



**THE DATASHEET OF  
SRF0905A-500Y**





## Features

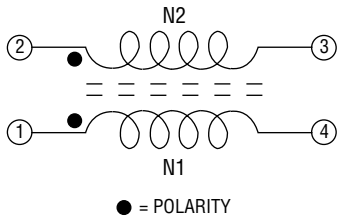
- Current rating up to 1.6 A
- Inductance range: 10 to 6500  $\mu$ H
- Frequency up to 300 MHz
- Dimensions: 9.2 x 6 x 5 mm
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*

## SRF0905A Series - Line Filter

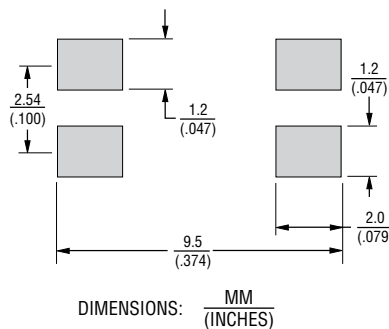
### Electrical Specifications @ 25 °C

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

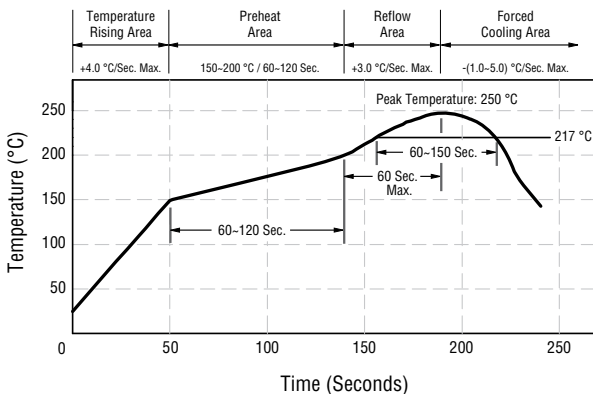
### Electrical Schematic



### 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](http://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 Rise .....45 °C typ. at rated I<sub>rms</sub>

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

### Materials

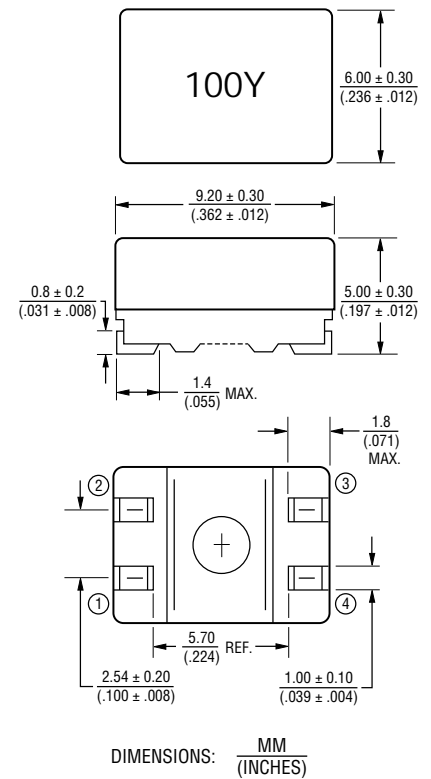
Core.....Ferrite, toroid

Wire.....Enameled copper

Terminal Finish.....Sn

Packaging..... 1000 pcs. per reel

### Product Dimensions



### How to Order

**SRF0905A - 100Y**

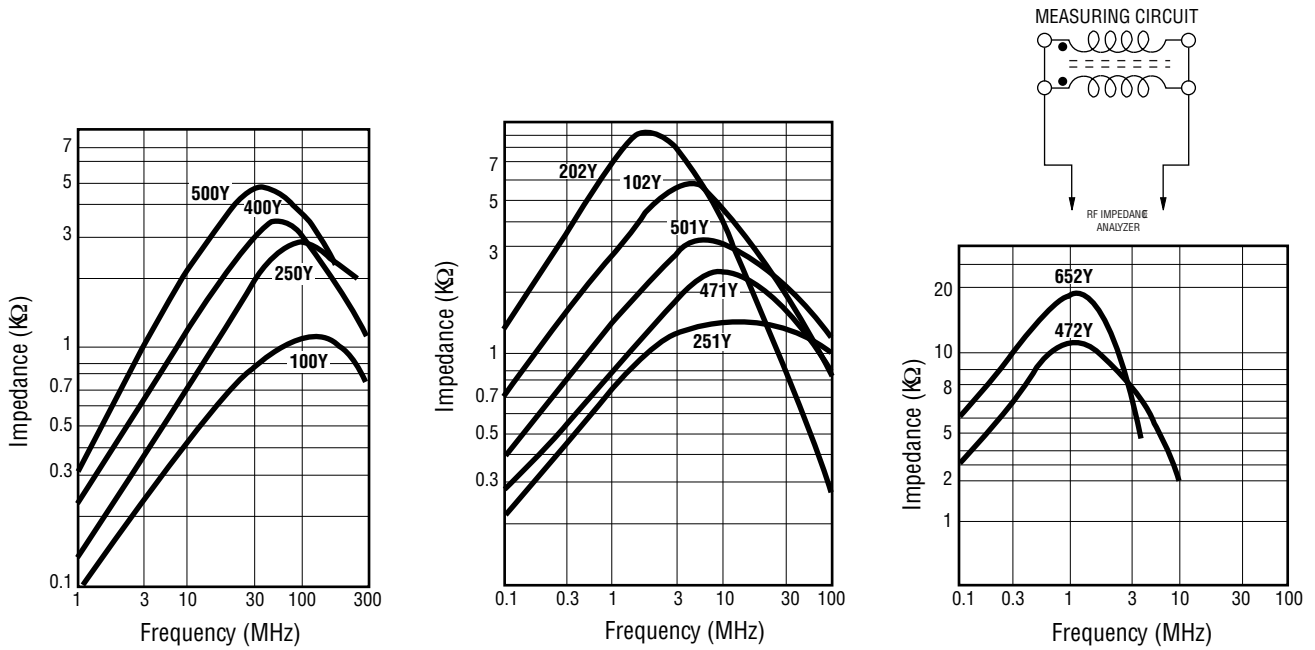
Model \_\_\_\_\_

Value Code (see table) \_\_\_\_\_

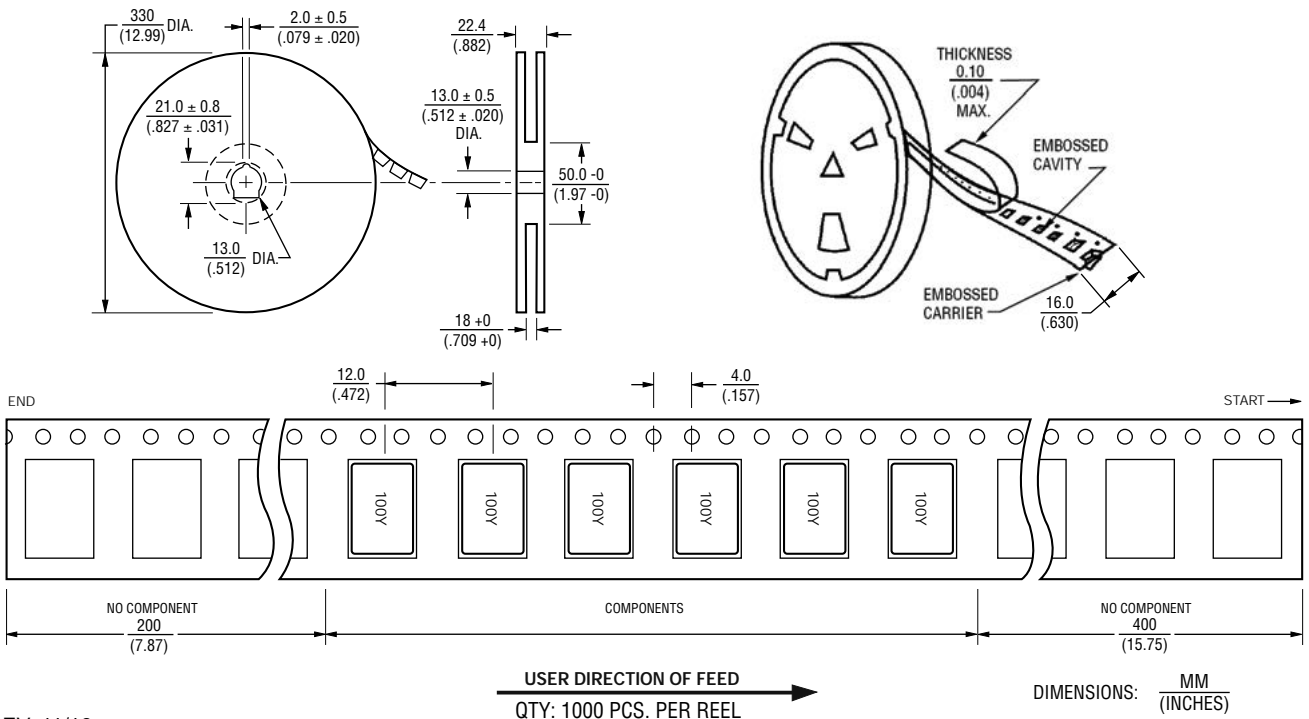
# SRF0905A Series - Line Filter

**BOURNS®**

## Impedance Graphs



## Packaging Specifications



REV. 11/19

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