**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>L (µH) @ 100 kHz / 0.1 V</th>
<th>SRF (MHz) Typ.</th>
<th>DCR (mΩ) Typ.</th>
<th>DCR (mΩ) Max.</th>
<th>20 °C Temp. Rise</th>
<th>40 °C Temp. Rise</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>24.2</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>28.6</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>32.5</td>
<td>4.6</td>
<td>6.1</td>
<td>7.1</td>
</tr>
<tr>
<td>SRP5050FA-100M1</td>
<td>10 ± 20 %</td>
<td>10</td>
<td>39.0</td>
<td>43.0</td>
<td>3.8</td>
<td>5.2</td>
<td>6.5</td>
</tr>
<tr>
<td>SRP5050FA-150M1</td>
<td>15 ± 20 %</td>
<td>9</td>
<td>60.0</td>
<td>66.0</td>
<td>3.8</td>
<td>4.4</td>
<td>5.5</td>
</tr>
<tr>
<td>SRP5050FA-220M1</td>
<td>22 ± 20 %</td>
<td>8</td>
<td>90.6</td>
<td>99.65</td>
<td>2.5</td>
<td>3.4</td>
<td>3.7</td>
</tr>
</tbody>
</table>

#### Product Dimensions

**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.

Users should verify actual device performance in their specific applications.

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Soldering Profile

REFLOW TIMES: 3 MAX.

L vs. I Charts

- **SRP5050FA-5R6M**
  - Inductance (μH) vs. Temperature Rise (°C)
  - DC Current (A)

- **SRP5050FA-100M1**
  - Inductance (μH) vs. Temperature Rise (°C)
  - DC Current (A)

- **SRP5050FA-150M1**
  - Inductance (μH) vs. Temperature Rise (°C)
  - DC Current (A)

- **SRP5050FA-220M1**
  - Inductance (μH) vs. Temperature Rise (°C)
  - DC Current (A)

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