

## Features

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

## Applications

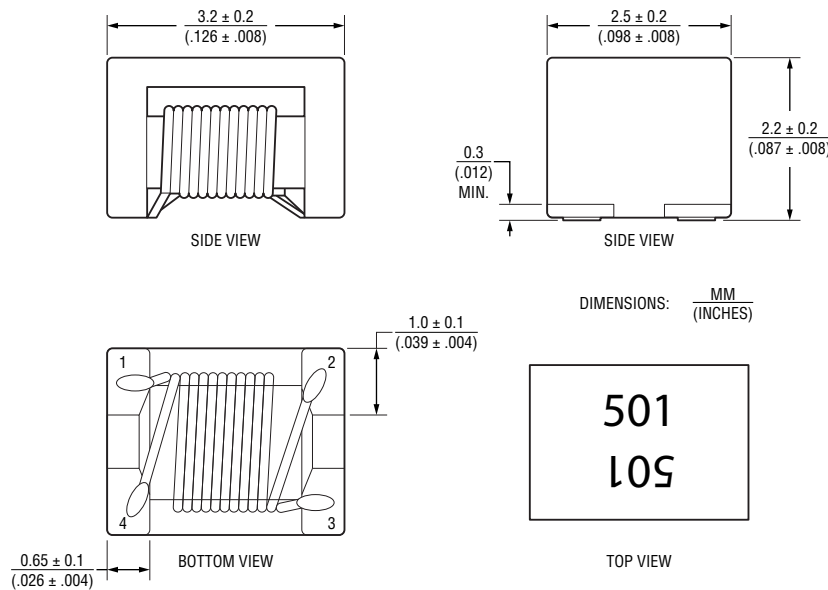
- Noise filters
- DC power lines
- Automotive systems

# SRF3225TAP Series – Common Mode Chip Inductors

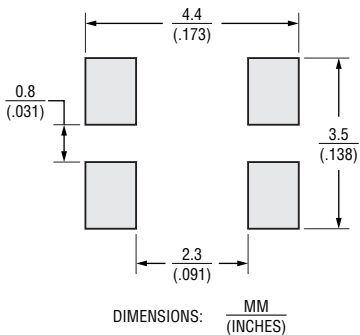
### Electrical Specifications @ 25 °C

Bourns Part Number	Common Mode Impedance (Ω) @ 100 MHz	DCR (Ω) Max.	Rated Current (mA) Max.	Rated Voltage (VDC) Max.	IR (MΩ) Min.
SRF3225TAP-501Y	500 ±25 %	0.10	2000	80	10
SRF3225TAP-102Y	1000 ±25 %	0.10	1500	80	10

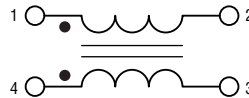
### Product Dimensions



### Recommended Layout



### Electrical Schematic



### Additional Information

Click these links for more information:



### General Specifications

Operating Temperature ..... -55 °C to +150 °C  
(Temperature rise included)  
Storage Temperature ..... -55 °C to +150 °C  
Temperature Rise ..... 40 °C at rated Irms<sup>1</sup>  
Moisture Sensitivity Level..... 1  
ESD Classification (HBM)..... N/A  
<sup>1</sup>Circuit 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 ..... Sn  
Packaging..... 2000 pcs. per 7-inch reel

### How to Order

**SRF3225TAP - 501 Y**

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



**CALIFORNIA WARNING:** Can expose you to lead, a carcinogen and reproductive toxicant.  
See [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

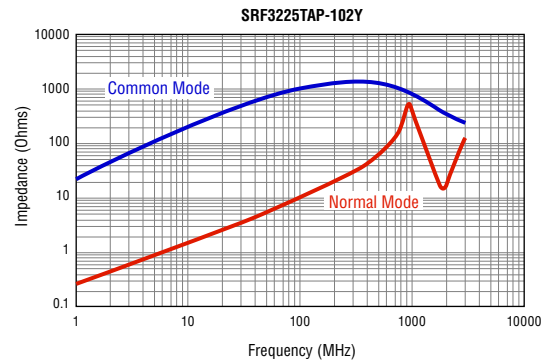
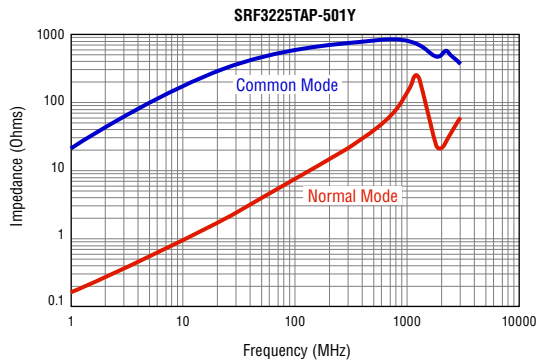
\*\*Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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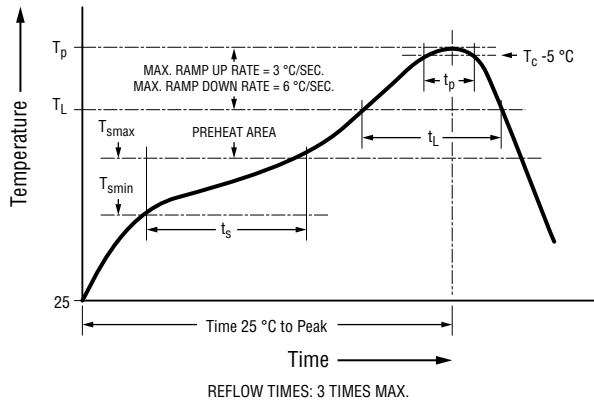
# SRF3225TAP Series – Common Mode Chip Inductors



## Typical Impedance vs. Frequency Curves



## Soldering Profile



Profile Feature	Pb Free Assembly
Preheat	
- Temperature Min. ( $T_{smin}$ )	150 °C
- Temperature Max. ( $T_{smax}$ )	200 °C
- Time ( $t_s$ ) from $T_{smin}$ to $T_{smax}$	60-120 seconds
Ramp-up Rate ( $T_L$ to $T_P$ )	3 °C/second max.
Liquidous temperature ( $T_L$ )	217 °C
Time ( $t_L$ ) maintained above $T_L$	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.

### NOTE:

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

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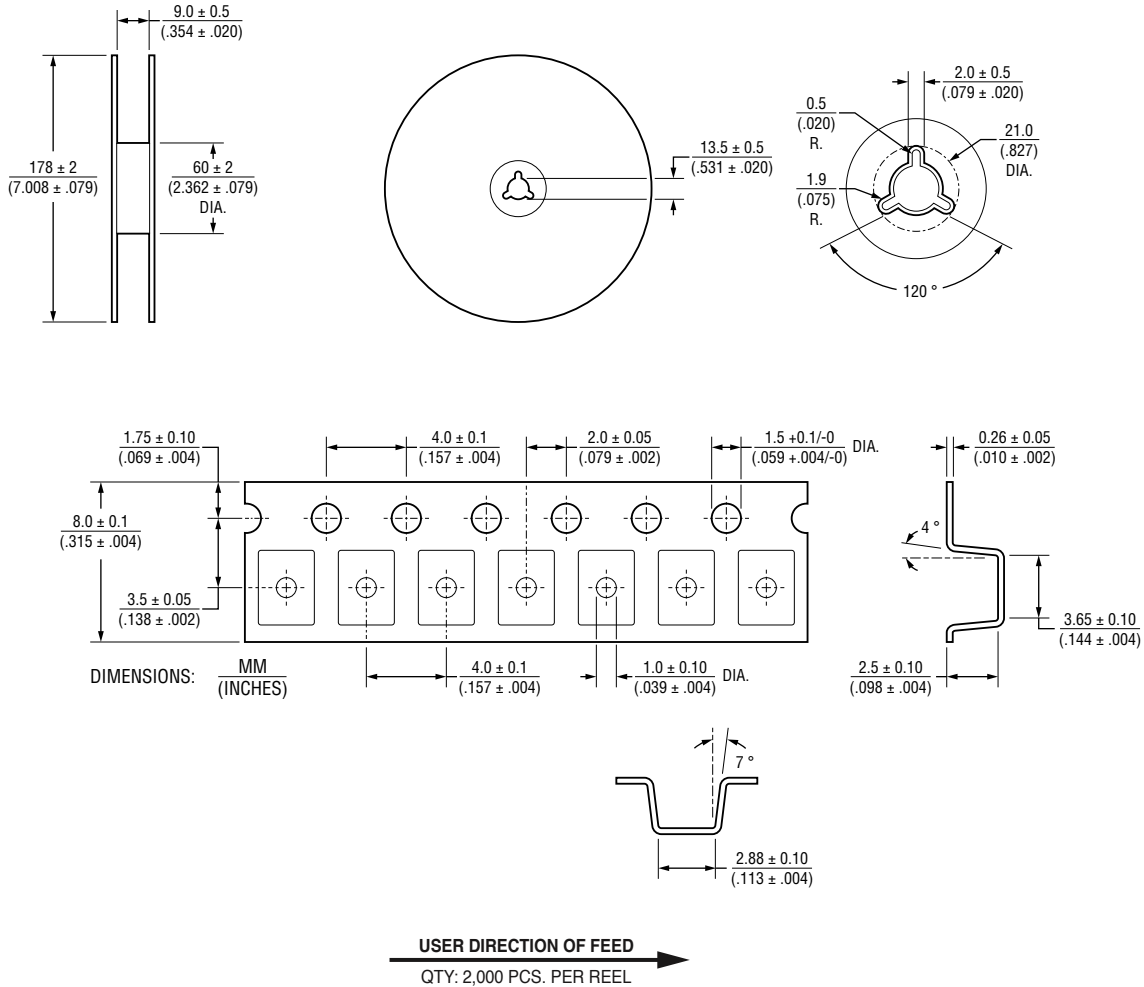
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# SRF3225TAP Series – Common Mode Chip Inductors



## Packaging Specifications



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