



## Features

- Shielded construction – low radiation
- Inductance range: 1.2 to 1000  $\mu$ H
- Heating current up to 5.2 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

## SRR5228A 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.			
SRR5228A-1R2Y	1.2	$\pm$ 30	170.0	14.0	22.0	3.90	5.20	4.30
SRR5228A-2R2Y	2.2	$\pm$ 30	95.0	21.0	27.0	3.10	4.10	3.10
SRR5228A-3R3Y	3.3	$\pm$ 30	70.0	27.0	32.0	2.80	3.60	2.30
SRR5228A-4R7Y	4.7	$\pm$ 30	55.0	35.0	45.0	2.45	3.20	2.00
SRR5228A-6R8Y	6.8	$\pm$ 30	40.0	45.0	56.0	2.20	2.80	1.80
SRR5228A-100M	10.0	$\pm$ 20	28.0	69.0	85.0	1.70	2.30	1.45
SRR5228A-150M	15.0	$\pm$ 20	23.0	106.0	140.0	1.40	1.80	1.25
SRR5228A-220M	22.0	$\pm$ 20	18.0	150.0	193.0	1.30	1.70	1.00
SRR5228A-330M	33.0	$\pm$ 20	14.0	204.0	260.0	1.00	1.30	0.84
SRR5228A-470M	47.0	$\pm$ 20	12.0	295.0	360.0	0.84	1.10	0.70
SRR5228A-680M	68.0	$\pm$ 20	10.0	445.0	550.0	0.65	0.90	0.57
SRR5228A-101M	100.0	$\pm$ 20	8.0	650.0	800.0	0.57	0.70	0.47
SRR5228A-121M	120.0	$\pm$ 20	6.0	860.0	1100.0	0.49	0.65	0.43
SRR5228A-151M	150.0	$\pm$ 20	5.5	1180.0	1470.0	0.42	0.55	0.39
SRR5228A-181M	180.0	$\pm$ 20	5.0	1240.0	1550.0	0.40	0.52	0.35
SRR5228A-221M	220.0	$\pm$ 20	4.5	1650.0	2000.0	0.35	0.46	0.32
SRR5228A-271M	270.0	$\pm$ 20	4.0	2100.0	2500.0	0.32	0.42	0.29
SRR5228A-331M	330.0	$\pm$ 20	3.7	2600.0	3200.0	0.27	0.36	0.26
SRR5228A-391M	390.0	$\pm$ 20	3.3	2800.0	3400.0	0.26	0.35	0.24
SRR5228A-471M	470.0	$\pm$ 20	3.0	3600.0	4300.0	0.24	0.31	0.22
SRR5228A-561M	560.0	$\pm$ 20	2.7	3900.0	4700.0	0.22	0.28	0.20
SRR5228A-681M	680.0	$\pm$ 20	2.6	4700.0	5700.0	0.20	0.26	0.18
SRR5228A-821M	820.0	$\pm$ 20	2.2	6600.0	7900.0	0.17	0.22	0.16
SRR5228A-102M	1000.0	$\pm$ 20	2.1	7200.0	8700.0	0.16	0.21	0.15

#### Notes:

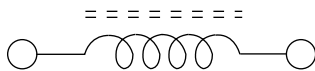
1.  $I_{rms1}$  based on temperature rise of 20 °C typ.
2.  $I_{rms2}$  based on temperature rise of 40 °C typ.

### How to Order

**SRR5228A - 1R2Y**

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

### Electrical Schematic



**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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### 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:



[PRODUCT SELECTOR](#) [TECHNICAL LIBRARY](#) [INVENTORY](#) [SAMPLES](#) [CONTACT](#)

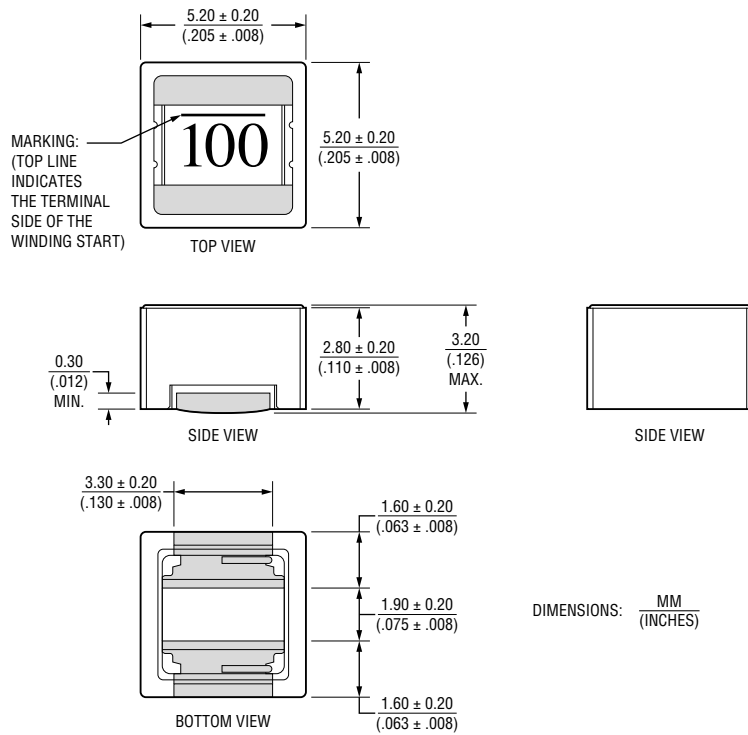
### Materials

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

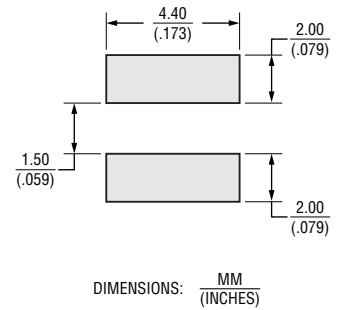
# SRR5228A Series - Shielded Power Inductors



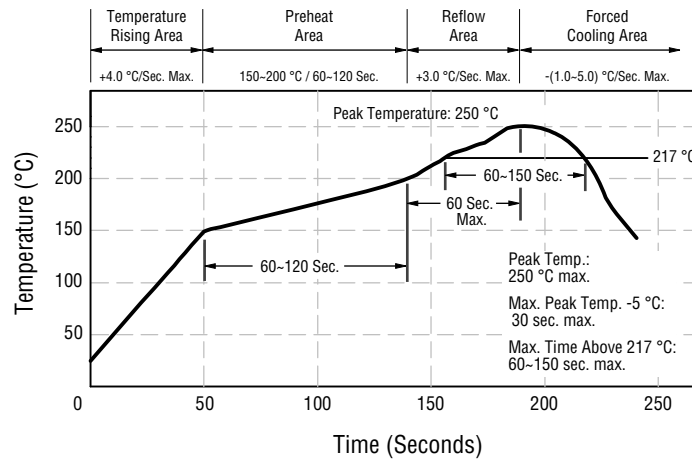
## Product Dimensions



## Recommended Layout



## Soldering Profile



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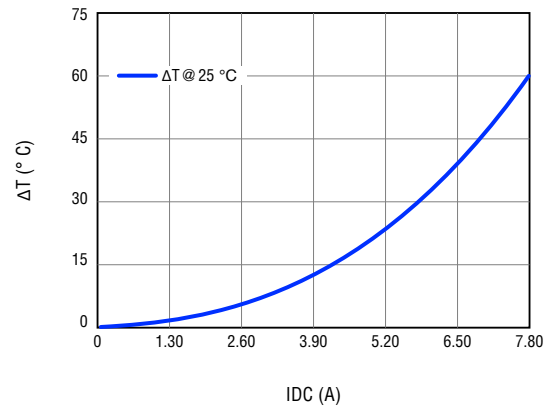
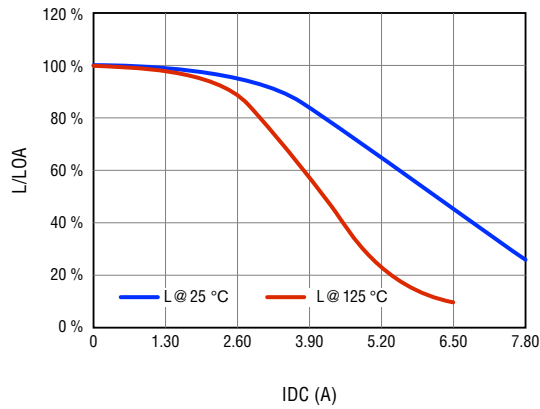
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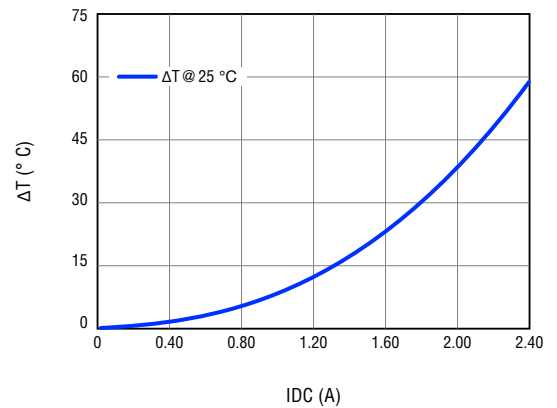
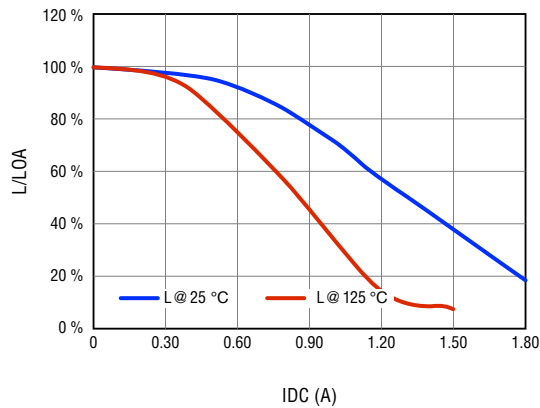
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## Typical Current Characteristics

### SRR5228A-1R2Y



### SRR5228A-220M

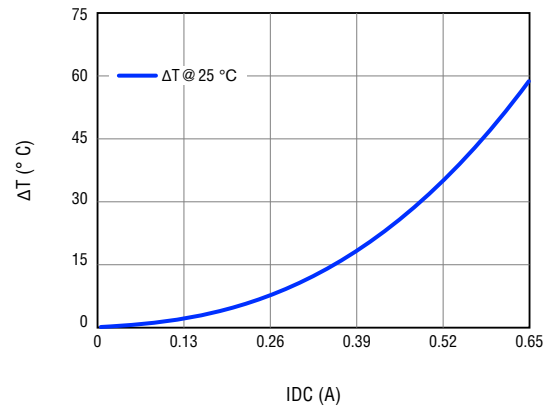
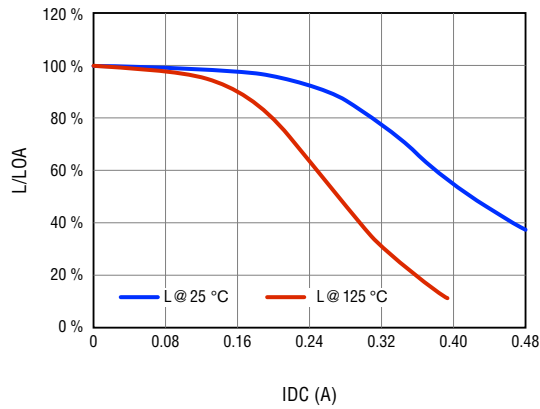


# SRR5228A Series - Shielded Power Inductors

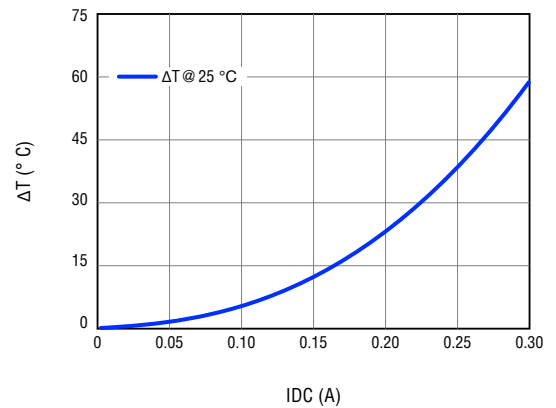
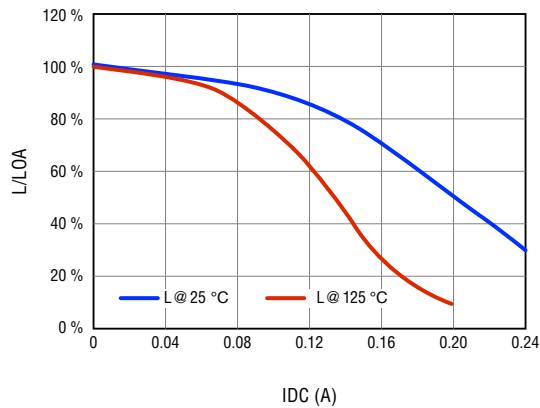
**BOURNS®**

## Typical Current Characteristics (continued)

### SRR5228A-221M



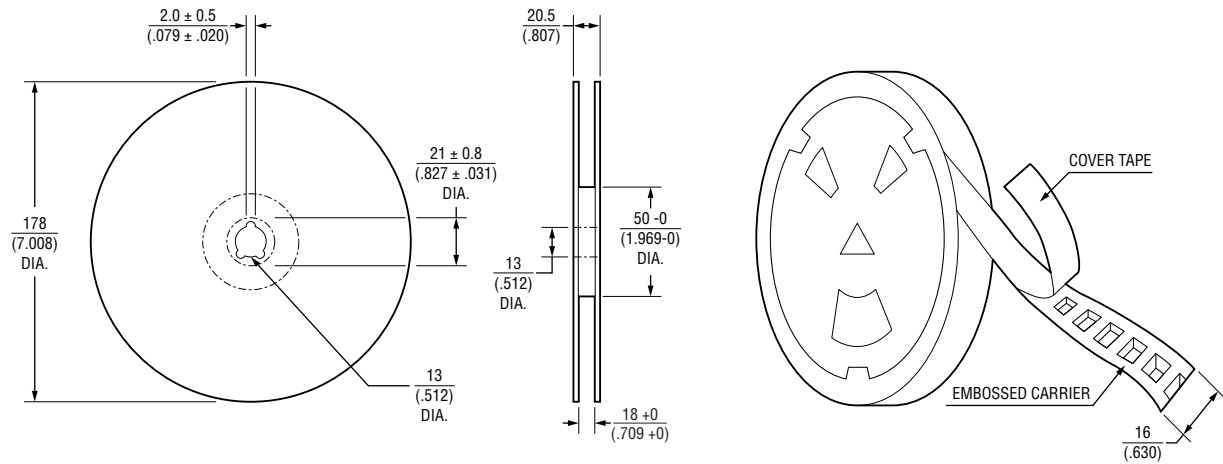
### SRR5228A-102M



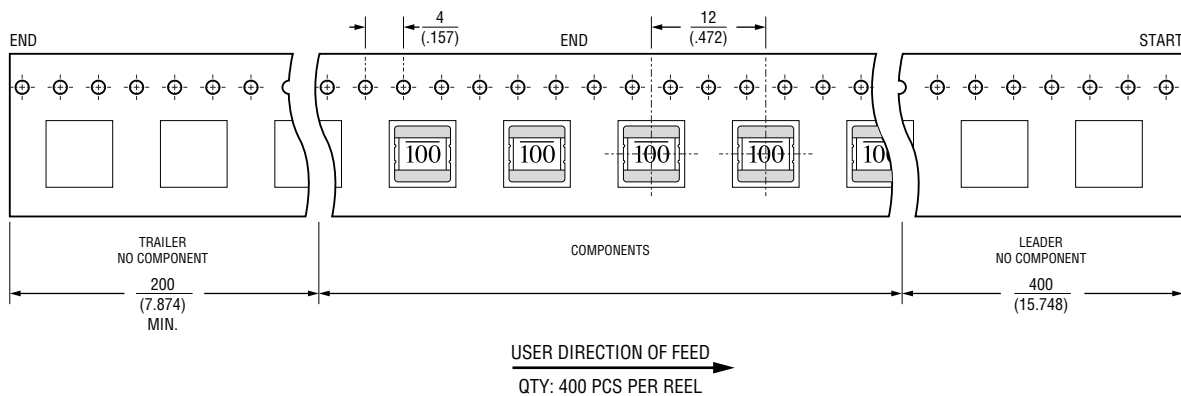
# SRR5228A Series - Shielded Power Inductors

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## Packaging Specifications



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



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REV. 01/24

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