Features
- Current rating up to 1.6 A
- Inductance range: 10 to 6500 μH
- Frequency up to 300 MHz
- Dimensions: 9.2 x 6 x 5 mm
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

SRF0905A Series - Line Filter

Electrical Specifications @ 25 °C

<table>
<thead>
<tr>
<th>Bourns Part Number</th>
<th>Inductance L (μH)</th>
<th>Tol. (%)</th>
<th>Test Freq./Voltage</th>
<th>DCR (Ω) Max.</th>
<th>Rated Voltage (Vdc)</th>
<th>I rms (A)</th>
<th>Frequ. Range (MHz)</th>
<th>Imped. (Ω) Min.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRF0905A-100Y</td>
<td>10 ± 30</td>
<td>1 kHz / 0.1 V</td>
<td>0.08</td>
<td>80</td>
<td>1.6</td>
<td>20 - 300</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>SRF0905A-250Y</td>
<td>25 ± 30</td>
<td>1 kHz / 0.1 V</td>
<td>0.16</td>
<td>80</td>
<td>1.0</td>
<td>20 - 150</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>SRF0905A-400Y</td>
<td>40 ± 30</td>
<td>1 kHz / 0.1 V</td>
<td>0.25</td>
<td>80</td>
<td>0.9</td>
<td>20 - 100</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>SRF0905A-500Y</td>
<td>50 ± 30</td>
<td>1 kHz / 0.1 V</td>
<td>0.32</td>
<td>80</td>
<td>0.8</td>
<td>20 - 100</td>
<td>1500</td>
<td></td>
</tr>
<tr>
<td>SRF0905A-251Y</td>
<td>25 ± 50</td>
<td>100 kHz / 5 mV</td>
<td>0.13</td>
<td>80</td>
<td>1.2</td>
<td>3 - 20</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>SRF0905A-471Y</td>
<td>470 ± 30</td>
<td>100 kHz / 5 mV</td>
<td>0.14</td>
<td>80</td>
<td>1.1</td>
<td>2 - 20</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>SRF0905A-501Y</td>
<td>500 ± 50</td>
<td>100 kHz / 5 mV</td>
<td>0.15</td>
<td>80</td>
<td>1.0</td>
<td>1 - 15</td>
<td>1500</td>
<td></td>
</tr>
<tr>
<td>SRF0905A-102Y</td>
<td>1000 ± 50</td>
<td>100 kHz / 5 mV</td>
<td>0.31</td>
<td>80</td>
<td>0.8</td>
<td>1 - 5</td>
<td>3000</td>
<td></td>
</tr>
<tr>
<td>SRF0905A-202Y</td>
<td>2000 ± 50</td>
<td>100 kHz / 5 mV</td>
<td>0.42</td>
<td>80</td>
<td>0.6</td>
<td>1 - 5</td>
<td>3000</td>
<td></td>
</tr>
<tr>
<td>SRF0905A-472Y</td>
<td>4700 ± 50</td>
<td>100 kHz / 5 mV</td>
<td>0.9</td>
<td>80</td>
<td>0.4</td>
<td>0.3 - 3</td>
<td>4000</td>
<td></td>
</tr>
<tr>
<td>SRF0905A-652Y</td>
<td>6500 ± 50</td>
<td>100 kHz / 5 mV</td>
<td>1.05</td>
<td>80</td>
<td>0.3</td>
<td>0.3 - 2</td>
<td>5000</td>
<td></td>
</tr>
</tbody>
</table>

General Specifications

Operating Temperature
-40 °C to +105 °C (Temperature rise included)

Storage Temperature
-40 °C to +105 °C

Resistance to Solder Heat
+250 °C for 10 sec.

Temperature Rise
45 °C typ. at rated Irms

Hi-Pot
500 VAC, 60 Hz, 3 mA max. for 3 seconds

Materials
Core: Ferrite, toroid
Wire: Enameled copper
Terminal Finish: Sn
Packaging: 1000 pcs. per reel

Electrical Schematic

Recommended Layout

Soldering Profile

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.

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

Packaging Specifications

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