AEC-Q200 COMPLIANT

**RoHS COMPLIANT**

VERSIONS AVAILABLE

**RoHS COMPLIANT**

LEAD FREE VERSIONS ARE **RoHS COMPLIANT** and AEC-Q200 compliant

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**Features**
- Multiple configurations: parallel, series, dual-inductor and transformer
- Magnetically shielded, low radiation
- Inductance range: 8.2 to 600 µH
- Heating current up to 2.19 A
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

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**Applications**
- DC/DC converters
- Power supplies
- SEPIC - DC/DC converters

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**SRF0703A Series - Dual-Winding Shielded Power Inductors**

### Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part No.</th>
<th>Parallel Rating</th>
<th>Series Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inductance @ 100 kHz / 0.25 V L (µH) ±20%</td>
<td>DCR (Ω) Max.</td>
</tr>
<tr>
<td>SRF0703A-8R2M</td>
<td>8.2</td>
<td>0.0772</td>
</tr>
<tr>
<td>SRF0703A-100M</td>
<td>10</td>
<td>0.0826</td>
</tr>
<tr>
<td>SRF0703A-150M</td>
<td>15</td>
<td>0.119</td>
</tr>
<tr>
<td>SRF0703A-220M</td>
<td>22</td>
<td>0.15</td>
</tr>
<tr>
<td>SRF0703A-330M</td>
<td>33</td>
<td>0.24</td>
</tr>
<tr>
<td>SRF0703A-470M</td>
<td>47</td>
<td>0.338</td>
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<tr>
<td>SRF0703A-680M</td>
<td>68</td>
<td>0.507</td>
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<tr>
<td>SRF0703A-820M</td>
<td>82</td>
<td>0.61</td>
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<tr>
<td>SRF0703A-101M</td>
<td>100</td>
<td>0.715</td>
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<tr>
<td>SRF0703A-151M</td>
<td>150</td>
<td>0.986</td>
</tr>
<tr>
<td>SRF0703A-221M</td>
<td>220</td>
<td>1.48</td>
</tr>
<tr>
<td>SRF0703A-331M</td>
<td>330</td>
<td>2.16</td>
</tr>
</tbody>
</table>

### Electrical Schematics

**Recommended Layout**

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**General Specifications**
- Operating Temperature: -40 °C to +125 °C (Temperature rise included)
- Storage Temperature: -40 °C to +125 °C
- Resistance to Solder Heat: +250 °C for 10 sec.
- Temperature Rise: 40 °C typ. at rated Irms
- Inductance Drop: 30 % typ. at Isat
- Hi-pot (N1-N2): 500 Vac/60 Hz, 3 mA, 1 sec
- Moisture Sensitivity Level: 1
- ESD Classification (HBM): N/A

### Materials
- Core: Ferrite
- Wire: Enamelled copper
- Terminal Finish: Enamelled Sn
- Packaging: 1500 pcs. per reel

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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.
Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.

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SRF0703A Series - Dual-Winding Shielded Power Inductors

Inductance vs. IDC

Temperature Rise vs. IDC

How to Order

<table>
<thead>
<tr>
<th>Model</th>
<th>Value Code (see table)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRF0703A - 100M</td>
<td></td>
</tr>
</tbody>
</table>

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SRF0703A Series - Dual-Winding Shielded Power Inductors

Soldering Profile

<table>
<thead>
<tr>
<th>Temperature Rising Area</th>
<th>Preheat Area</th>
<th>Reflow Area</th>
<th>Forced Cooling Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>+4.0 °C/Sec. Max.</td>
<td>150-200 °C / 60-120 Sec.</td>
<td>+3.0 °C/Sec. Max.</td>
<td>+(-1.0-5.0) °C/Sec. Max.</td>
</tr>
</tbody>
</table>

Peak Temperature: 250 °C max.
Max. Peak Temperature -5 °C: 30 sec. max.
Max. Time Above 217 °C: 90-150 sec. max.

Temperature (°C) vs. Time (Seconds)

Packaging Specifications

Dimensions:

<table>
<thead>
<tr>
<th>QTY: 1500 PCS. PER REEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMENSIONS: MM</td>
</tr>
<tr>
<td>END</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>START</td>
</tr>
<tr>
<td>NO COMPONENT</td>
</tr>
<tr>
<td>COMPONENTS</td>
</tr>
<tr>
<td>NO COMPONENT</td>
</tr>
</tbody>
</table>

REV. 11/18
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