
BOURNS®

## Features

- Shielded construction – low radiation
- Inductance range: 2.6 to 1000 µH
- Heating current up to 4.5 A
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

## Applications

- Automotive driver assistant devices, infotainment systems and lighting
- DC-DC converters
- Power supplies in consumer, industrial, and telecom electronics

# SRR5828A Series - Shielded Power Inductors

## Electrical Specifications @ 25 °C

| Bourns Part Number | Inductance @ 100 KHz / 1.0 V | | SRF (MHz) Typ. | DCR (milliohms) | | $I_{rms}1$ (A) Typ. | $I_{rms}2$ (A) Typ. | $I_{sat}$ (A) Typ. |
|---|---|---|---|---|---|---|---|---|
| | L (µH) | Tol. (%) | | Typ. | Max. | | | |
| SRR5828A-2R6Y | 2.6 | ±30 | 78.0 | 23.0 | 30.0 | 3.25 | 4.50 | 3.15 |
| SRR5828A-3R3Y | 3.3 | ±30 | 70.0 | 27.0 | 35.0 | 3.20 | 4.40 | 2.80 |
| SRR5828A-4R7Y | 4.7 | ±30 | 48.0 | 31.0 | 40.0 | 3.00 | 4.00 | 2.57 |
| SRR5828A-5R3Y | 5.3 | ±30 | 46.0 | 35.0 | 42.0 | 2.80 | 3.80 | 2.20 |
| SRR5828A-6R2Y | 6.2 | ±30 | 41.0 | 45.0 | 57.0 | 2.60 | 3.50 | 2.10 |
| SRR5828A-8R2Y | 8.2 | ±30 | 37.0 | 49.0 | 63.0 | 2.30 | 3.00 | 1.62 |
| SRR5828A-100M | 10.0 | ±20 | 32.0 | 64.0 | 83.0 | 2.00 | 2.60 | 1.55 |
| SRR5828A-120M | 12.0 | ±20 | 25.0 | 76.0 | 100.0 | 1.85 | 2.50 | 1.50 |
| SRR5828A-150M | 15.0 | ±20 | 25.0 | 90.0 | 115.0 | 1.70 | 2.25 | 1.35 |
| SRR5828A-180M | 18.0 | ±20 | 22.0 | 100.0 | 130.0 | 1.60 | 2.15 | 1.30 |
| SRR5828A-220M | 22.0 | ±20 | 19.0 | 125.0 | 160.0 | 1.35 | 1.75 | 1.15 |
| SRR5828A-270M | 27.0 | ±20 | 18.0 | 147.0 | 180.0 | 1.25 | 1.65 | 1.05 |
| SRR5828A-330M | 33.0 | ±20 | 15.0 | 190.0 | 230.0 | 1.10 | 1.40 | 0.92 |
| SRR5828A-390M | 39.0 | ±20 | 14.0 | 200.0 | 260.0 | 1.05 | 1.37 | 0.86 |
| SRR5828A-470M | 47.0 | ±20 | 13.0 | 247.0 | 305.0 | 1.00 | 1.33 | 0.78 |
| SRR5828A-560M | 56.0 | ±20 | 11.0 | 315.0 | 395.0 | 0.85 | 1.13 | 0.70 |
| SRR5828A-680M | 68.0 | ±20 | 10.0 | 375.0 | 470.0 | 0.80 | 1.03 | 0.65 |
| SRR5828A-820M | 82.0 | ±20 | 9.0 | 425.0 | 530.0 | 0.73 | 0.95 | 0.60 |
| SRR5828A-101M | 100.0 | ±20 | 8.0 | 550.0 | 645.0 | 0.60 | 0.80 | 0.53 |
| SRR5828A-151M | 150.0 | ±20 | 7.0 | 770.0 | 910.0 | 0.55 | 0.70 | 0.45 |
| SRR5828A-181M | 180.0 | ±20 | 5.5 | 940.0 | 1100.0 | 0.48 | 0.64 | 0.42 |
| SRR5828A-221M | 220.0 | ±20 | 5.0 | 1095.0 | 1200.0 | 0.45 | 0.62 | 0.37 |
| SRR5828A-331M | 330.0 | ±20 | 4.0 | 1830.0 | 2100.0 | 0.35 | 0.46 | 0.30 |
| SRR5828A-681M | 680.0 | ±20 | 3.0 | 4170.0 | 4800.0 | 0.23 | 0.31 | 0.21 |
| SRR5828A-102M | 1000.0 | ±20 | 2.0 | 6360.0 | 7300.0 | 0.15 | 0.21 | 0.13 |

Notes:
1. Irms1 based on temperature rise of 20 °C typ.
2. Irms2 based on temperature rise of 40 °C typ.

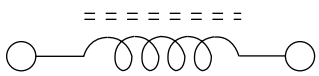
## How to Order

**SRR5828A - 2R6Y**

Model

Value Code (see table)

## Electrical Schematic



## General Specifications

Operating Temperature
..... -40 °C to +150 °C
(Temperature rise included)
Storage Temperature
..... -40 °C to +150 °C
Temperature Rise
.....20 °C typ. at rated $I_{rms}1$
.....40 °C typ. at rated $I_{rms}2$
Inductance Drop .....35 % typ. at $I_{sat}$
Moisture Sensitivity Level.....1
ESD Classification (HBM).....N/A

## Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

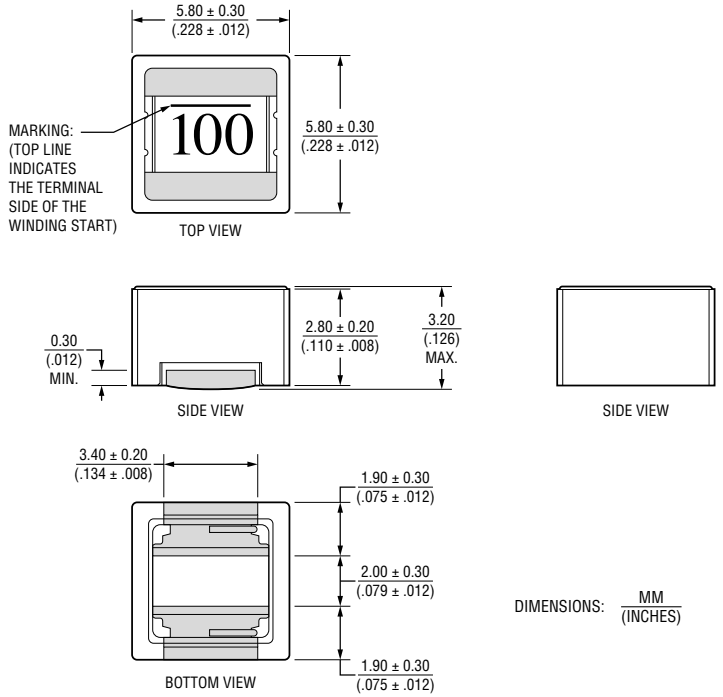
## Materials

Core..... Ferrite
Wire .....Enameled copper
Terminal Finish ..... Sn/Ag/Cu
Packaging..... 400 pcs. per 7-inch reel

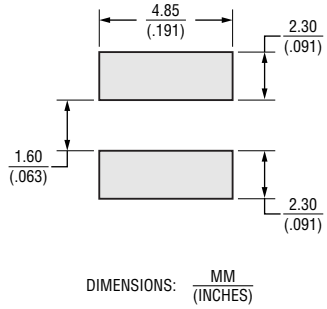
**WARNING Cancer and Reproductive Harm** www.P65Warnings.ca.gov

* 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.

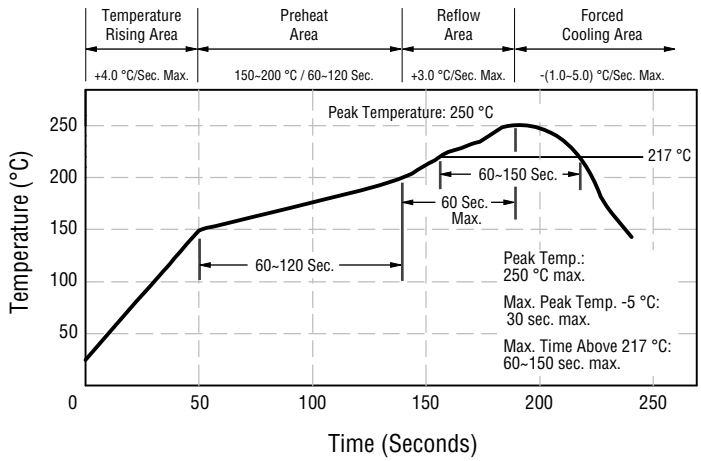
## Product Dimensions




## Recommended Layout

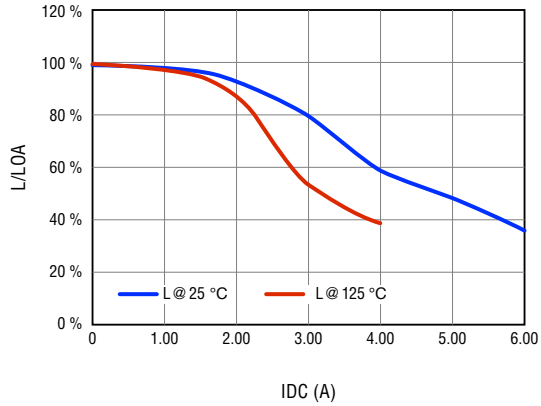


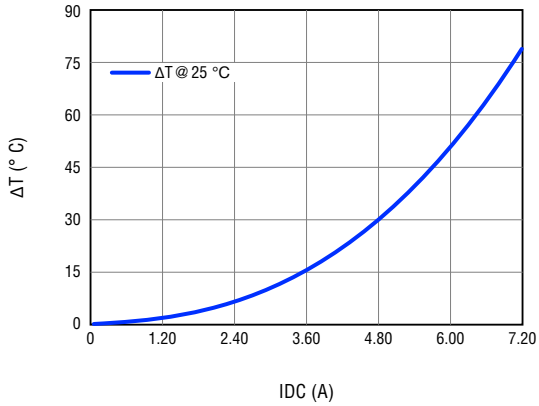

## Soldering Profile



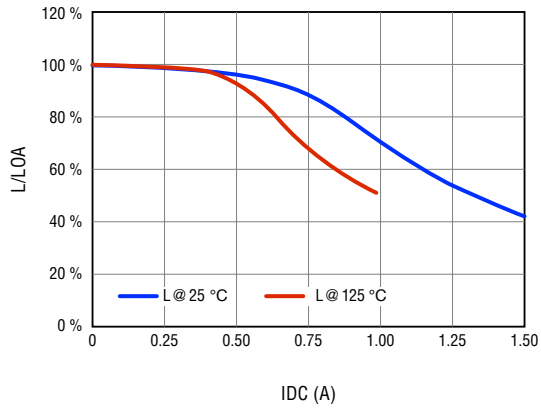
## Typical Current Characteristics

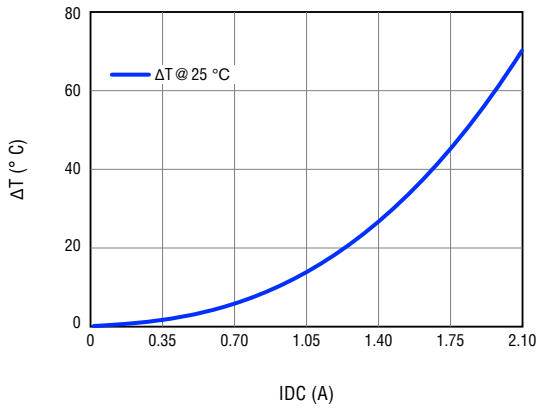
### SRR5828A-2R6Y



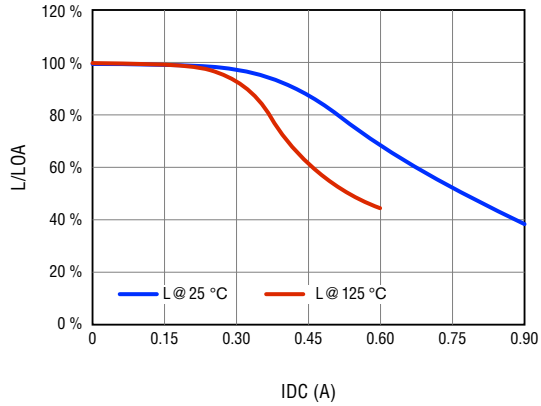

### SRR5828A-330M

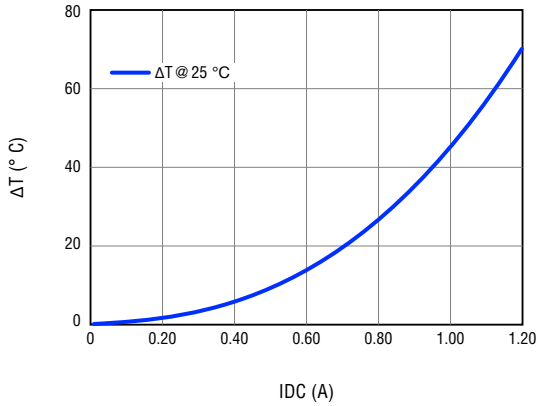


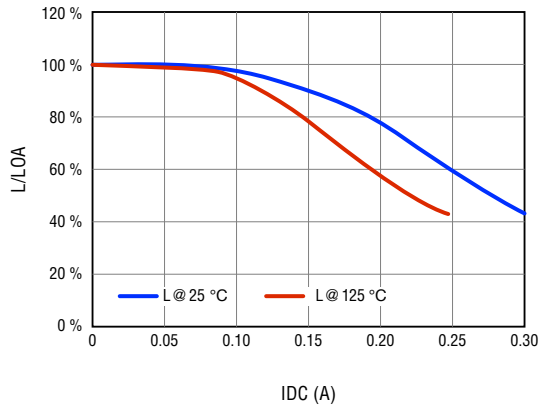
## Typical Current Characteristics (continued)

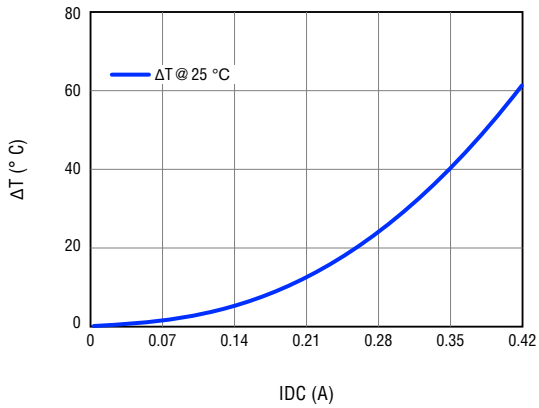
### SRR5828A-101M



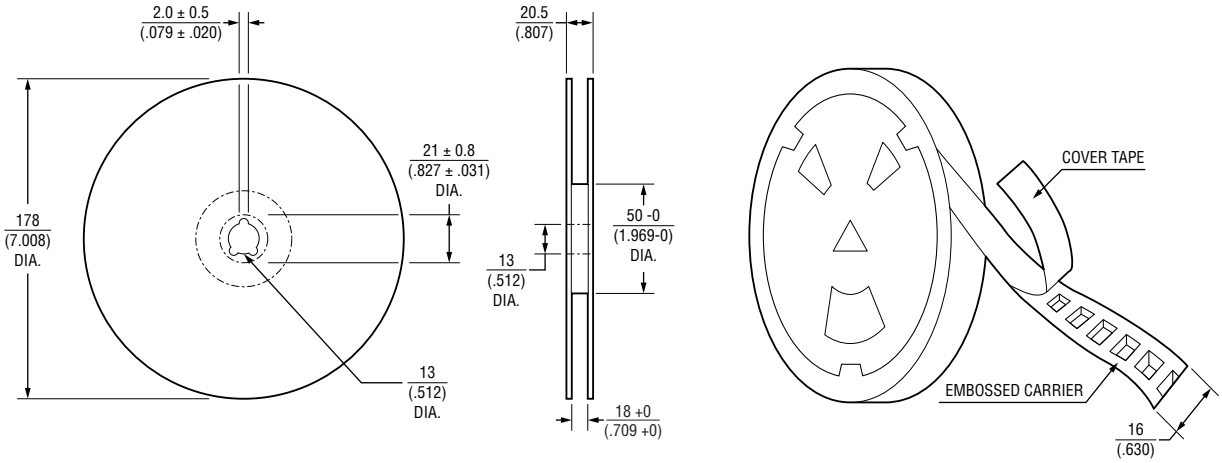




### SRR5228A-681M

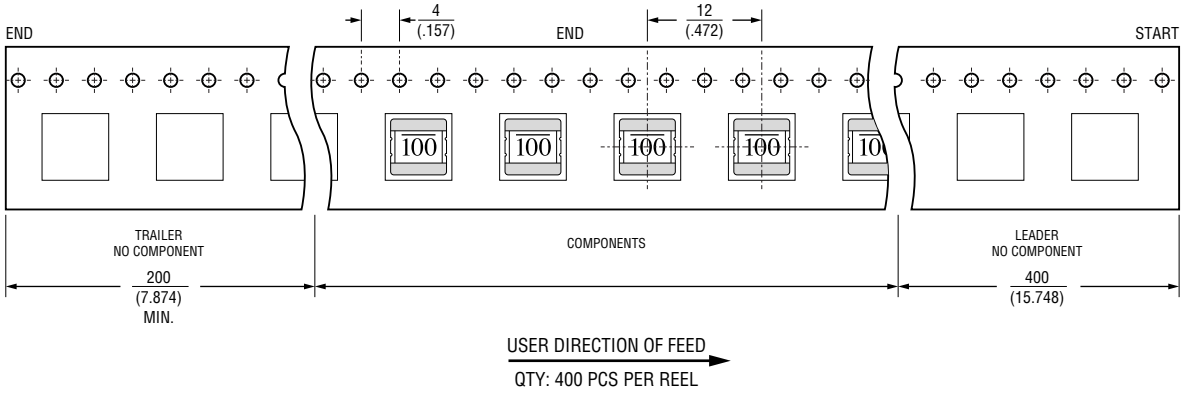


## Packaging Specifications




DIMENSIONS: MM (INCHES)




USER DIRECTION OF FEED

QTY: 400 PCS PER REEL

BOURNS®

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