



Features

- Shielded construction
- Low profile: 2.5 mm
- Current rating up to 5 A
- Frequency range to 700 MHz
- RoHS compliant* and halogen free**

Applications

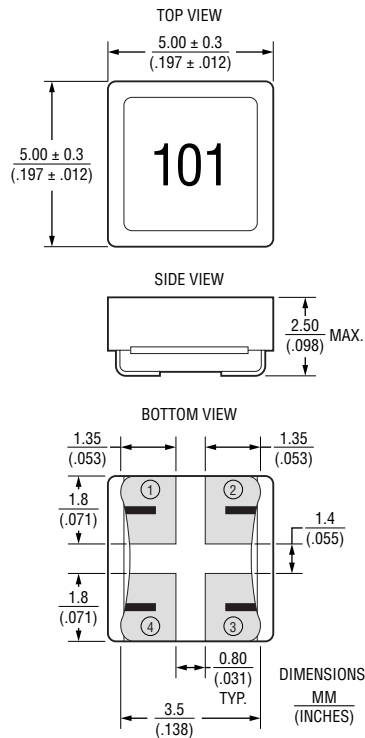
- EMI suppression

SRF0502 Series – Line Filter

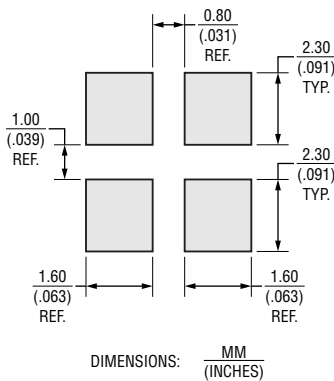
Electrical Specifications @ 25 °C

Part Number	Common Mode Impedance @ 100 MHz (kΩ)	Inductance @ 100 kHz / 0.1 V (μH)	Rated Current (A)	DCR Max. (mΩ)	Impedance (Z)	
					Freq. Range (MHz)	Min. Value (Ω)
SRF0502-101Y	0.1 ± 55 % @ 10 MHz	1.55	2.5	30.8	50 - 300	250
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

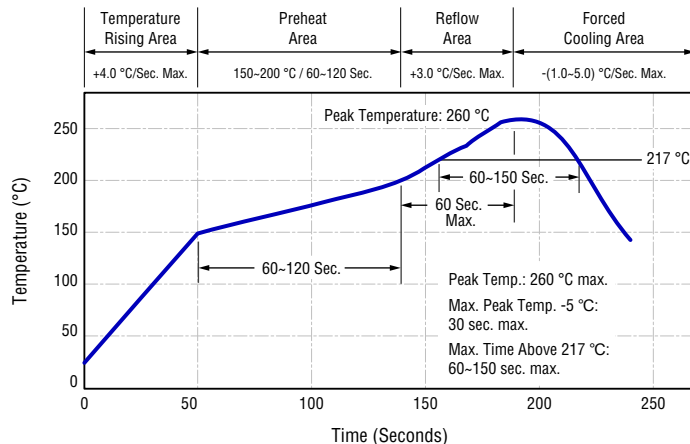


How to Order

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_{DC}
 Dielectric Withstanding Voltage.. 125 V_{DC}
 Insulation Resistance.. 10 megohms min.
 Temperature Rise
 251Y to 142Y
 40 °C typ. at rated current
 101Y, pin 3 to pin 4 shorted
 45 °C max. 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



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.

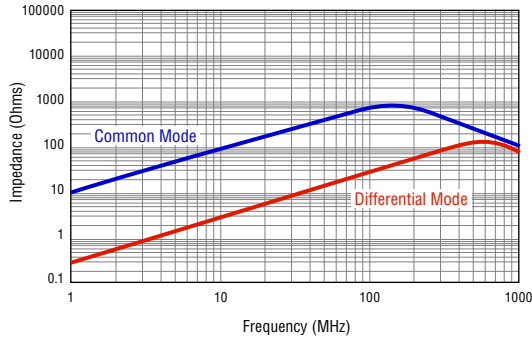
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SRF0502 Series – Line Filter

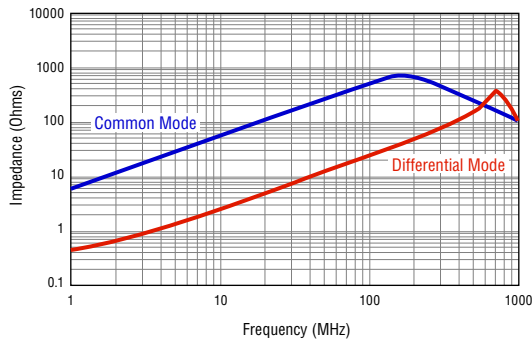


Typical Impedance vs. Frequency Curves

SRF0502-101Y

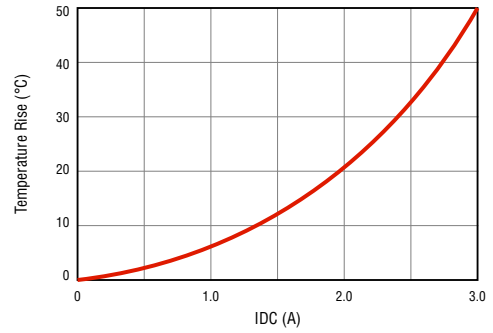


SRF0502-501Y

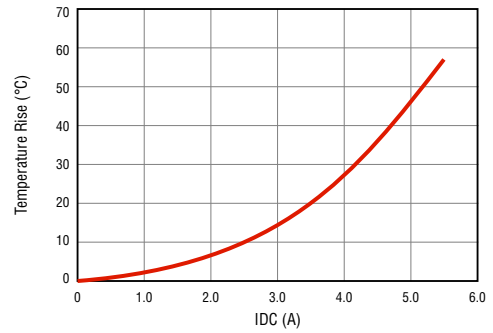


Temperature Rise Plots

SRF0502-101Y

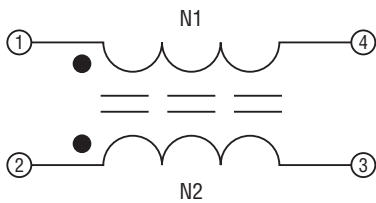


SRF0502-501Y

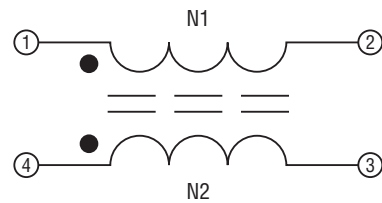


Schematic

SRF0502-101Y



SRF0502-251Y ~ SRF0502-142Y

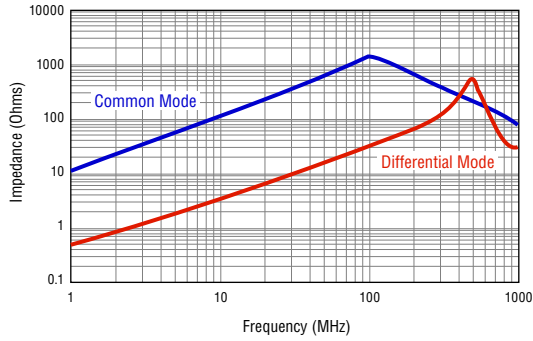


SRF0502 Series – Line Filter

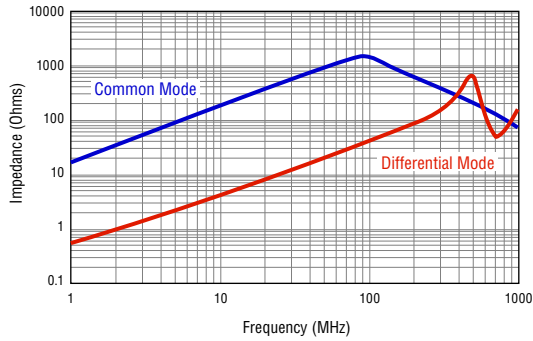
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Typical Impedance vs. Frequency Curves

SRF0502-102Y

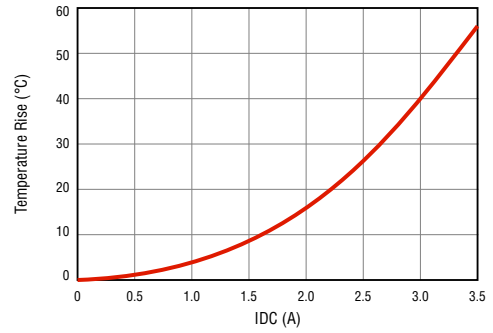


SRF0502-142Y

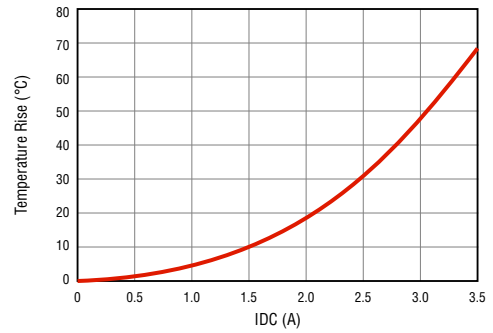


Temperature Rise Plots

SRF0502-102Y



SRF0502-142Y



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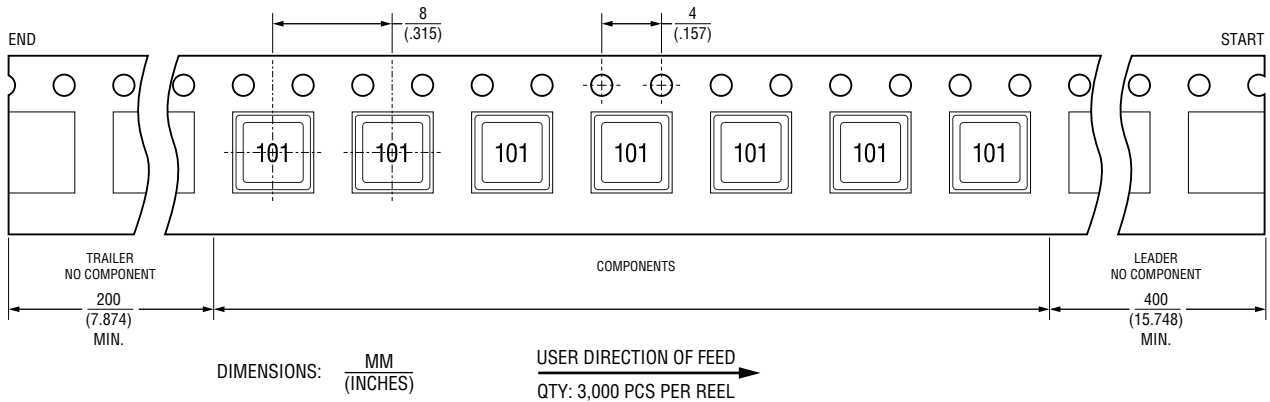
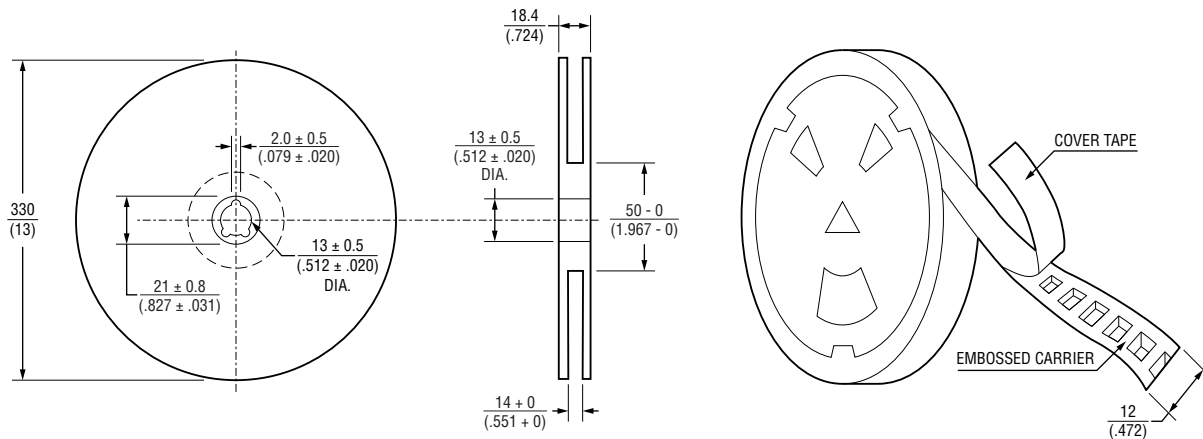
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SRF0502 Series – Line Filter

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Packaging Specifications



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Americas: Tel: +1 951-781-5500 • Email: americus@bourns.com

Mexico: Tel: +52-614-478-0400 • Email: mexicus@bourns.com

Asia: Tel: +886-2-2562-4117 • Email: asiacus@bourns.com

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REV. 10/24

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