

#### **Features**

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

## **Applications**

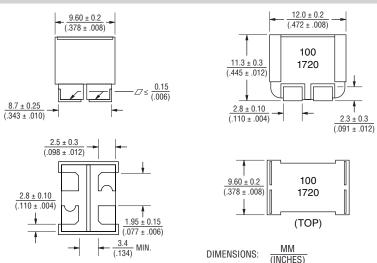
- Class-D amplifier systems
- Class-D output filters

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

#### Electrical Specifications @ 25 °C

Bourns	Inductance @ 100 kHz / 1 V		SRF (MHz)	DCR (mΩ)	DCR (mΩ)	I rms (A)	I sat (A)
Part Number	L (μH)	Tol. %	Ref.	Typ.	Max.	Typ.	Typ.
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**



### **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 Irms¹ 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**

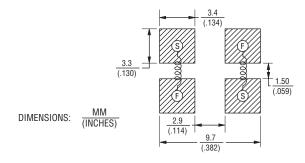
SRF1010DA - 100M

Value Code (see table)

#### **Schematic**



### **Recommended Layout**





### WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

- RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
- \*\*Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) content is 1500 ppm or less.

Users should verify actual device performance in their specific applications

## Specifications are subject to change without notice.

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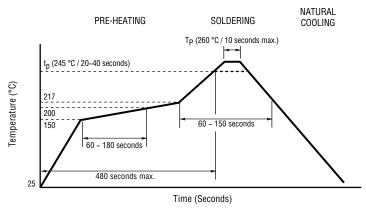
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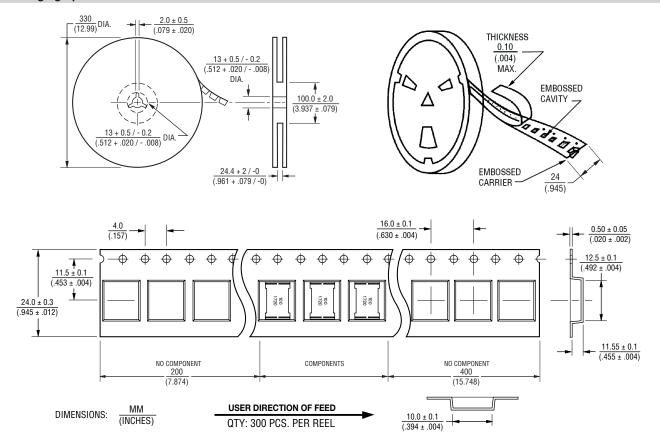
www.bourns.com

#### **Soldering Profile**



REFLOW TIMES: 3 MAX.

### **Packaging Specifications**



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