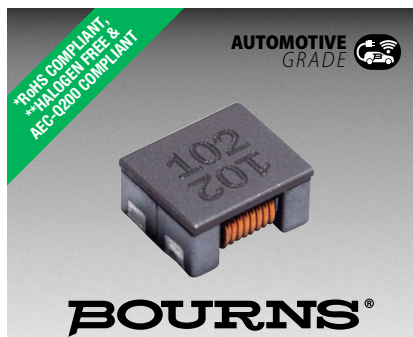




Features

- Shielded construction – low radiation
- High current
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

Applications

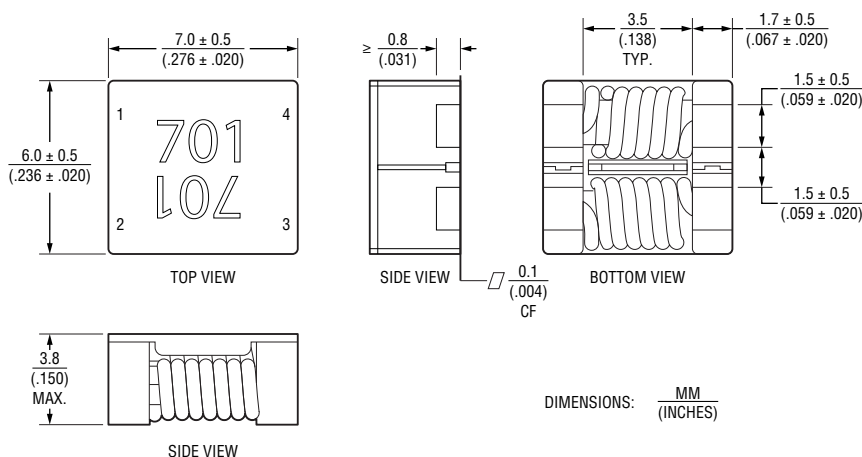
- Noise filters
- DC power lines
- Automotive systems

SRF7038A Series – Common Mode Chokes

Electrical Specifications at 25 °C

Part Number	Z (Ω) @ 100 MHz		L (μH) @ 100 kHz / 0.1 V	DCR (mΩ) Max.	Rated Current (A) Max.	Rated Voltage (VDC) Max.	Insulation Resistance (MΩ) Min.
	Min.	Typ.					
SRF7038A-700Y	40	70	0.83	5	15	80	10
SRF7038A-101Y	65	100	0.83	5	14	80	10
SRF7038A-141Y	100	140	1.3	10	9	80	10
SRF7038A-301Y	225	300	2.5	10	5	80	10
SRF7038A-501Y	400	500	2.9	10	5	80	10
SRF7038A-701Y	500	700	4.6	15	4	80	10
SRF7038A-102Y	800	1020	6.3	17	3	80	10
SRF7038A-132Y	910	1300	6.7	20	3	80	10
SRF7038A-302Y	2500	3000	18.2	50	1.5	80	10

Product Dimensions



Additional Information

Click these links for more information:



General Specifications

Operating Temperature

..... -40 °C to +125 °C
(Temperature rise included)

Storage Temperature .. -40 °C to +125 °C

Temperature Rise 40 °C at rated Irms¹

Moisture Sensitivity Level..... 1

ESD Classification (HBM)..... N/A

¹Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

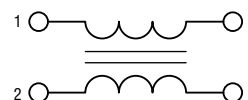
Core..... Ferrite

Wire..... Enameled copper

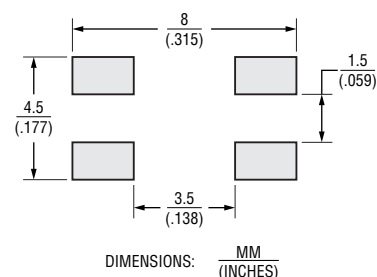
Terminal Finish SnCu

Packaging..... 1500 pcs. per 13-inch reel

Electrical Schematic



Recommended Layout



How to Order

SRF7038A - 700 Y

Model _____
Value Code (see table) _____
Tolerance _____



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.

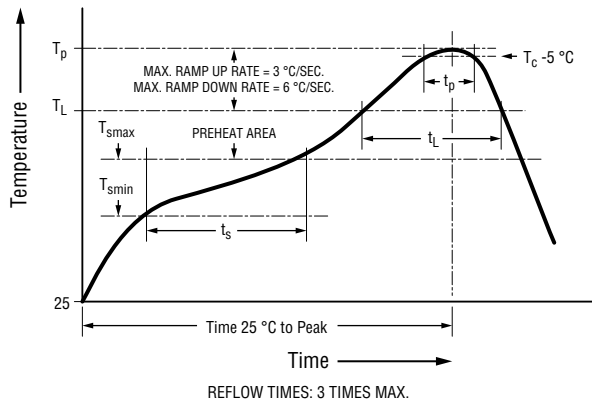
**Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

SRF7038A Series – Common Mode Chokes

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Soldering Profile

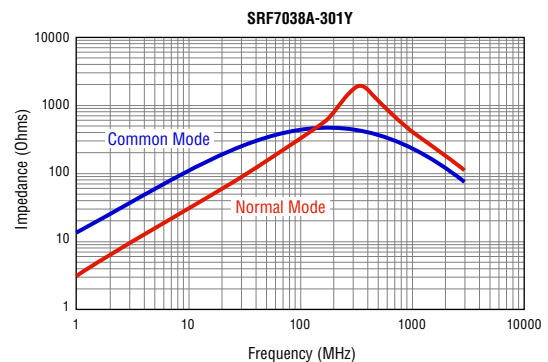
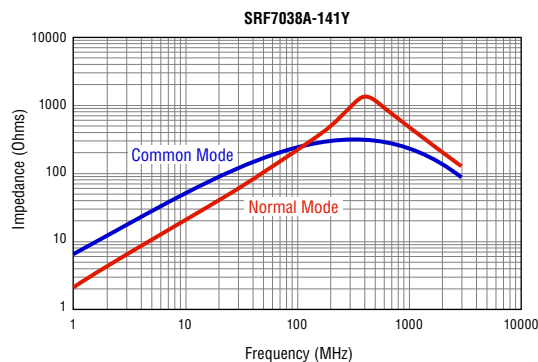
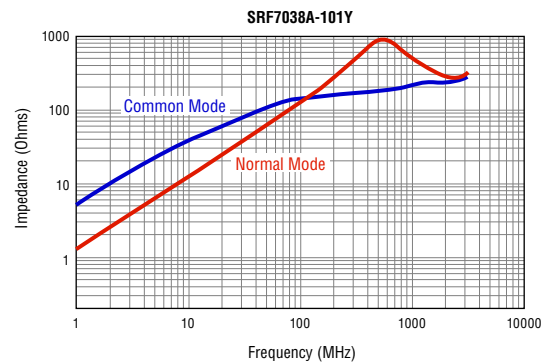
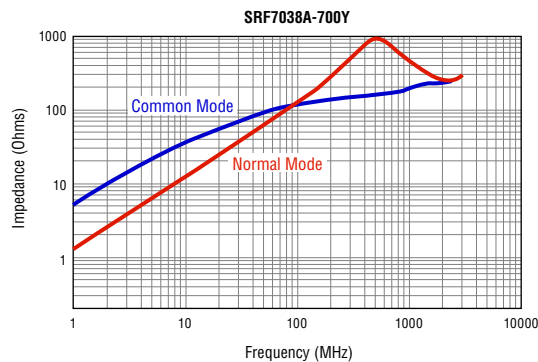


Profile Feature	Pb Free Assembly
Preheat - Temperature Min. (T_{smin}) - Temperature Max. (T_{smax}) - Time(t_s) from T_{smin} to T_{smax}	150 °C 200 °C 60-120 seconds
Ramp-up Rate (T_L to T_p)	3 °C/second max.
Liquidous temperature (T_L) Time (t_L) maintained above T_L	217 °C 60-150 seconds
Peak package body temperature (T_p)	250 °C
Time (t_p) at $T_c - 5^\circ\text{C}$ (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.

NOTE:

The part has been tested under this reflow condition. Deviations from this, especially with higher temperatures or longer durations, could impact performance.

Typical Impedance vs. Frequency Curves



Specifications are subject to change without notice.

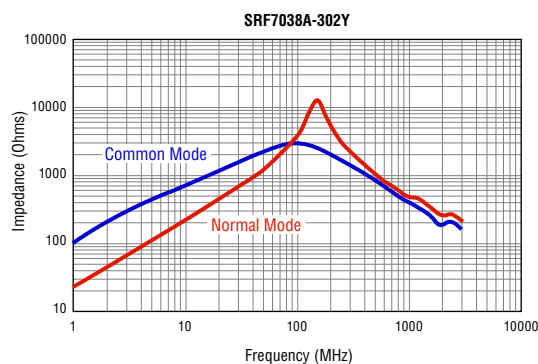
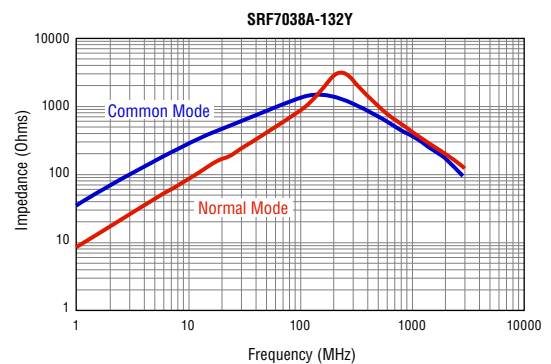
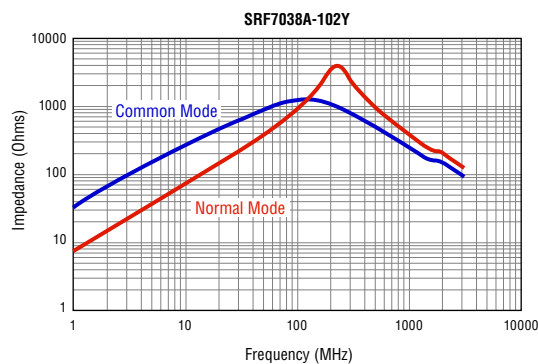
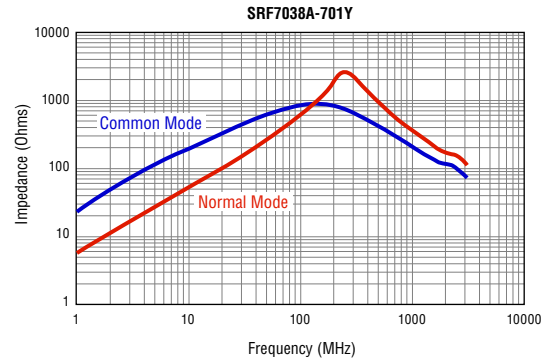
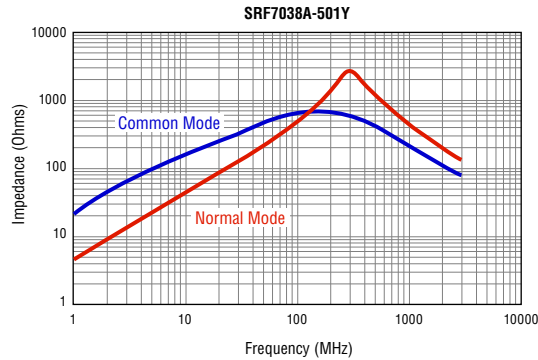
Users should verify actual device performance in their specific applications.

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SRF7038A Series – Common Mode Chokes

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Typical Impedance vs. Frequency Curves (continued)



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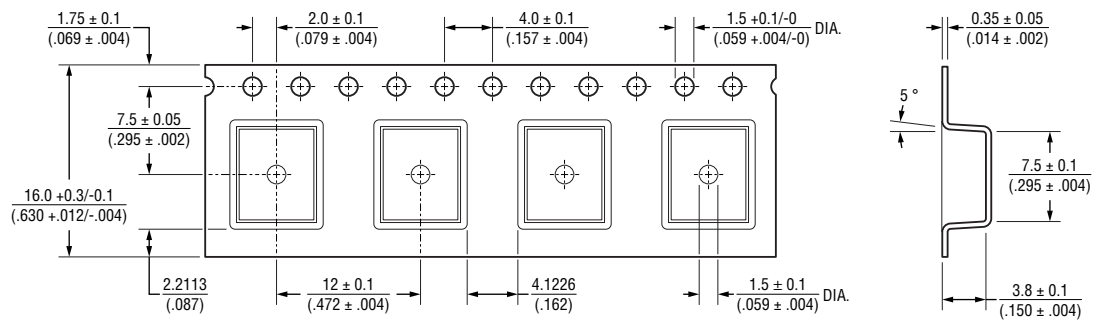
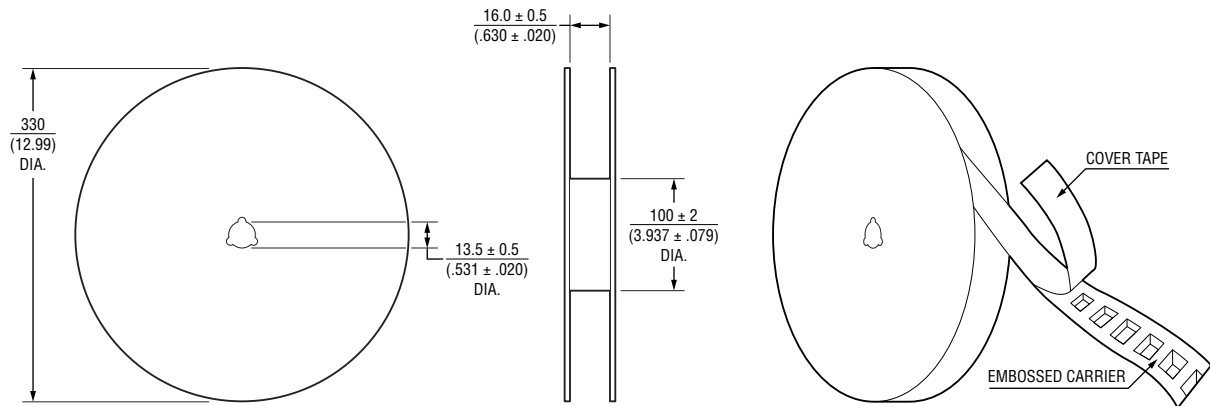
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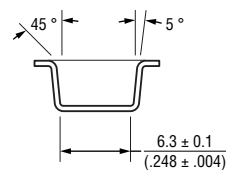
SRF7038A Series – Common Mode Chokes

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Packaging Specifications



USER DIRECTION OF FEED
QTY: 1,500 PCS PER REEL



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

BOURNS®

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

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

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