



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**

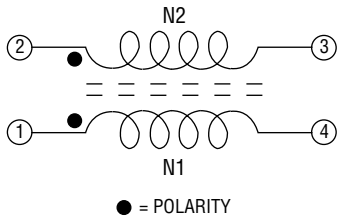
BOURNS®

SRF0905A Series - Line Filter

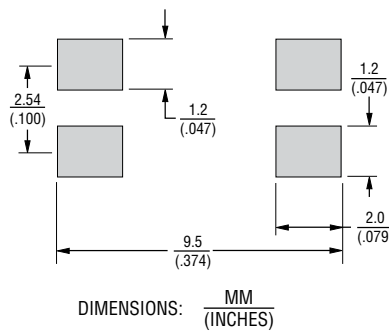
Electrical Specifications @ 25 °C

| 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 |

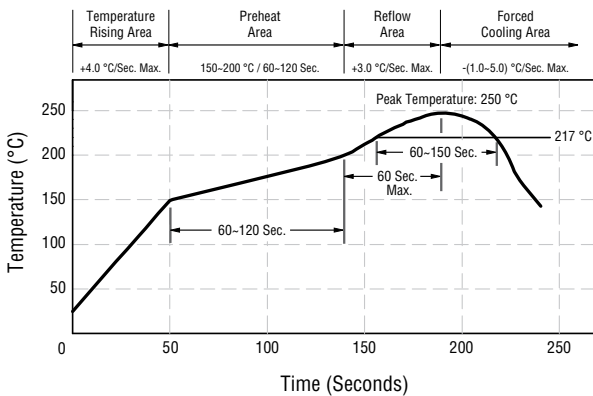
Electrical Schematic



Recommended Layout



Soldering Profile



Peak Temperature: 250 °C max.

Max. Peak Temperature -5 °C: 30 sec. max.

Max. Time Above 217 °C: 90-150 sec. max.



WARNING Cancer and Reproductive Harm www.P65Warnings.ca.gov

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

**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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General Specifications

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

Storage Temperature-40 °C to +105 °C

Temperature Rise45 °C typ. at rated I_{rms}

Hi-Pot500 VAC, 60 Hz,
3 mA max. for 3 seconds

Materials

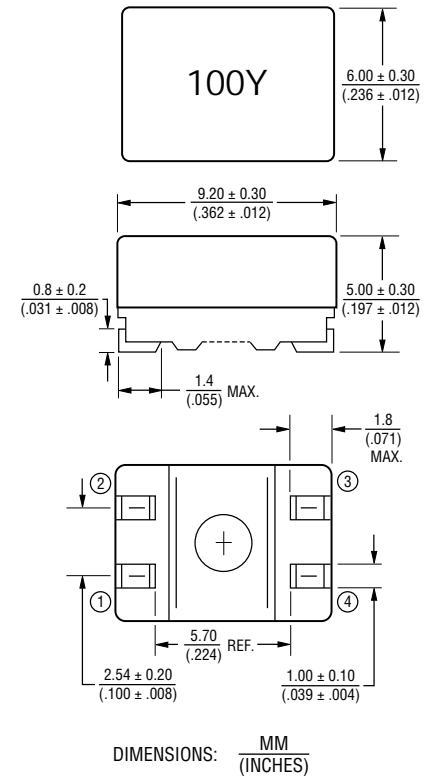
Core.....Ferrite, toroid

Wire.....Enameled copper

Terminal Finish.....Sn

Packaging.....1000 pcs. per reel

Product Dimensions



How to Order

SRF0905A - 100Y

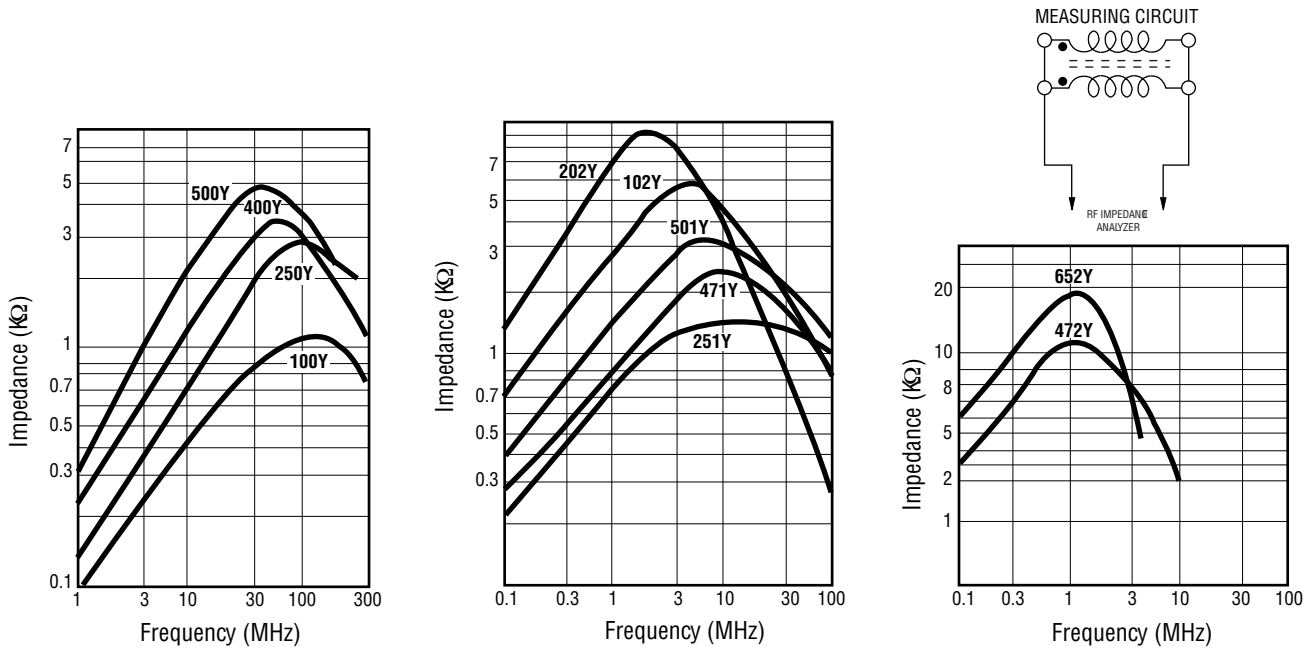
Model _____

Value Code (see table) _____

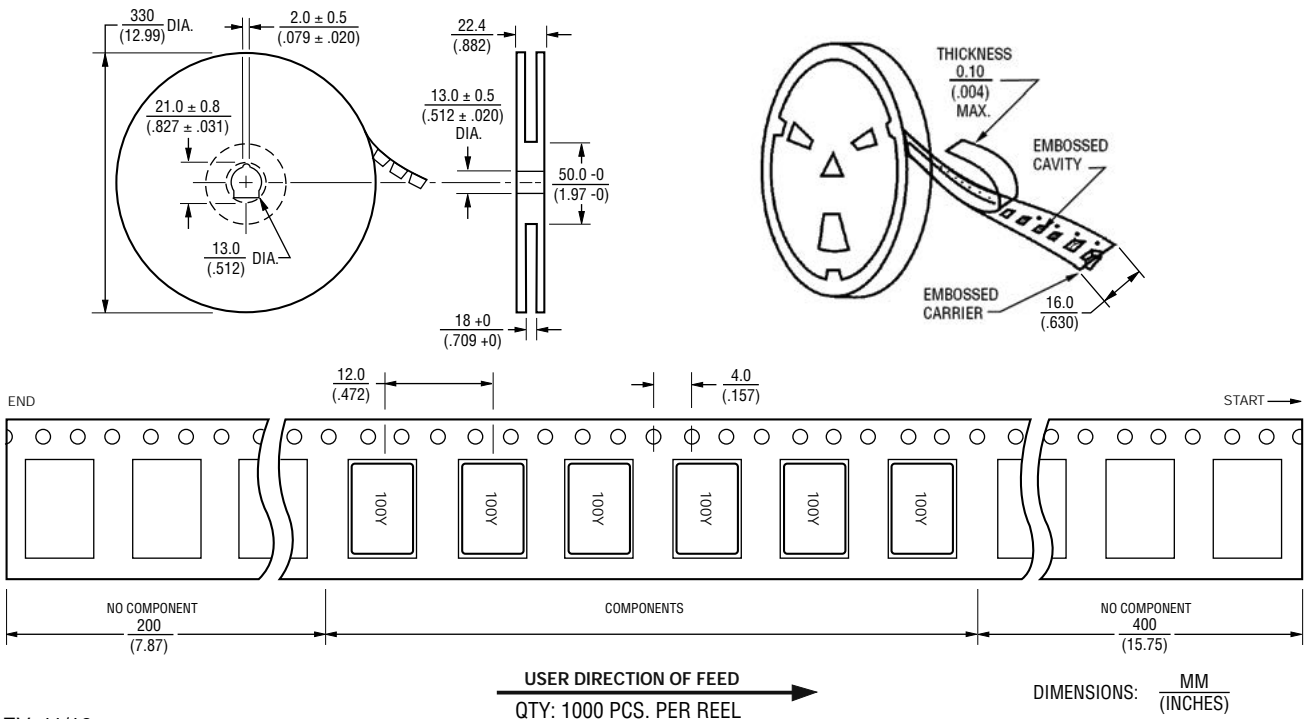
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Impedance Graphs



Packaging Specifications



REV. 11/19

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