SRP7050AA Series - Shielded Power Inductors

Features
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance @ 100 KHz / 1 V (µH)</th>
<th>Q (Typ.) @100 KHz / 1 V</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>
</tr>
</thead>
<tbody>
<tr>
<td>SRP7050AA-R47Y</td>
<td>0.47</td>
<td>20</td>
<td>10</td>
<td>89</td>
<td>2.9</td>
<td>3.3</td>
<td>22</td>
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<tr>
<td>SRP7050AA-R68M</td>
<td>0.68</td>
<td>20</td>
<td>10</td>
<td>65</td>
<td>3.6</td>
<td>4.1</td>
<td>20</td>
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<tr>
<td>SRP7050AA-1R0M</td>
<td>1.0</td>
<td>20</td>
<td>10</td>
<td>47</td>
<td>5.6</td>
<td>6.2</td>
<td>17</td>
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<tr>
<td>SRP7050AA-1R5M</td>
<td>1.5</td>
<td>20</td>
<td>10</td>
<td>32</td>
<td>6.6</td>
<td>7.3</td>
<td>15</td>
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<tr>
<td>SRP7050AA-2R2M</td>
<td>2.2</td>
<td>20</td>
<td>10</td>
<td>24</td>
<td>10</td>
<td>11.5</td>
<td>14</td>
</tr>
<tr>
<td>SRP7050AA-3R3M</td>
<td>3.3</td>
<td>20</td>
<td>10</td>
<td>21</td>
<td>14</td>
<td>16.2</td>
<td>13</td>
</tr>
<tr>
<td>SRP7050AA-4R7M</td>
<td>4.7</td>
<td>20</td>
<td>10</td>
<td>19</td>
<td>20.8</td>
<td>24</td>
<td>11</td>
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<tr>
<td>SRP7050AA-6R8M</td>
<td>6.8</td>
<td>20</td>
<td>10</td>
<td>14</td>
<td>30</td>
<td>36</td>
<td>9.0</td>
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<td>SRP7050AA-8R2M</td>
<td>8.2</td>
<td>20</td>
<td>10</td>
<td>13</td>
<td>38.5</td>
<td>45</td>
<td>7.5</td>
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<td>SRP7050AA-100M</td>
<td>10.0</td>
<td>20</td>
<td>10</td>
<td>14</td>
<td>44</td>
<td>53</td>
<td>7.0</td>
</tr>
<tr>
<td>SRP7050AA-150M</td>
<td>15.0</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>73</td>
<td>85</td>
<td>5.0</td>
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<tr>
<td>SRP7050AA-220M</td>
<td>22.0</td>
<td>20</td>
<td>10</td>
<td>8</td>
<td>122</td>
<td>142</td>
<td>4.2</td>
</tr>
<tr>
<td>SRP7050AA-470M</td>
<td>47.0</td>
<td>20</td>
<td>10</td>
<td>6</td>
<td>275</td>
<td>320</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Product Dimensions

** 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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SRP7050AA Series - Shielded Power Inductors

L vs. I Charts

- SRP7050AA-R47M
- SRP7050AA-R68M
- SRP7050AA-1R0M
- SRP7050AA-1R5M
- SRP7050AA-2R2M
- SRP7050AA-3R3M
- SRP7050AA-4R7M
- SRP7050AA-5R6M
- SRP7050AA-100M
- SRP7050AA-150M
- SRP7050AA-220M
- SRP7050AA-470M

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### Soldering Profile

<table>
<thead>
<tr>
<th>Time (Seconds)</th>
<th>Temperature (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>480 seconds max.</td>
<td>217</td>
</tr>
<tr>
<td>60 - 180 seconds</td>
<td>200</td>
</tr>
<tr>
<td>60 - 150 seconds</td>
<td>150</td>
</tr>
<tr>
<td>480 seconds max.</td>
<td>25</td>
</tr>
</tbody>
</table>

**REFLOW TIMES: 3 MAX.**

### How to Order

**SRP7050AA - 1ROM**

Model

Value Code (see table)

### Packaging Specifications

**DIMENSIONS:**

- **(MM)**
  - COVER TAPE: 2.0 ± 0.5
  - EMBOSSED CARRIER: 13 ± 0.5 / 0.2
  - DIA.: 16.4 ± 0.1
  - MIN.: 12.0 ± 0.1
  - MAX.: 10.0 ± 0.2
  - 0.35 ± 0.05
  - 02/21

- **(INCHES)**
  - COVER TAPE: .079 ± .020
  - EMBOSSED CARRIER: .512 ± .079
  - DIA.: .630 ± .012
  - MIN.: .472 ± .004
  - MAX.: .303 ± .004
  - 02/21

02/21

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