



### Features

- Ferrite toroid core for low radiation
- Current rating: 2.5 A
- High inductance: 3.5 mH
- RoHS compliant\* and halogen free\*\*

### Applications

- Noise suppression - power lines

### Sustainability

- High pallet density for lower CO<sub>2</sub>
- Eco-logistics-friendly packing
- Corrosion-resistant for longevity
- ISO 14001, low impact energy
- Responsibly sourced and produced
- Meets EU 94/62/EC standards

### Product Overview

Featuring a ferrite toroid core for low radiation and a high inductance of 3.5 mH, the Model SRF1709 suppresses electromagnetic interference (EMI) coming into or leaving from the system. This

high inductance common mode choke is ideal for power line noise suppression in consumer, industrial, and other electronic applications.

### Electrical Specifications (@ 25 °C Unless Otherwise Noted)

Bourns Part No.	Inductance L1, L2 @ 10 kHz / 0.1 V (mH)	Tolerance (%)	SRF (MHZ) Typ.	DCR N1, N2 (mΩ) Max.	I <sub>rms</sub> (A) Typ.
SRF1709-352Y	3.5	±40	1.15	79.5	2.5

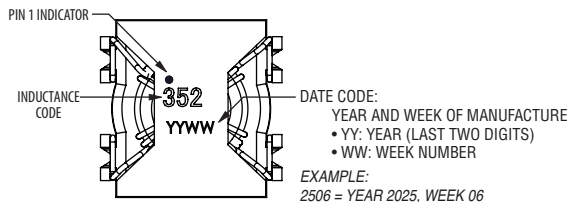
### General Specifications

Operating Temperature ..... -40 °C to +85 °C  
 Storage Temperature ..... -40 °C to +85 °C  
 Temperature Rise ..... 40 °C at rated I<sub>rms</sub>  
 Hi-Pot(N1-N2) ..... 1 kVdc, 3 mA, 1 sec.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM) ..... N/A

### Materials

Core ..... Ferrite  
 Wire ..... Enameled copper  
 Terminal finish ..... SnAgCu  
 Packaging ..... 250 pcs. per 13-inch reel

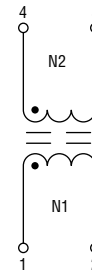
### Typical Part Marking



### How to Order

Model \_\_\_\_\_ **SRF1709 - 352 Y**  
 Value Code \_\_\_\_\_  
 Tolerance \_\_\_\_\_

### Electrical Schematic



### Contact Information

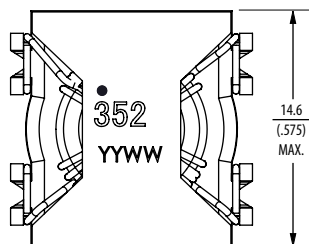
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\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
 \*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

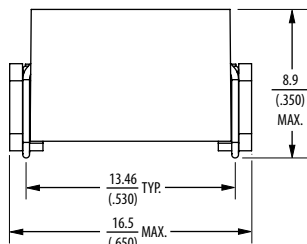
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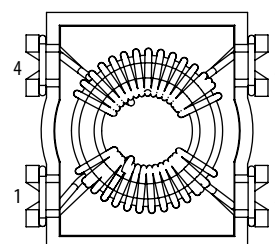
### Product Dimensions



TOP VIEW



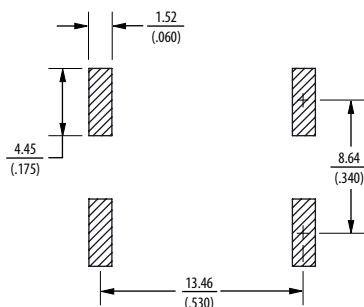
SIDE VIEW



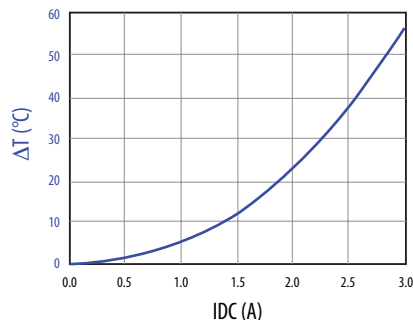
BOTTOM VIEW

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

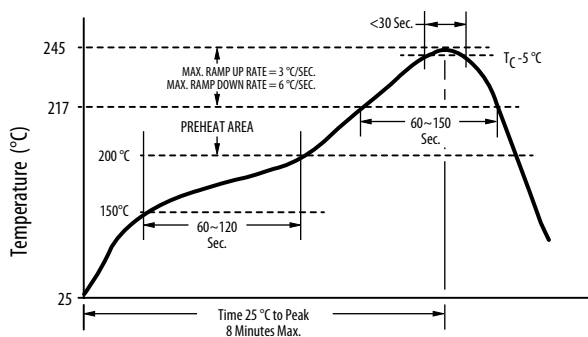
### Recommended Layout



### Temperature Rise



### Solder Reflow Recommendations



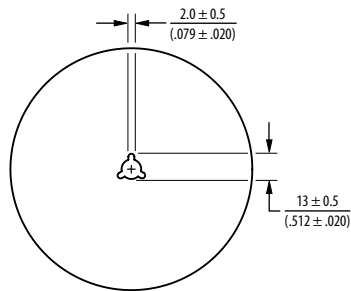
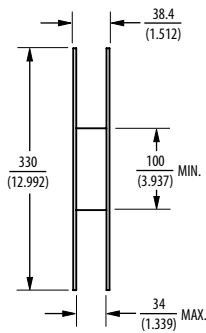
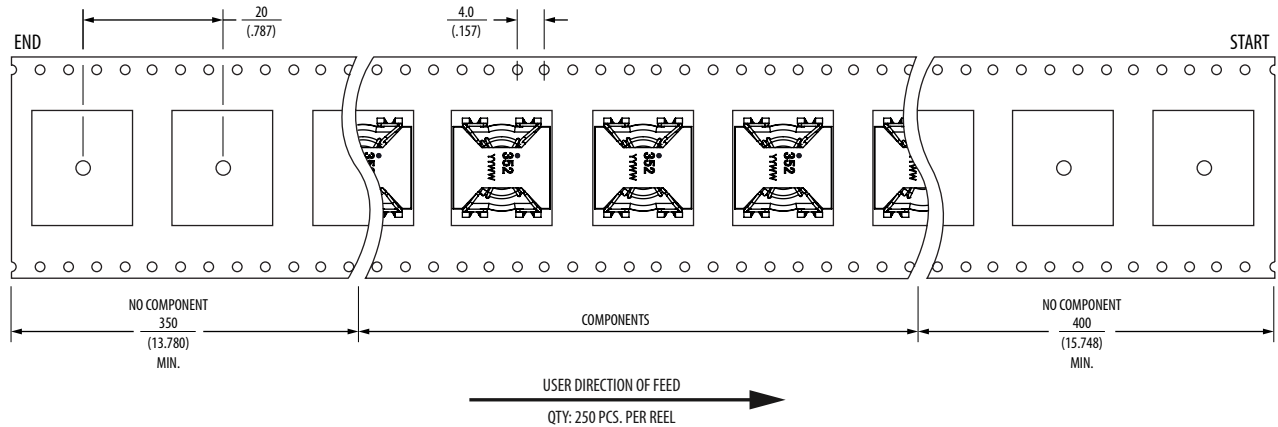
REFLOW TIMES: 3 TIMES MAX.

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 ( $T_P$ )	245 °C
Time within 5 °C of Actual Peak Temperature ( $t_p$ )	<30 seconds
Ramp-Down Rate ( $T_P$ to $T_L$ )	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

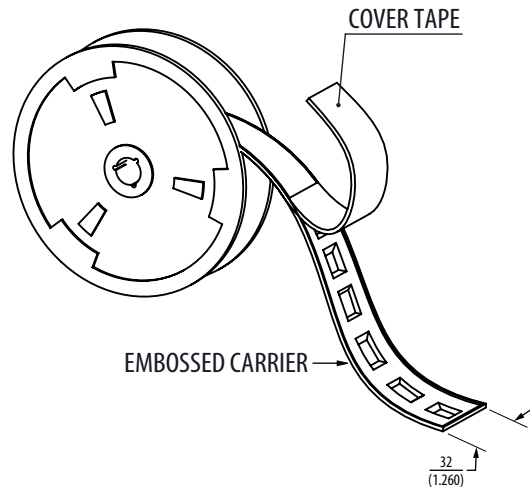
$T_P$  = Maximum peak package body temperature  
 $T_C$  = The classification temperature  
 $T_P$  should be equal to or less than  $T_C$   
Refer to IPC/JEDEC J-STD-020E



### Packaging Specifications



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



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