alloy powder
- Wire: Enameled copper
- Terminal Finish: Sn/Ni
- Packaging: 4000 pcs. per 13-inch reel

#### How to Order

- **Model**: SRP3012TA - 1R0M
- **Value Code (see table)**

#### 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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L vs. I Charts

<table>
<thead>
<tr>
<th>Inductance (μH)</th>
<th>DC Current (A)</th>
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<tbody>
<tr>
<td>0.15</td>
<td>0 3.6 7.2 10.8 14.4 18</td>
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<tr>
<td>0.12</td>
<td>0 2.4 4.8 7.2 9.6 12</td>
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<td>0.08</td>
<td>0 0.6 1.2 1.8 2.4 3</td>
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<td>0.05</td>
<td>0 1.4 2.8 4.2 5.6 7</td>
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<tr>
<td>0.03</td>
<td>0 1.4 2.8 4.2 5.6 7</td>
</tr>
<tr>
<td>0.01</td>
<td>0 1.4 2.8 4.2 5.6 7</td>
</tr>
</tbody>
</table>

REFLOW TIMES: 3 MAX.
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Packaging Specifications

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