

BOURNS®

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

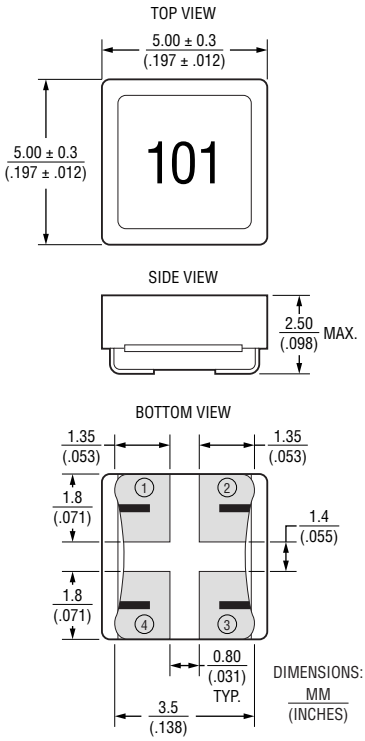
- EMI suppression

SRF0502 Series – Line Filter

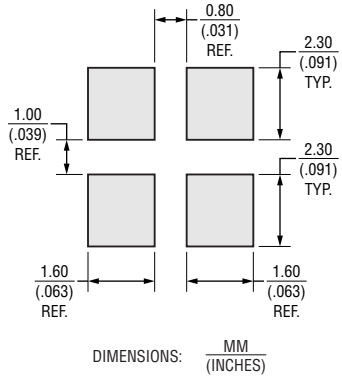
Electrical Specifications @ 25 °C

Part Number	Common Mode Impedance @ 100 MHz (kΩ)	Inductance @ 100 kHz / 0.1 V (μH)	Rated Current (A)	DCR Max. (mΩ)	Peak 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

Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

General Specifications

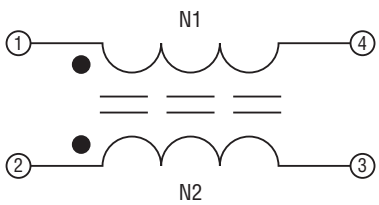
Rated Voltage..... 50 V_{DC}
Dielectric Withstanding Voltage.. 125 V_{DC}
Insulation Resistance .. 10 megohms min.
Temperature Rise
251Y to 142Y
..... 40 °C typ. at rated current
101Y, pin 3 to pin 4 shorted
..... 45 °C max. at rated current
Operating Temperature
..... -40 °C to +125 °C
(Temperature rise included)
Storage Temperature... -40 °C to +125 °C
Moisture Sensitivity Level..... 1
ESD Classification (HBM) ..... N/A

Materials

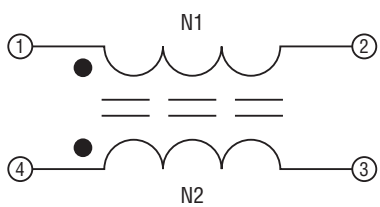
Core Material..... Ferrite
Wire .....Enameled copper
Terminal Finish ..... Sn
Packaging..... 3,000 pcs. per 13-inch reel

Schematic

SRF0502-101Y



SRF0502-251Y ~ SRF0502-142Y



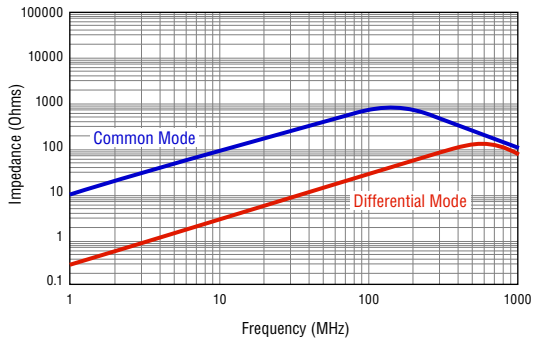
CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant.
See www.P65Warnings.ca.gov

* 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.

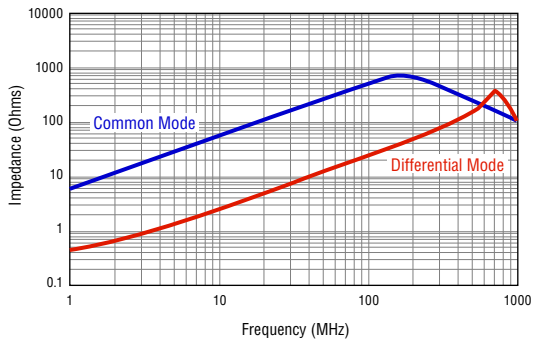
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Typical Impedance vs. Frequency Curves

SRF0502-101Y

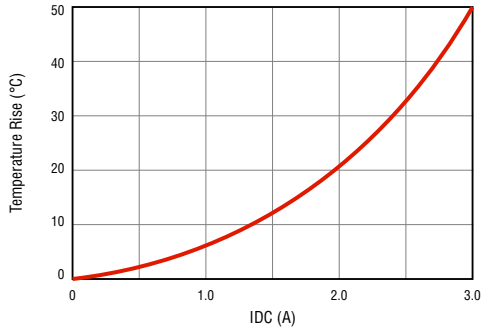


SRF0502-501Y

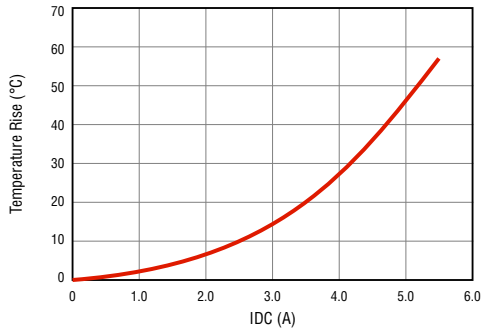


Temperature Rise Plots

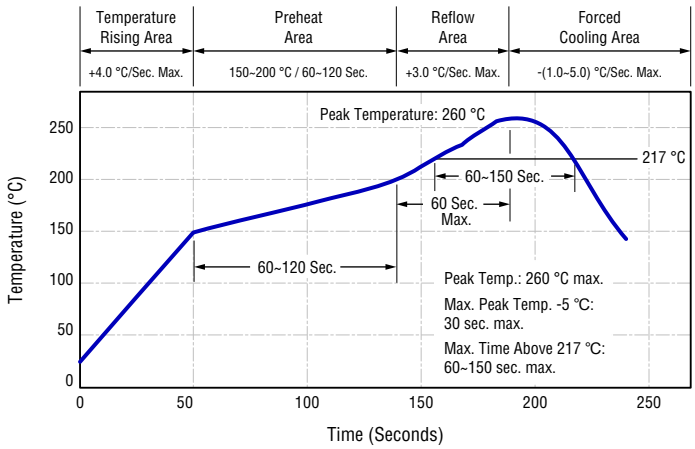
SRF0502-101Y



SRF0502-501Y



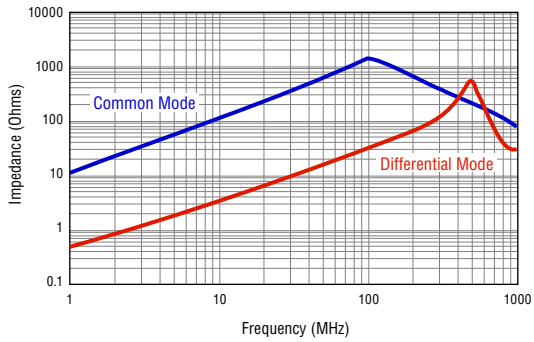
Soldering Profile



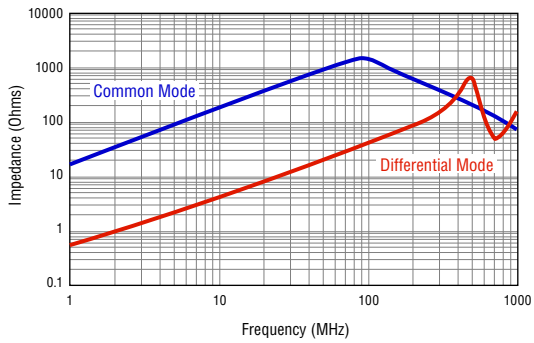
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Typical Impedance vs. Frequency Curves

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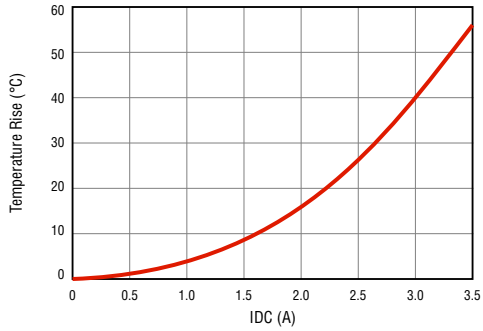


SRF0502-142Y

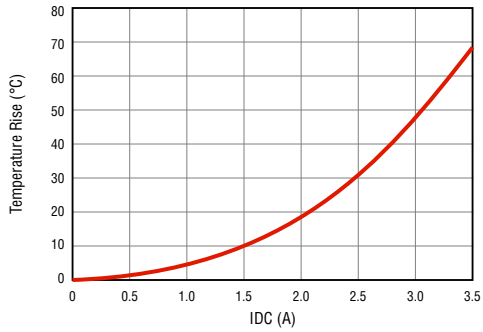


Temperature Rise Plots

SRF0502-102Y

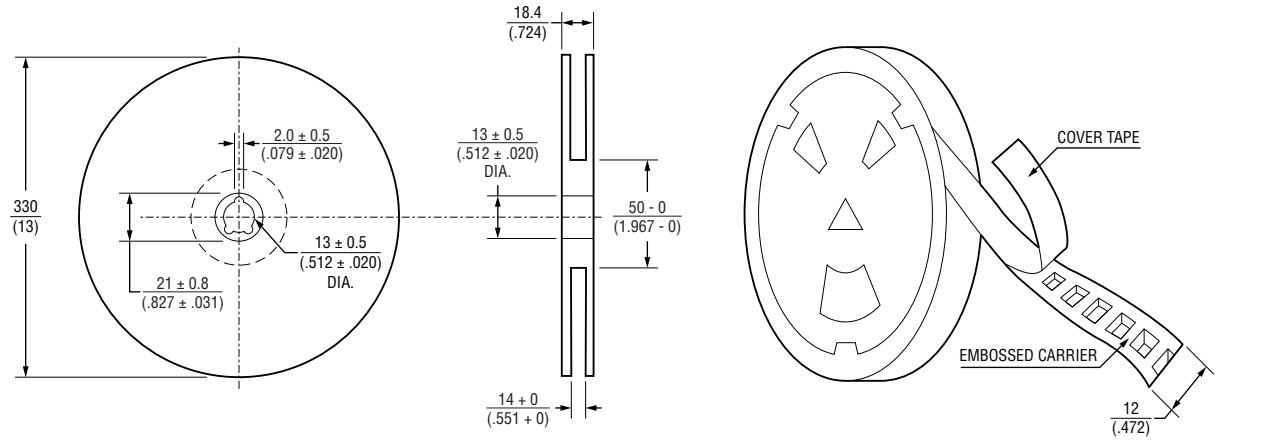


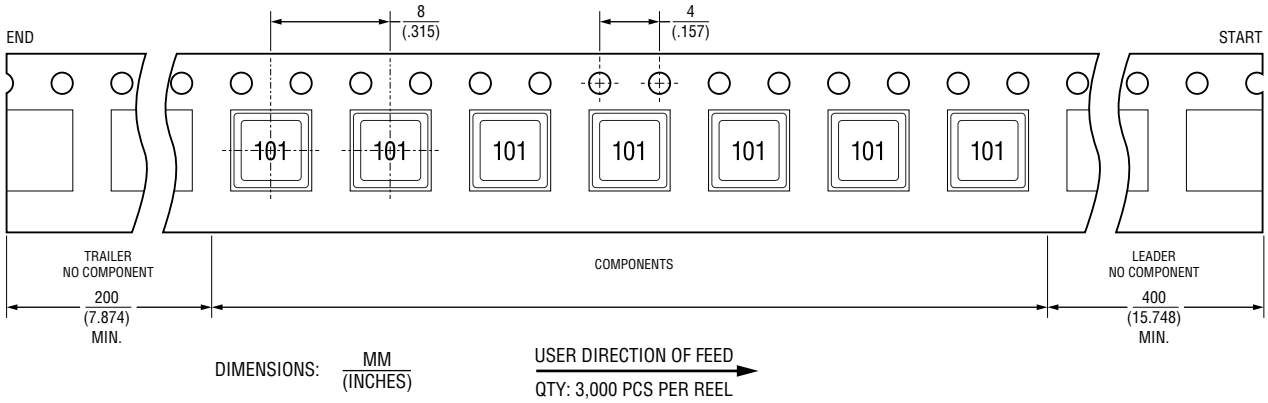
SRF0502-142Y



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Packaging Specifications





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The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com
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REV. 10/26

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