### Features
- Shielded construction
- Metal alloy powder core
- High saturation current
- Inductance range 1 to 100 µH
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

### SRP2313AA Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance @ 100 kHz / 1 V (µH)</th>
<th>Q (Min.) @ 100 kHz / 1 V (Typ.)</th>
<th>SRF (MHz) (Typ.)</th>
<th>DCR (mΩ) Typ.</th>
<th>DCR (mΩ) Max.</th>
<th>Irms (A) Typ.</th>
<th>Isat (A) Typ.</th>
<th>Terminal Type</th>
<th>Lead Frame</th>
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<tr>
<td>SRP2313AA-1R0M</td>
<td>1.0</td>
<td>20</td>
<td>60</td>
<td>23</td>
<td>0.8</td>
<td>0.95</td>
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<td>1.15</td>
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</tbody>
</table>

**Recommended Layout**

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**How to Order**

**SRP2313AA - 100M**

**Model**

Value Code (see table)

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**General Specifications**

- **Operating Temperature**: 
  \( -55 \, ^\circ C \) to \( +155 \, ^\circ C \) (Temperature rise included)

- **Storage Temperature (Component)**: \( -55 \, ^\circ C \) to \( +155 \, ^\circ C \)

- **Rated Current**: Inductance drops 30% at Isat

- **Temperature Rise**: \( +40 \, ^\circ C \) at rated Irms

- **Moisture Sensitivity Level**: 1

- **ESD Classification (HBM)**: N/A

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**Materials**

- Core: Metal alloy powder
- Wire: Enameled copper
- Terminal Finish: EnamelledSn

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**Product Dimensions**

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**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://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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SRP2313AA Series - Shielded Power Inductors

L vs. I Charts

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### Soldering Profile

**Preheat**
- Temperature Min. ($T_{smin}$)
- Temperature Max. ($T_{smax}$)
- Time ($t_s$) from $T_{smin}$ to $T_{smax}$

**Ramp-up Rate ($TL$ to $Tp$)** 3 °C/second max.

**Liquidous temperature ($TL$)**
- Time ($t_L$) maintained above $TL$

**Peak package body temperature ($Tp$)**
- Time within 5 °C of Actual Peak Temperature ($tg$)

**Ramp-Down Rate ($Tp$ to $TL$)** 6 °C/second max.

**Time 25 °C to Peak Temperature** 8 minutes max.

### Packaging Specifications

**Dimensions:**
- Leader: 200 m/m min.
- Components: 400 m/m min.

**Lead and Trailers:**
- Leader: no component
- Trailer: no component

**QTY:** 80 PCS. PER REEL

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