

## Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Dual inductors
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## Applications

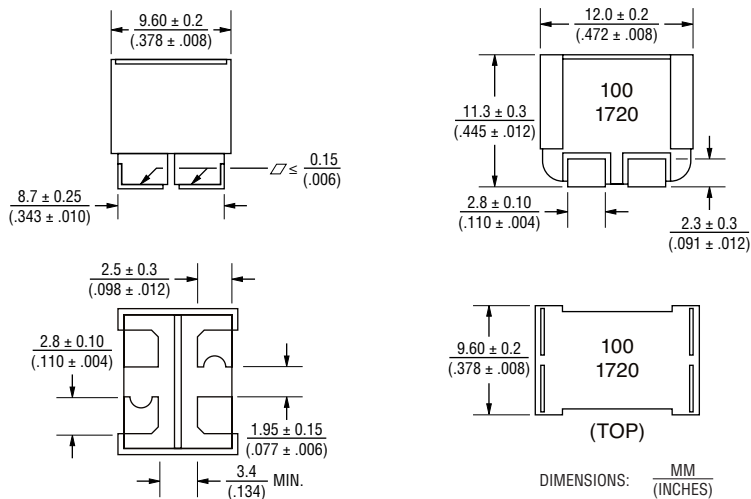
- Class-D amplifier systems
- Class-D output filters

## SRF1010DA Series – Dual-Shielded Inductors for Class-D Amplifiers

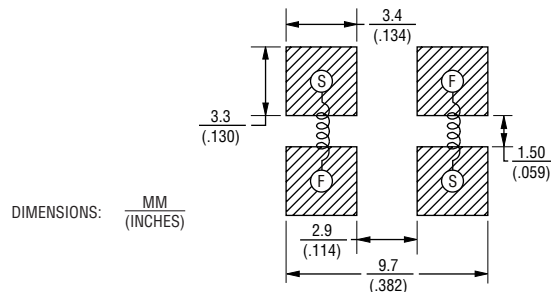
### Electrical Specifications @ 25 °C

| Bourns Part Number | Inductance @ 100 kHz / 1 V |        | SRF (MHz) Ref. | DCR (mΩ) Typ. | DCR (mΩ) Max. | I rms (A) Typ. | I sat (A) Typ. |
|--------------------|----------------------------|--------|----------------|---------------|---------------|----------------|----------------|
|                    | L (μH)                     | Tol. % |                |               |               |                |                |
| SRF1010DA-R43M     | 0.43                       | ± 20 % | 60             | 1.9           | 2.3           | 27             | 38.0           |
| SRF1010DA-5R6M     | 5.6                        | ± 20 % | 15             | 20            | 23            | 7.5            | 11.0           |
| SRF1010DA-7R5M     | 7.5                        | ± 20 % | 14             | 25            | 28            | 6.8            | 10.0           |
| SRF1010DA-100M     | 10                         | ± 20 % | 12             | 30.5          | 32.6          | 5.6            | 7.4            |
| SRF1010DA-150M     | 15                         | ± 20 % | 10             | 43.5          | 45.5          | 4.6            | 5.5            |

### Product Dimensions



### Recommended Layout



### Additional Information

Click these links for more information:



### General Specifications

Operating Temperature ..... -55 °C to +155 °C  
 (Temperature rise included)  
 Storage Temperature (Component) ..... -55 °C to +155 °C  
 Rated Current ..... Inductance drops 30 % at Isat  
 Temperature Rise ... 40 °C at rated Irms!  
 MSL ..... 1  
 ESD Classification (HBM) ..... N/A  
 Note 1: 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

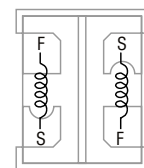
Core ..... Metal alloy powder  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn/Ni  
 Packaging ..... 300 pcs. per 13-inch reel

### How to Order

SRF1010DA - 100M

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

### Schematic



**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.

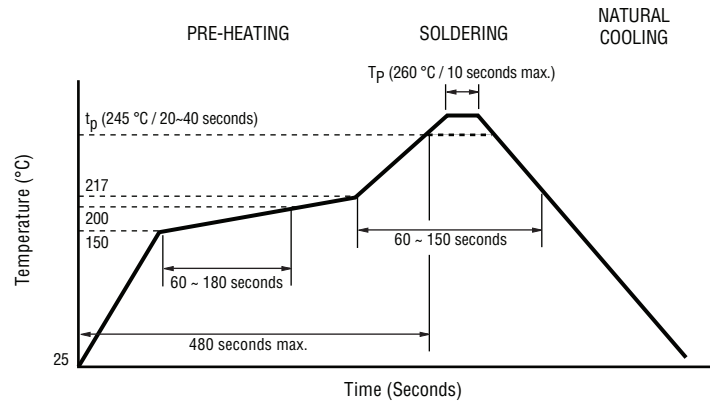
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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# SRF1010DA Series – Dual-Shielded Inductors for Class-D Amplifiers

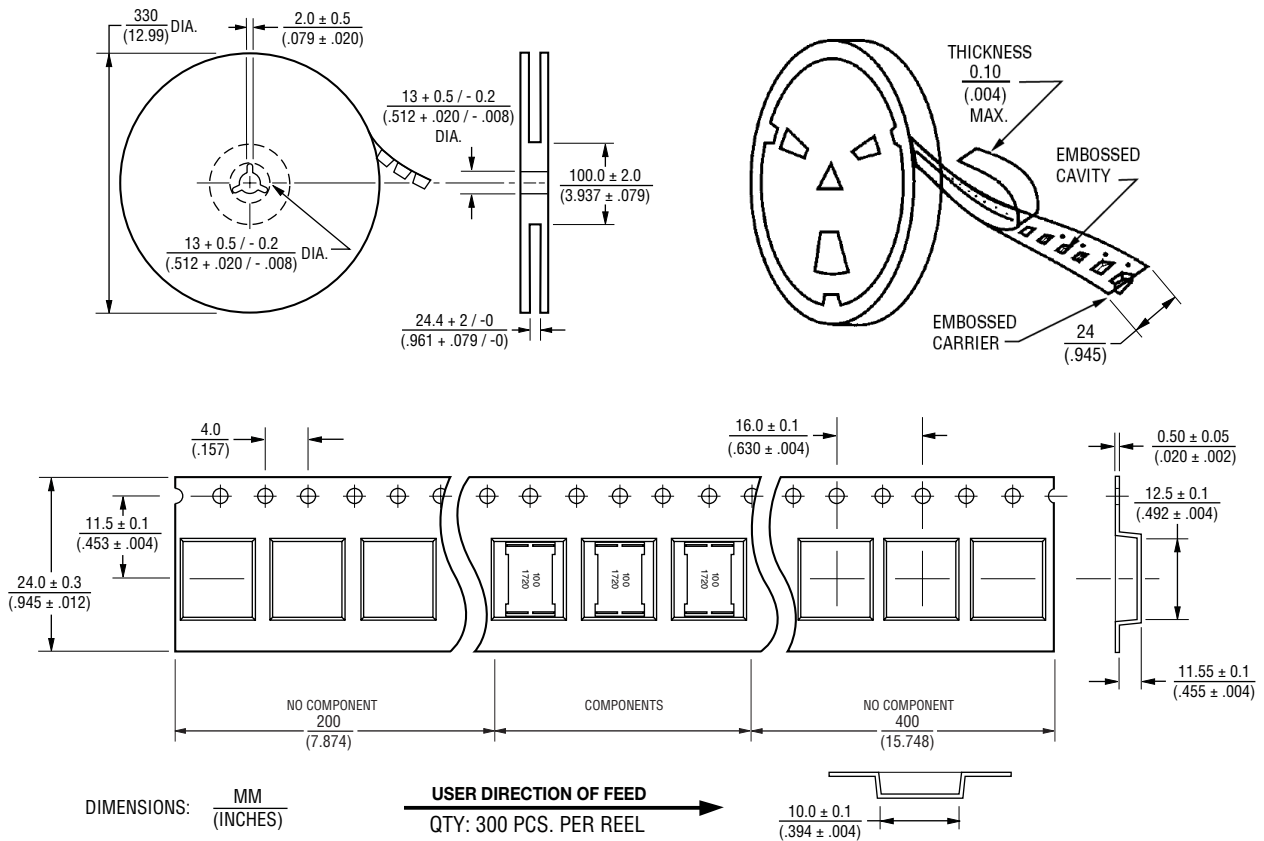


## Soldering Profile



REFLOW TIMES: 3 MAX.

## Packaging Specifications



REV. 05/26

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