Features
- Shielded construction
- Metal alloy powder core
- High saturation current
- Flat wire
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP5050FA Series – Shielded Power Inductors

### Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance @ 100 kHz / 0.1 V</th>
<th>SRF (MHz) Typ.</th>
<th>DCR (mΩ) Typ.</th>
<th>DCR (mΩ) Max.</th>
<th>I rms (A) Typ.</th>
<th>I set (A) Typ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRP5050FA-5R6M</td>
<td>5.60 ± 20 %</td>
<td>20</td>
<td>22.0</td>
<td>5.3</td>
<td>7.2</td>
<td>8.6</td>
</tr>
<tr>
<td>SRP5050FA-6R8M</td>
<td>6.80 ± 20 %</td>
<td>18</td>
<td>26.0</td>
<td>4.8</td>
<td>6.4</td>
<td>7.8</td>
</tr>
<tr>
<td>SRP5050FA-8R2M</td>
<td>8.20 ± 20 %</td>
<td>15</td>
<td>29.5</td>
<td>4.6</td>
<td>6.1</td>
<td>7.2</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: 20 or 40 °C at rated I rms

**MSL**
1

**ESD Classification (HBM)**
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: Enamelled copper
- Terminal Finish: Sn

Packaging:
- 1500 pcs. per 13-inch reel

### Recommended Layout

**DIMENSIONS: MM (INCHES)**

![Schematic](image)

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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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SRP5050FA Series – Shielded Power Inductors

Soldering Profile

REFLOW TIMES: 3 MAX.

L vs. I Charts

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Packaging Specifications

Dimensions: MM (INCHES)

User Direction of Feed
QTY: 1500 PCS PER REEL

05/19

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