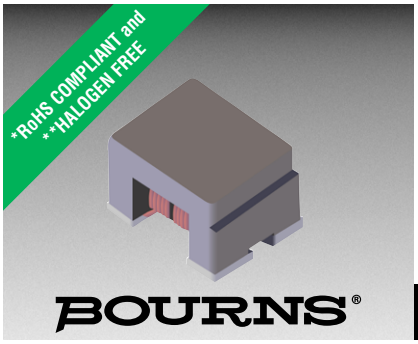


Features

- Small size and low profile
- High impedance over high frequency range
- RoHS compliant* and halogen free**

Applications

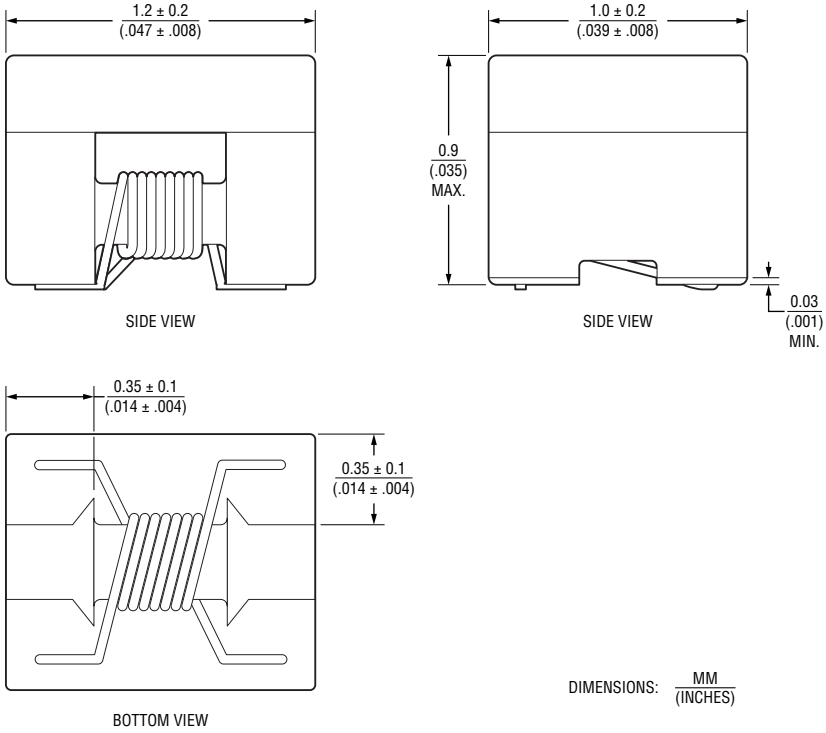
- Noise suppression in signal transmission line
- USB 3.1 Gen 1/2
- HDMI 2.0/2.1
- USB4™
- Thunderbolt™

SRF1209U4 Series – Common Mode Chip Inductor

Electrical Specifications at 25 °C

Part Number	Common Mode Impedance (Ω)	Test Frequency (MHz)	Cut-off Frequency Typ. (GHz)	DCR Max. (Ω)	Rated Current Max. (mA)	Rated Voltage Max. (VDC)	Withstand Voltage Max. (VDC)	IR Min. (Ω)
SRF1209U4-1R9Y	1.9 ±25 %	100	18	0.20	400	50	125	10M
SRF1209U4-5R3Y	5.3 ±25 %			0.30	300			
SRF1209U4-300Y	30.0 ±25 %			0.20	400			
SRF1209U4-900Y	90 ±25 %			0.30	300			

Product Dimensions

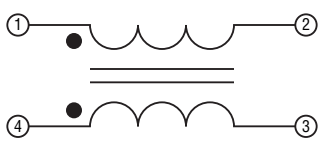


How to Order

SRF1209U4 - 1R9 Y

- Model
- Value Code (see table)
- Tolerance
  - Y = ±25 %

Electrical Schematic



Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

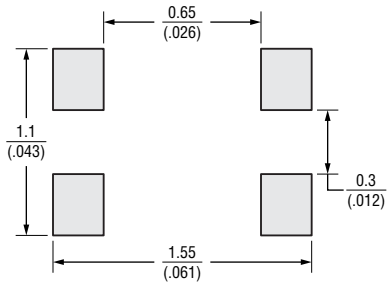
General Specifications

Operating Temperature ..... -40 °C to +125 °C
Storage Temperature ..... -40 °C to +125 °C
Temperature Rise ..... 40 °C at rated Irms
Moisture Sensitivity Level: 1
ESD Classification (HBM): ..... N/A

Materials

Core Material ..... Ferrite
Wire ..... Enameled copper
Terminal Finish ..... Sn
Packaging ..... 3,000 pcs. per 7-inch reel

Recommended Layout



* 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.

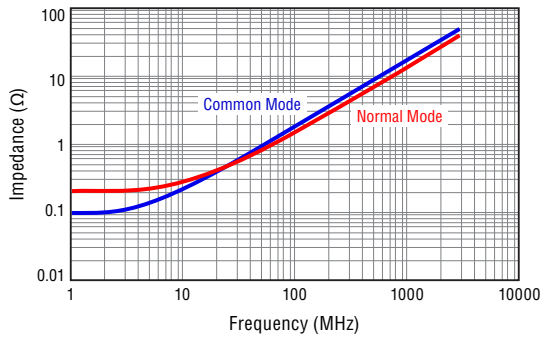
"Thunderbolt" is a trademark of Intel Corporation in the U.S. and/or other countries.
"USB4" is a registered trademark of USB Implementers Forum. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.
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WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

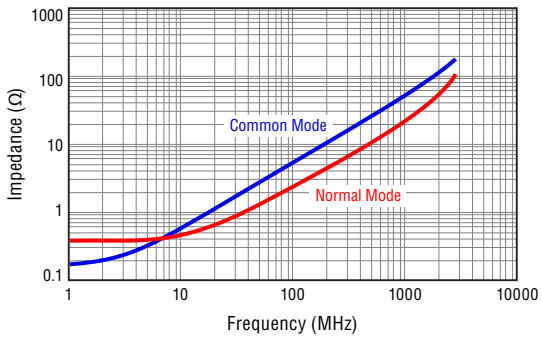
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Typical Impedance vs. Frequency Curves

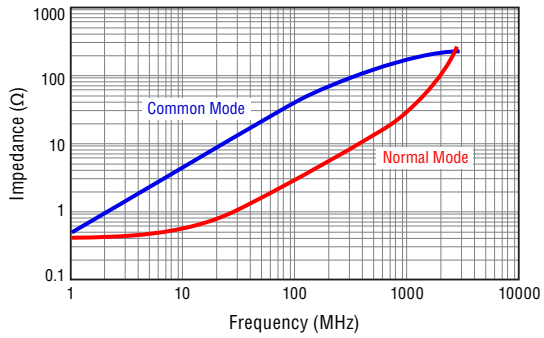
SRF1209U4-1R9Y



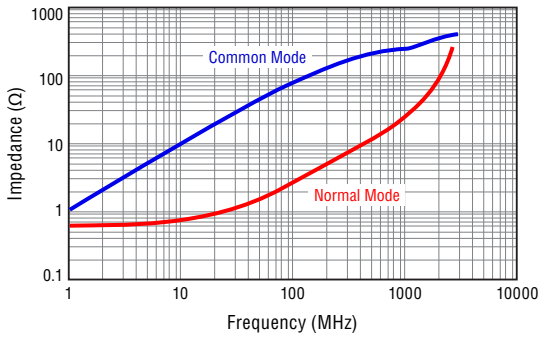
SRF1209U4-5R3Y



SRF1209U4-300Y



SRF1209U4-900Y

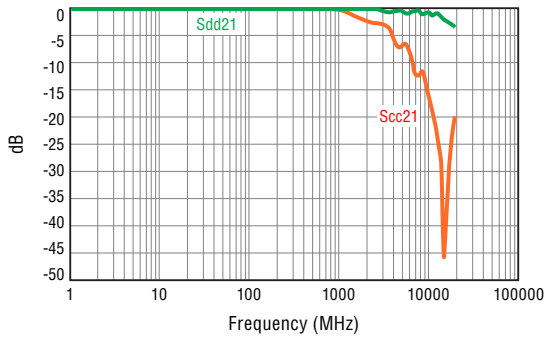


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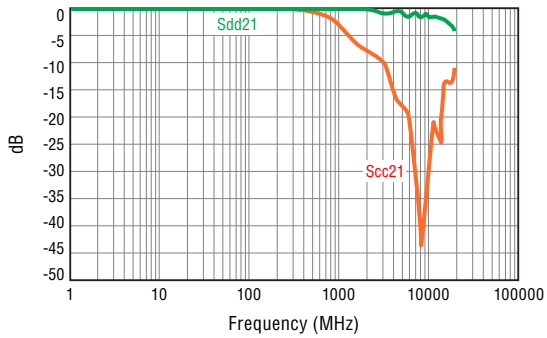
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Typical Characteristics

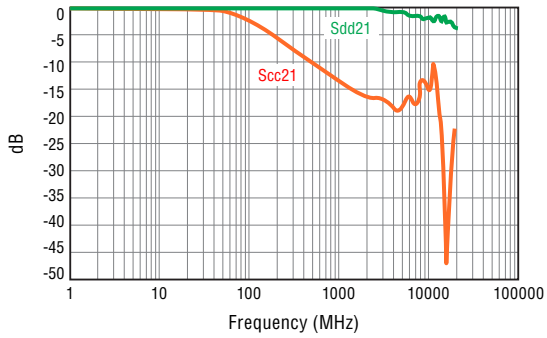
SRF1209U4-1R9Y



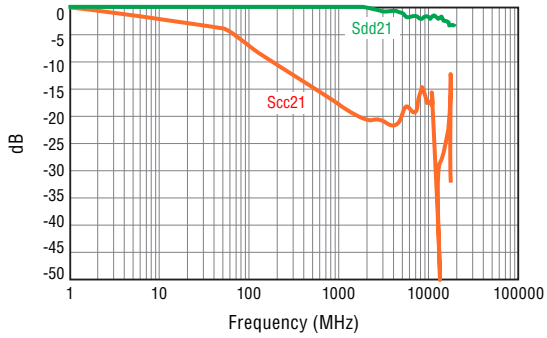
SRF1209U4-5R3Y



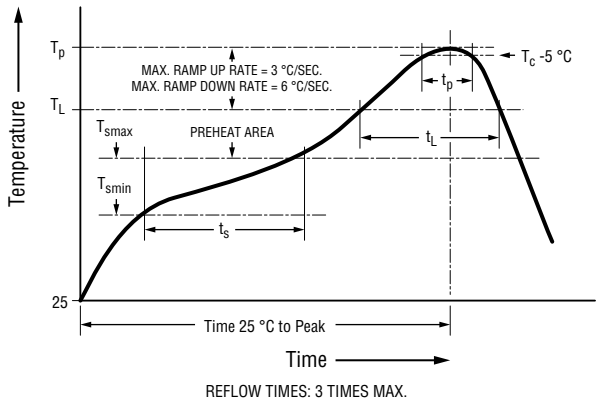
SRF1209U4-300Y



SRF1209U4-900Y



Soldering Profile



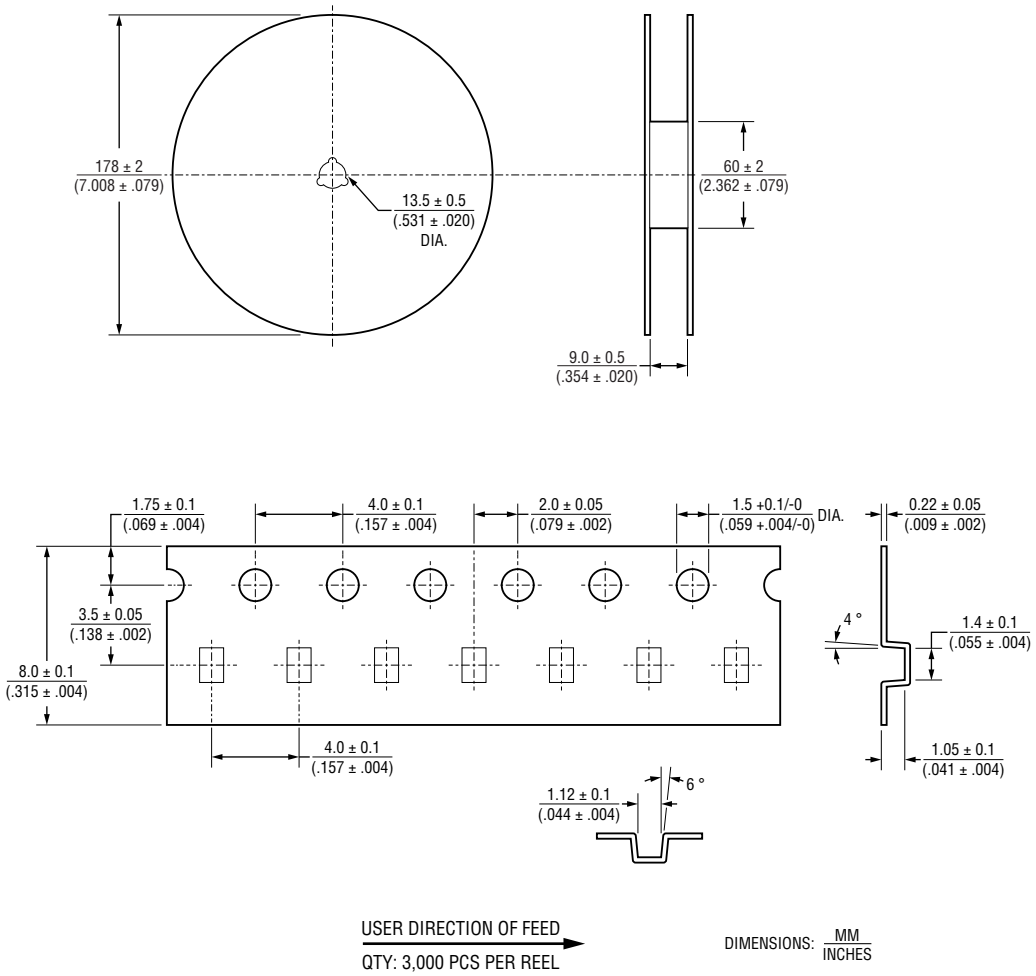
REFLOW TIMES: 3 TIMES MAX.

Profile Feature	Pb Free Assembly
Preheat - Temperature Min. (T_{smin}) - Temperature Max. (T_{smax}) - Time(t_s) from T_{smin} to T_{smax}	 150 °C 200 °C 60-120 seconds
Ramp-up Rate (T_L to T_p)	3 °C/second max.
Liquidous temperature (T_L) Time (t_L) maintained above T_L	217 °C 60-150 seconds
Peak package body temperature (T_p)	260 °C
Time (t_p) at T_c - 5 °C (T_p should be equal to or less than T_c)	< 30 seconds
Ramp-Down Rate (T_p to T_L)	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

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Packaging Specifications



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