



Features

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

Applications

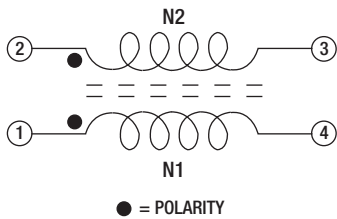
- Automotive systems:
 - Driver assistant
 - Information
 - Entertainment
 - Lighting
- EMI suppression

SRF0905A Series - Line Filter

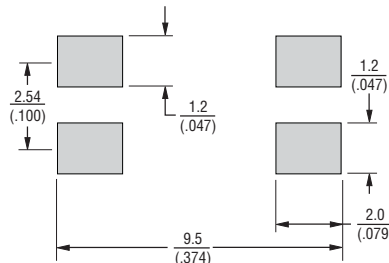
Electrical Specifications @ 25 °C

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

Electrical Schematic

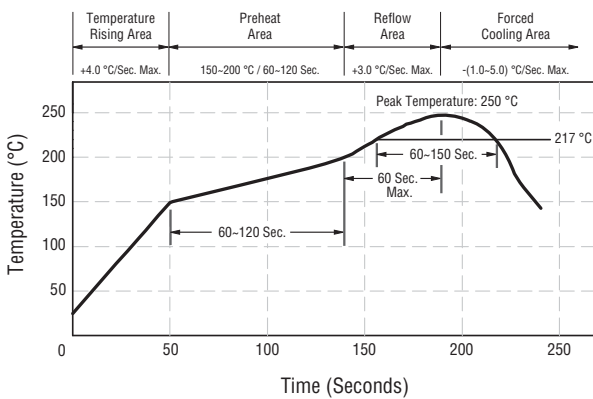


Recommended Layout



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Soldering Profile



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

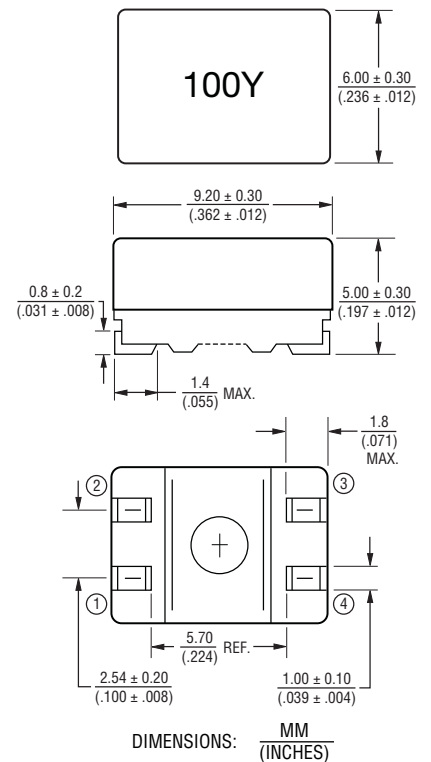
General Specifications

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 Rise45 °C typ. at rated I rms
 Hi-Pot 500 VAC, 60 Hz,
 3 mA max. for 3 seconds

Materials

CoreFerrite, toroid
 WireEnameled copper
 Terminal FinishSn
 Packaging 1000 pcs. per reel

Product Dimensions



How to Order

SRF0905A - 100Y

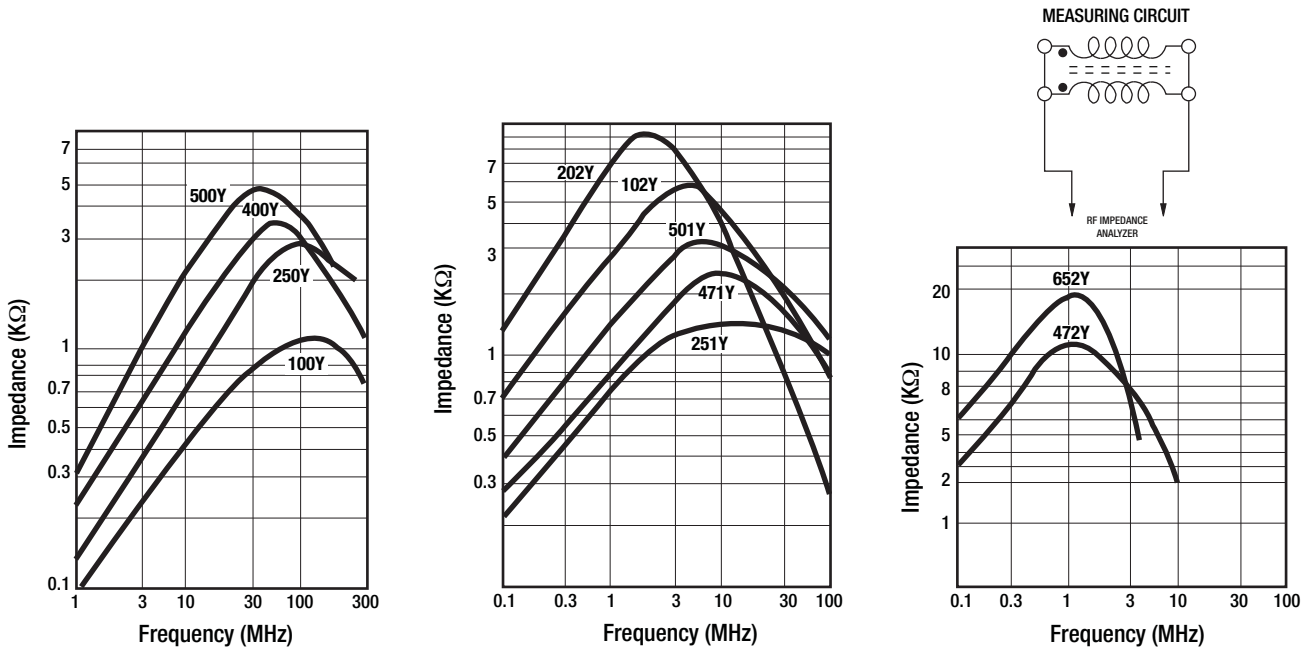
Model _____
 Value Code (see table) _____

* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
 ** Bourns follows the prevailing definition of "halogen free" in the industry. 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.
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
 Users should verify actual device performance in their specific applications.

SRF0905A Series - Line Filter

BOURNS®

Impedance Graphs



Packaging Specifications

