



## Features

- Shielded construction
- Low profile: 2.5 mm
- Current rating up to 6 A
- Frequency range to 900 MHz
- RoHS compliant\* and halogen free\*\*

## Applications

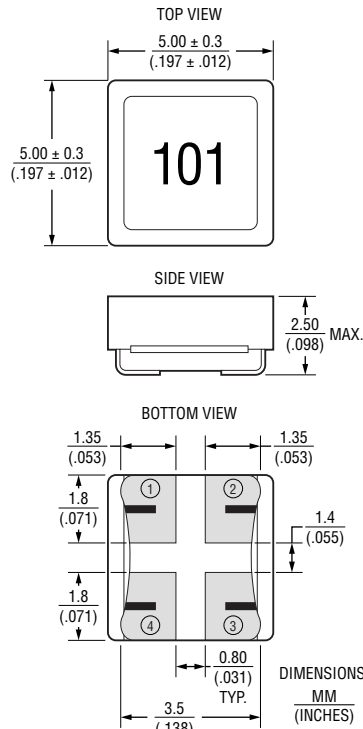
- EMI suppression

# SRF0502 Series – Line Filter

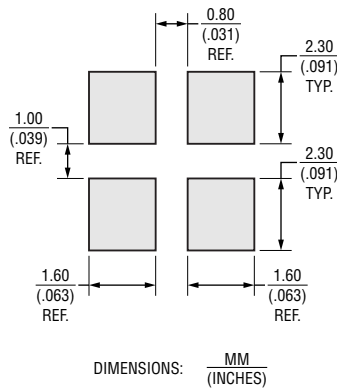
### Electrical Specifications @ 25 °C

Part Number	Common Mode Impedance @ 100 MHz (kΩ)	Inductance @ 100 kHz / 0.1 V (μH)	Rated Current (mA)	DCR Max. (mΩ)	Impedance (Z)	
					Freq. Range (MHz)	Min. Value (Ω)
SRF0502-101Y	0.10 ± 35 %	0.23	6.0	15.0	90 - 900	60
SRF0502-251Y	0.25 ± 35 %	0.55	5.0	20.0	80 - 700	120
SRF0502-501Y	0.50 ± 35 %	1.10	4.0	30.0	60 - 300	200
SRF0502-102Y	1.00 ± 35 %	2.50	2.0	45.0	50 - 200	400
SRF0502-142Y	1.40 ± 35 %	2.60	1.5	55.0	40 - 160	450

### Product Dimensions



### Recommended Layout

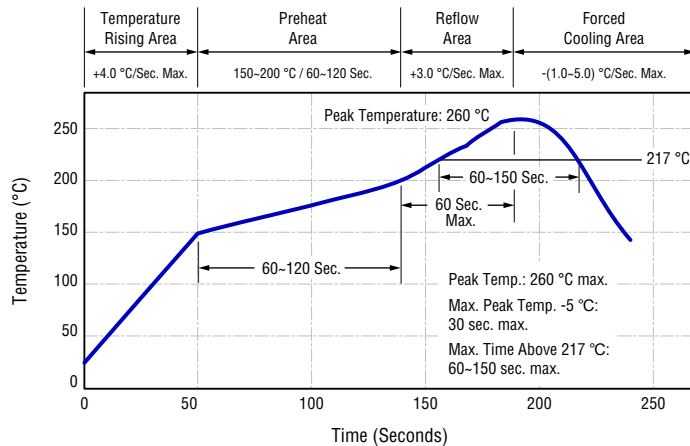


### How to Order

**SRF0502 - 101 Y**

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

### Soldering Profile



### Additional Information

Click these links for more information:



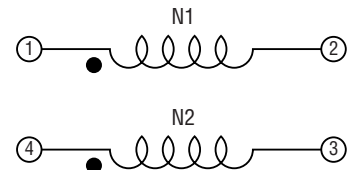
### General Specifications

Rated Voltage..... 50 V<sub>DC</sub>  
 Dielectric Withstanding Voltage.. 125 V<sub>DC</sub>  
 Insulation Resistance.. 10 megohms min.  
 Temperature Rise  
 ..... 40 °C typ. at rated current  
 Operating Temperature  
 ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature... -40 °C to +125 °C  
 Moisture Sensivity Level..... 1  
 ESD Classification (HBM) ..... N/A

### Materials

Core Material..... Ferrite  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn  
 Packaging..... 3,000 pcs. per 13-inch reel

### Schematic



**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.

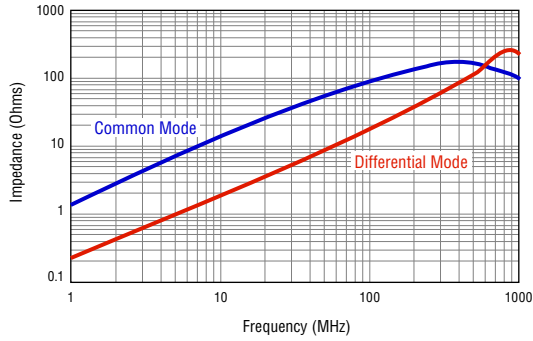
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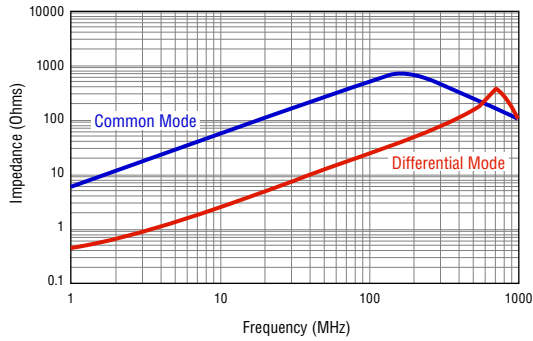
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## Typical Impedance vs. Frequency Curves

### SRF0502-101Y

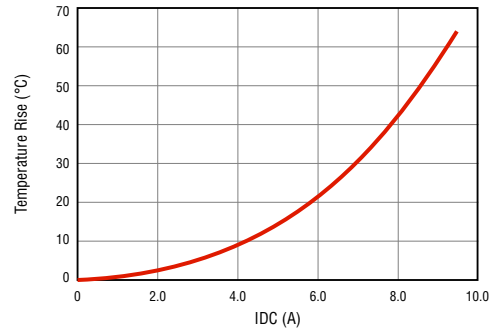


### SRF0502-501Y

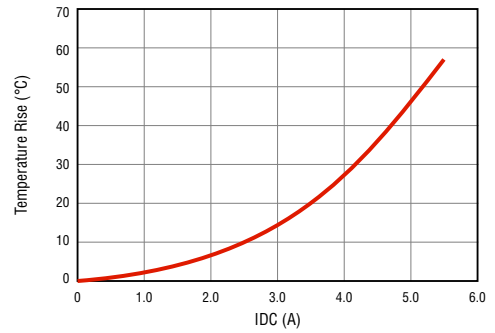


## Temperature Rise Plots

### SRF0502-101Y



### SRF0502-501Y

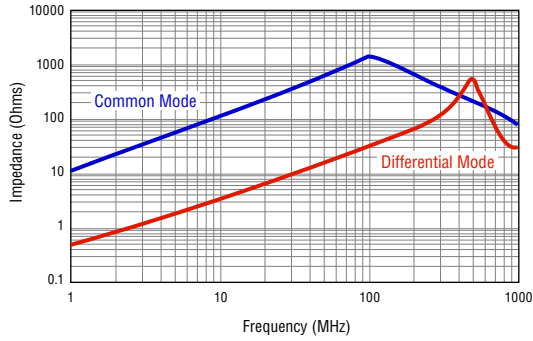


# SRF0502 Series – Line Filter

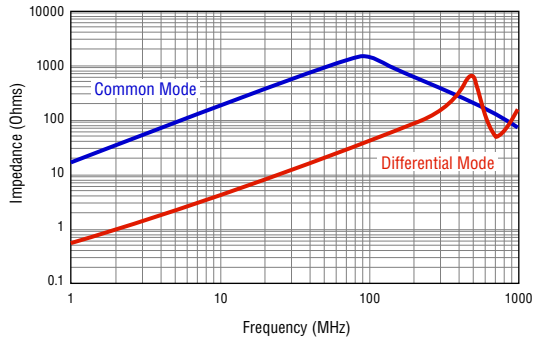
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## Typical Impedance vs. Frequency Curves

SRF0502-102Y

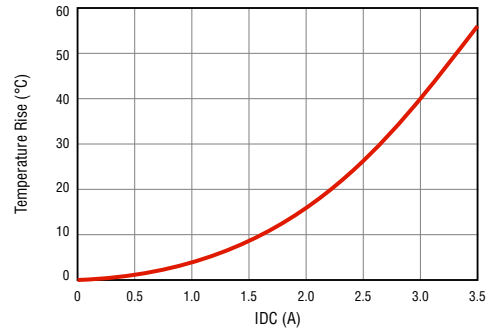


SRF0502-142Y

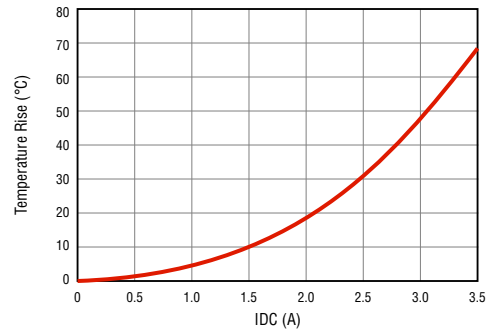


## Temperature Rise Plots

SRF0502-102Y



SRF0502-142Y



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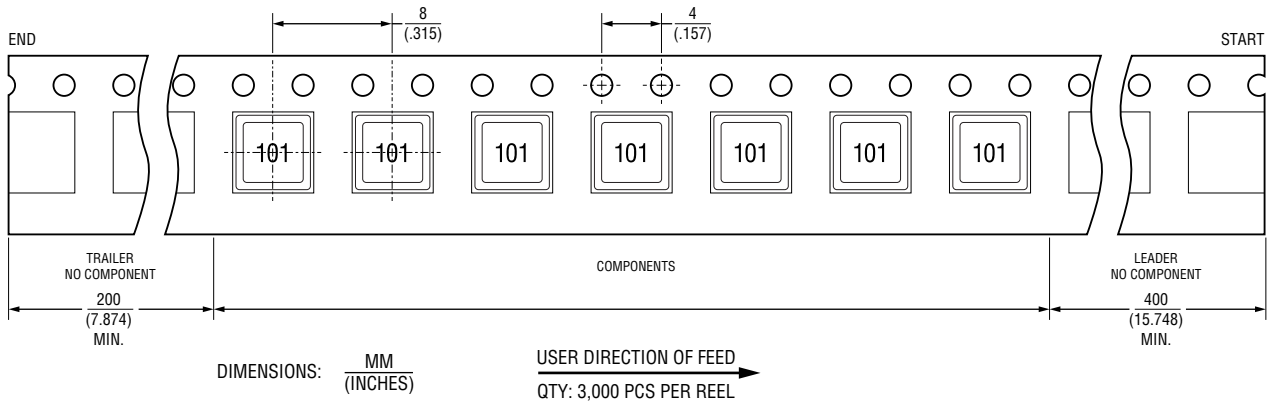
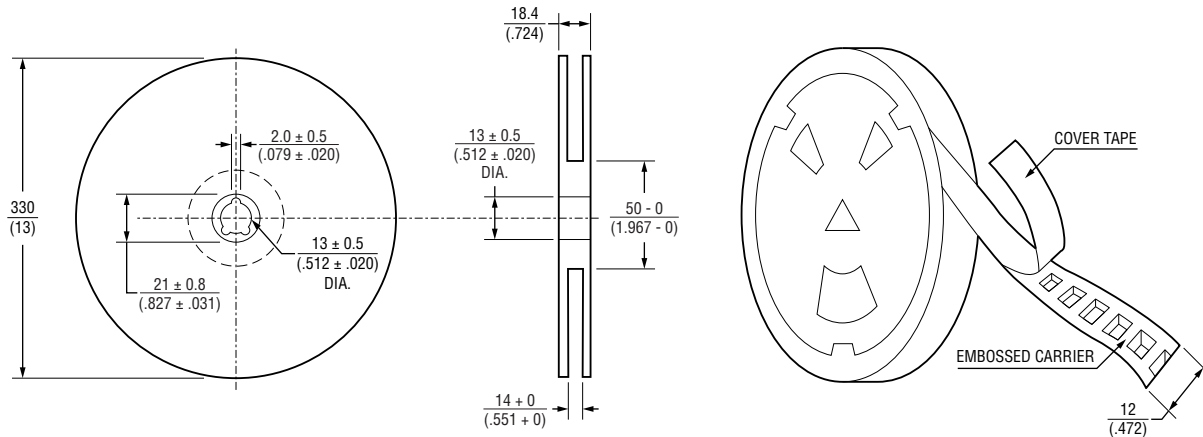
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# SRF0502 Series – Line Filter

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## Packaging Specifications



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