



## Features

- Shielded construction – low radiation
- Inductance range: 2.6 to 1000  $\mu$ H
- 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)		$I_{rms1}$ (A) Typ.	$I_{rms2}$ (A) Typ.	$I_{sat}$ (A) Typ.
	L ( $\mu$ H)	Tol. (%)		Typ.	Max.			
SRR5828A-2R6Y	2.6	$\pm$ 30	78.0	23.0	30.0	3.25	4.50	3.15
SRR5828A-3R3Y	3.3	$\pm$ 30	70.0	27.0	35.0	3.20	4.40	2.80
SRR5828A-4R7Y	4.7	$\pm$ 30	48.0	31.0	40.0	3.00	4.00	2.57
SRR5828A-5R3Y	5.3	$\pm$ 30	46.0	35.0	42.0	2.80	3.80	2.20
SRR5828A-6R2Y	6.2	$\pm$ 30	41.0	45.0	57.0	2.60	3.50	2.10
SRR5828A-8R2Y	8.2	$\pm$ 30	37.0	49.0	63.0	2.30	3.00	1.62
SRR5828A-100M	10.0	$\pm$ 20	32.0	64.0	83.0	2.00	2.60	1.55
SRR5828A-120M	12.0	$\pm$ 20	25.0	76.0	100.0	1.85	2.50	1.50
SRR5828A-150M	15.0	$\pm$ 20	25.0	90.0	115.0	1.70	2.25	1.35
SRR5828A-180M	18.0	$\pm$ 20	22.0	100.0	130.0	1.60	2.15	1.30
SRR5828A-220M	22.0	$\pm$ 20	19.0	125.0	160.0	1.35	1.75	1.15
SRR5828A-270M	27.0	$\pm$ 20	18.0	147.0	180.0	1.25	1.65	1.05
SRR5828A-330M	33.0	$\pm$ 20	15.0	190.0	230.0	1.10	1.40	0.92
SRR5828A-390M	39.0	$\pm$ 20	14.0	200.0	260.0	1.05	1.37	0.86
SRR5828A-470M	47.0	$\pm$ 20	13.0	247.0	305.0	1.00	1.33	0.78
SRR5828A-560M	56.0	$\pm$ 20	11.0	315.0	395.0	0.85	1.13	0.70
SRR5828A-680M	68.0	$\pm$ 20	10.0	375.0	470.0	0.80	1.03	0.65
SRR5828A-820M	82.0	$\pm$ 20	9.0	425.0	530.0	0.73	0.95	0.60
SRR5828A-101M	100.0	$\pm$ 20	8.0	550.0	645.0	0.60	0.80	0.53
SRR5828A-151M	150.0	$\pm$ 20	7.0	770.0	910.0	0.55	0.70	0.45
SRR5828A-181M	180.0	$\pm$ 20	5.5	940.0	1100.0	0.48	0.64	0.42
SRR5828A-221M	220.0	$\pm$ 20	5.0	1095.0	1200.0	0.45	0.62	0.37
SRR5828A-331M	330.0	$\pm$ 20	4.0	1830.0	2100.0	0.35	0.46	0.30
SRR5828A-681M	680.0	$\pm$ 20	3.0	4170.0	4800.0	0.23	0.31	0.21
SRR5828A-102M	1000.0	$\pm$ 20	2.0	6360.0	7300.0	0.15	0.21	0.13

#### Notes:

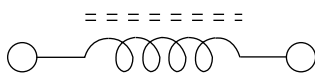
1.  $I_{rms1}$  based on temperature rise of 20 °C typ.
2.  $I_{rms2}$  based on temperature rise of 40 °C typ.

### 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  $I_{rms1}$   
..... 40 °C typ. at rated  $I_{rms2}$

Inductance Drop ..... 35 % typ. at  $I_{sat}$

Moisture Sensitivity Level ..... 1

ESD Classification (HBM) ..... N/A

### Additional Information

Click these links for more information:



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### 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](http://www.P65Warnings.ca.gov)

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

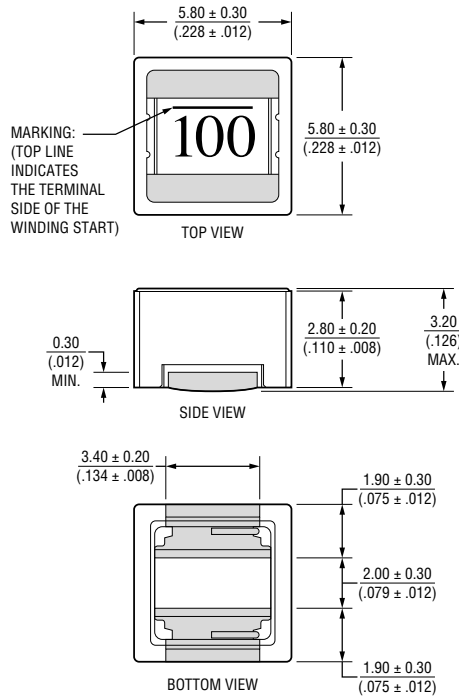
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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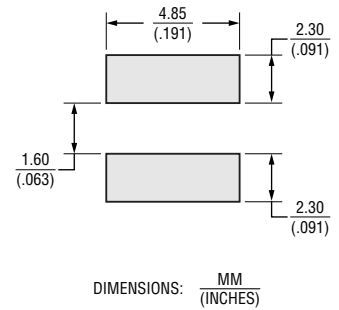
# SRR5828A Series - Shielded Power Inductors



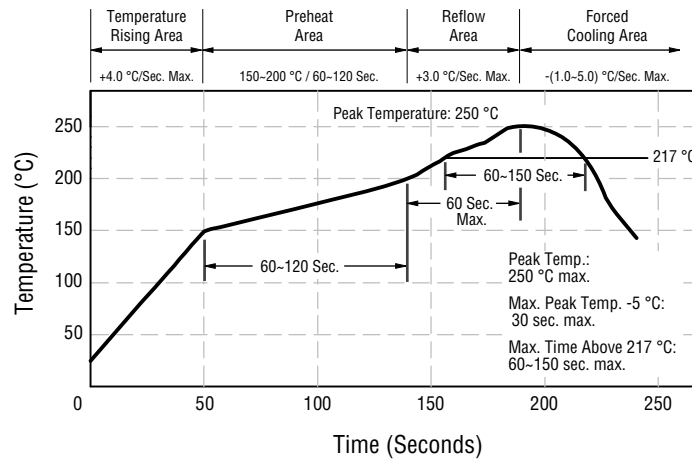
## Product Dimensions



## Recommended Layout



## Soldering Profile



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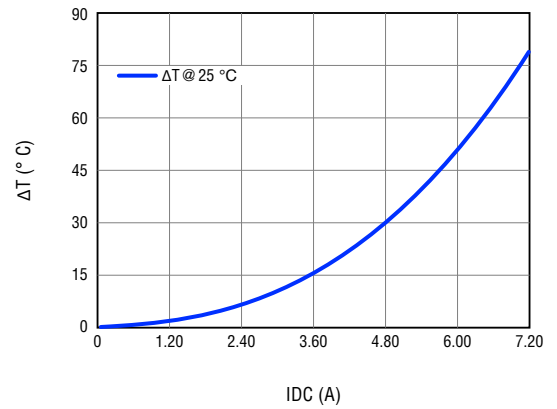
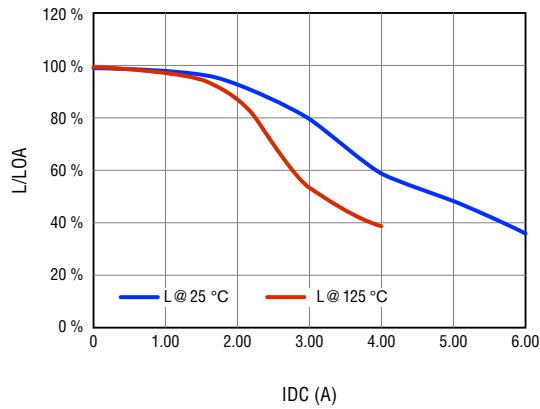
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# SRR5828A Series - Shielded Power Inductors

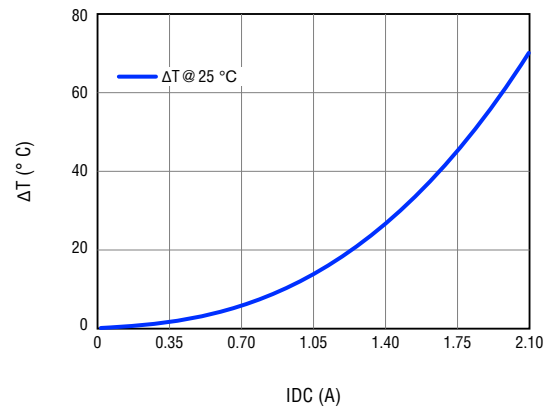
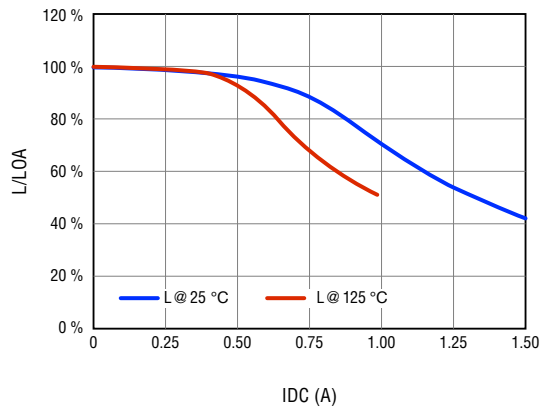
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## Typical Current Characteristics

### SRR5828A-2R6Y



### SRR5828A-330M

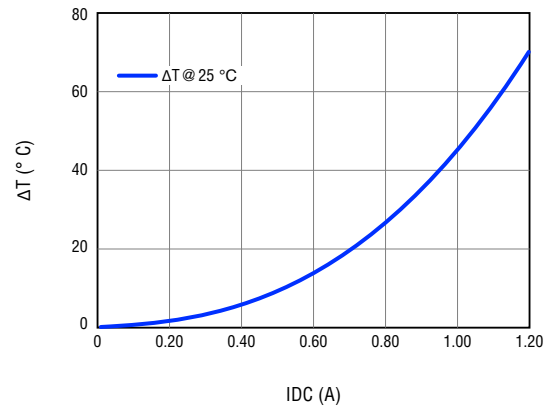
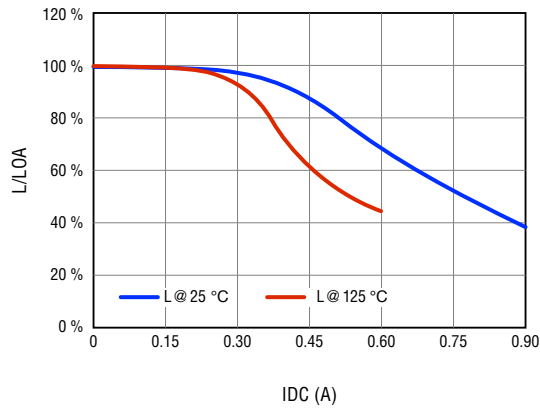


# SRR5828A Series - Shielded Power Inductors

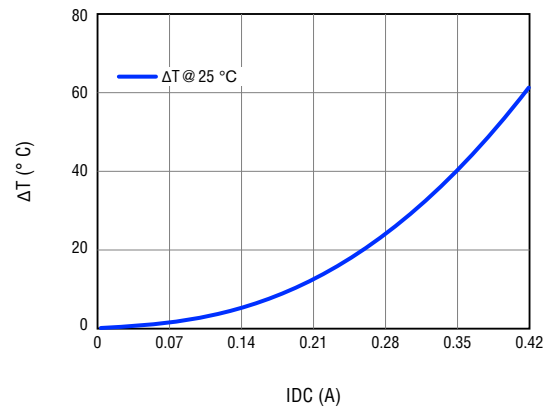
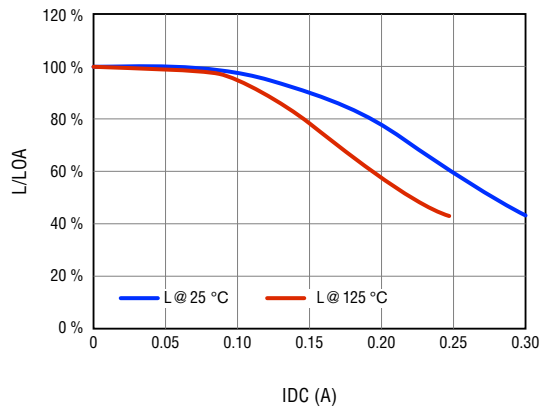
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## Typical Current Characteristics (continued)

### SRR5828A-101M



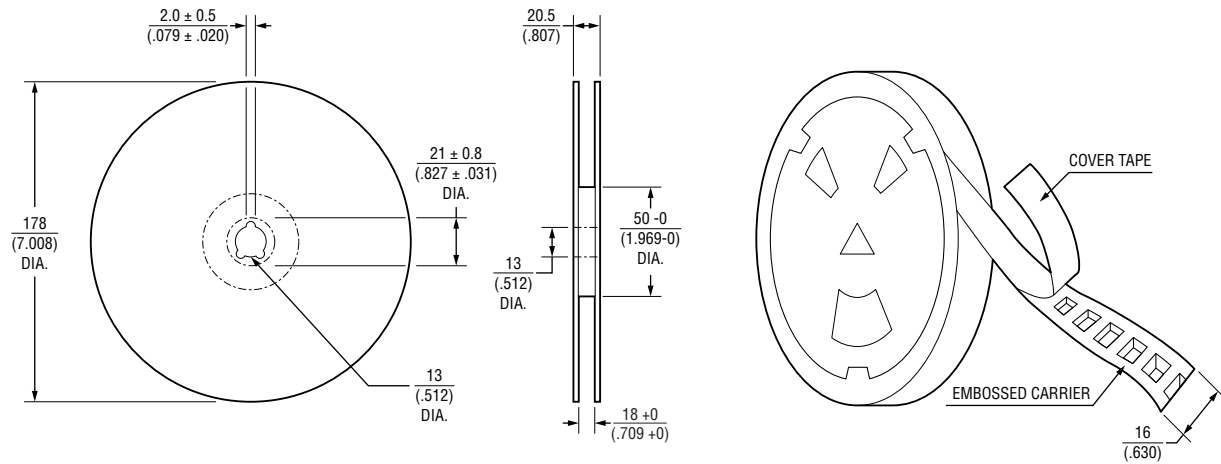
### SRR5228A-681M



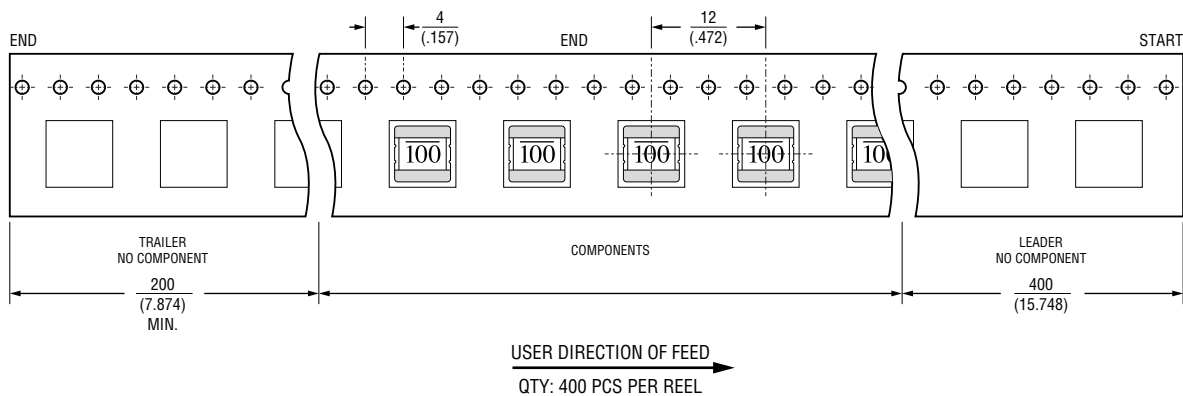
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## Packaging Specifications



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



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