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</th>
<th>Q (Min.)</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>
</tr>
</thead>
<tbody>
<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>
<td>70</td>
<td>60</td>
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<tr>
<td>SRP2313AA-1R5M</td>
<td>1.5</td>
<td>20</td>
<td>60</td>
<td>21</td>
<td>1.0</td>
<td>1.15</td>
<td>57</td>
<td>48</td>
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<td>SRP2313AA-2R2M</td>
<td>2.2</td>
<td>20</td>
<td>60</td>
<td>19</td>
<td>1.05</td>
<td>1.25</td>
<td>50</td>
<td>43</td>
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<tr>
<td>SRP2313AA-3R3M</td>
<td>3.3</td>
<td>20</td>
<td>60</td>
<td>15</td>
<td>1.5</td>
<td>1.76</td>
<td>44</td>
<td>37</td>
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<tr>
<td>SRP2313AA-4R7M</td>
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<td>20</td>
<td>40</td>
<td>11</td>
<td>1.9</td>
<td>2.7</td>
<td>44</td>
<td>34</td>
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<tr>
<td>SRP2313AA-6R8M</td>
<td>6.8</td>
<td>20</td>
<td>40</td>
<td>9</td>
<td>2.7</td>
<td>3.1</td>
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<td>32</td>
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<tr>
<td>SRP2313AA-100M</td>
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<td>20</td>
<td>40</td>
<td>7</td>
<td>3.8</td>
<td>4.15</td>
<td>30</td>
<td>20</td>
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<tr>
<td>SRP2313AA-220M</td>
<td>22.0</td>
<td>20</td>
<td>30</td>
<td>5</td>
<td>9.2</td>
<td>11</td>
<td>16</td>
<td>14</td>
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<tr>
<td>SRP2313AA-230M</td>
<td>23.0</td>
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<td>30</td>
<td>5</td>
<td>9.2</td>
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<td>18</td>
<td>14</td>
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<tr>
<td>SRP2313AA-330M</td>
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<td>30</td>
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<td>13.5</td>
<td>15.4</td>
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<td>SRP2313AA-470M</td>
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<td>14</td>
<td>10</td>
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<td>SRP2313AA-680M</td>
<td>68.0</td>
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<td>9</td>
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<td>SRP2313AA-101M</td>
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<td>20</td>
<td>2</td>
<td>36.0</td>
<td>40.0</td>
<td>11</td>
<td>9</td>
</tr>
</tbody>
</table>

General Specifications
Operating Temperature .................................-55 °C to +155 °C (Temperature rise included)
Storage Temperature (Component) .....................-55 °C to +155 °C
Rated Current .........................................Inductance drops 30 % at Isat
Temperature Rise ...40 °C at rated Irms
Moisture Sensitivity Level .........................1
ESD Classification (HBM) .........................N/A

Materials
Core...........................Metal alloy powder
Wire............................Enameled copper
Terminal Finish .........................Sn
Packaging.............. 80 pcs. per 13-inch reel

Electrical Schematic

How to Order
SRP2313AA - 100M
Model __________________________ Value Code (see table)

Recommended Layout

Product Dimensions

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com
EMEA: Tel: +36 88 520 390 • Email: eurocus@bourns.com
The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com
www.bourns.com

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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The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf
L vs. I Charts

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**SRP2313AA Series - Shielded Power Inductors**

**Soldering Profile**

<table>
<thead>
<tr>
<th>Preheating</th>
<th>Soldering</th>
<th>Natural Cooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tp (260 °C, 10 Sec. Max.)</td>
<td>Tp (245 °C, 20–40 Sec.)</td>
<td></td>
</tr>
<tr>
<td>25 °C</td>
<td>20–40 Sec.</td>
<td></td>
</tr>
<tr>
<td>60–180 Sec.</td>
<td>60–150 Sec.</td>
<td></td>
</tr>
<tr>
<td>480 Sec. Max.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Packaging Specifications**

- Components
  - User Direction of Feed: QTY: 80 PCS. PER REEL
  - Leader: no component 200 m/m min.
  - Components: 20.2 ± 0.1 (0.795 ± 0.004)
  - Trailer: no component 400 m/m min.
  - Dimensions: MM (INCHES)
  - Leader: 44.4 ± 0.2 (1.748 ± 0.008)
  - Trailer: 24.0 ± 0.1 (0.945 ± 0.004)
  - Component: 13.5 ± 0.5/0.2 (0.531 ± 0.020/0.008)

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