



**THE DATASHEET OF  
SRR1280A-820M**





## Features

- Shielded construction
- Inductance range: 4.7 to 1000  $\mu$ H
- Heating current up to 8.2 A
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

**BOURNS®**

## SRR1280A Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

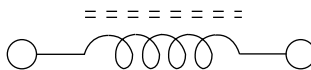
Bourns Part Number	Inductance			Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR (m $\Omega$ ) Max.	I rms (A)	I sat (A)
	L ( $\mu$ H)	Tol. (%)	Test Frequency/Voltage						
SRR1280A-4R7Y	4.7	$\pm 30$	100 KHz/1 V	22	7.96	30	15.5	8.20	8.80
SRR1280A-6R8Y	6.8	$\pm 30$	100 KHz/1 V	20	7.96	22	18.5	7.60	8.00
SRR1280A-8R2Y	8.2	$\pm 30$	100 KHz/1 V	22	7.96	20	20.5	6.20	6.80
SRR1280A-100M	10	$\pm 20$	1 KHz/1 V	24	2.52	17	19.5	6.00	6.30
SRR1280A-120M	12	$\pm 20$	1 KHz/1 V	26	2.52	15	28.0	5.60	6.00
SRR1280A-150M	15	$\pm 20$	1 KHz/1 V	26	2.52	13	28.5	5.20	5.00
SRR1280A-180M	18	$\pm 20$	1 KHz/1 V	24	2.52	12	35.0	4.80	4.60
SRR1280A-220M	22	$\pm 20$	1 KHz/1 V	20	2.52	11	38.6	4.30	4.10
SRR1280A-270M	27	$\pm 20$	1 KHz/1 V	26	2.52	10	52.0	3.90	3.70
SRR1280A-330M	33	$\pm 20$	1 KHz/1 V	28	2.52	9.5	57.0	3.50	3.30
SRR1280A-390M	39	$\pm 20$	1 KHz/1 V	24	2.52	8.5	70.0	3.20	3.10
SRR1280A-470M	47	$\pm 20$	1 KHz/1 V	24	2.52	7.5	80.0	2.90	2.80
SRR1280A-560M	56	$\pm 20$	1 KHz/1 V	24	2.52	7	100.0	2.60	2.50
SRR1280A-680M	68	$\pm 20$	1 KHz/1 V	20	2.52	6.5	120.0	2.40	2.30
SRR1280A-820M	82	$\pm 20$	1 KHz/1 V	20	2.52	5	130.0	2.30	2.20
SRR1280A-101M	100	$\pm 20$	1 KHz/1 V	18	0.796	4.5	150.0	2.10	2.00
SRR1280A-121K	120	$\pm 10$	1 KHz/1 V	16	0.796	4.3	200.0	1.95	1.95
SRR1280A-151K	150	$\pm 10$	1 KHz/1 V	24	0.796	4.1	270.0	1.85	1.90
SRR1280A-181K	180	$\pm 10$	1 KHz/1 V	24	0.796	4	300.0	1.75	1.88
SRR1280A-221K	220	$\pm 10$	1 KHz/1 V	24	0.796	3.4	400.0	1.60	1.70
SRR1280A-271K	270	$\pm 10$	1 KHz/1 V	20	0.796	3.1	450.0	1.20	1.60
SRR1280A-331K	330	$\pm 10$	1 KHz/1 V	18	0.796	2.9	600.0	1.10	1.40
SRR1280A-391K	390	$\pm 10$	1 KHz/1 V	20	0.796	2.7	680.0	1.00	1.40
SRR1280A-471K	470	$\pm 10$	1 KHz/1 V	20	0.796	2.2	880.0	0.90	1.25
SRR1280A-561K	560	$\pm 10$	1 KHz/1 V	20	0.796	2	960.0	0.80	1.15
SRR1280A-681K	680	$\pm 10$	1 KHz/1 V	26	0.796	1.7	1300.0	0.75	0.97
SRR1280A-821K	820	$\pm 10$	1 KHz/1 V	20	0.796	1.4	1500.0	0.70	0.94
SRR1280A-102K	1000	$\pm 10$	1 KHz/1 V	40	0.252	1.3	1700.0	0.68	0.80

### How to Order

**SRR1280A - 100M**

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

### Electrical Schematic



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**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 Temp. .... -40 °C to +125 °C  
(Temperature rise included)

Storage Temp. .... -40 °C to +125 °C  
Temperature Rise

..... 40 °C typ. at rated I rms

Inductance Drop ..... 25 % typ. at I sat

Moisture Sensitivity Level ..... 1

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

### Materials

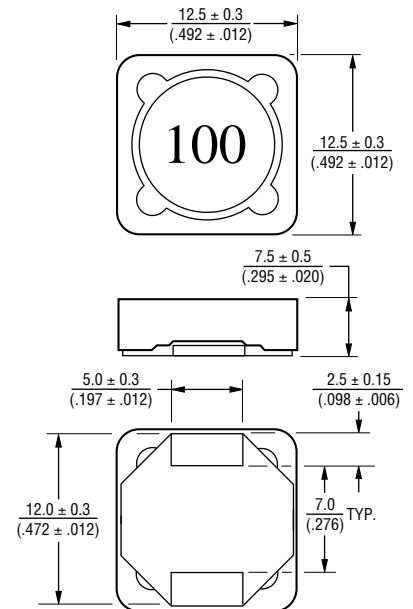
Core ..... Ferrite

Wire ..... Enameled copper

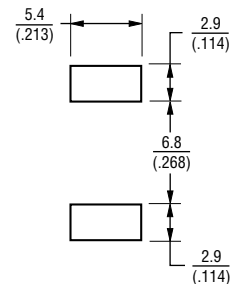
Terminal Finish ..... Sn

Packaging ..... 400 pcs. per reel

### Product Dimensions



### Recommended Layout



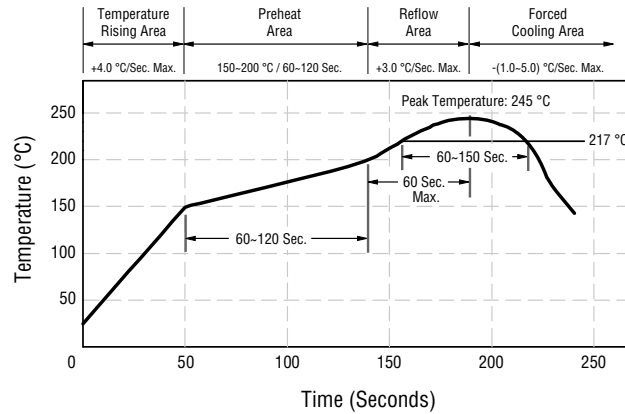
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

# SRR1280A Series - Shielded Power Inductors

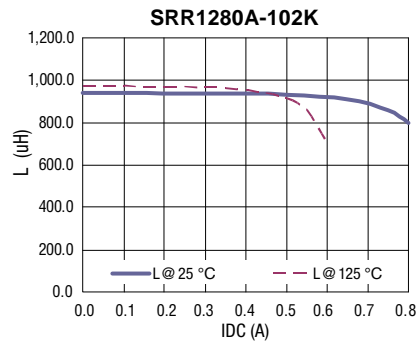
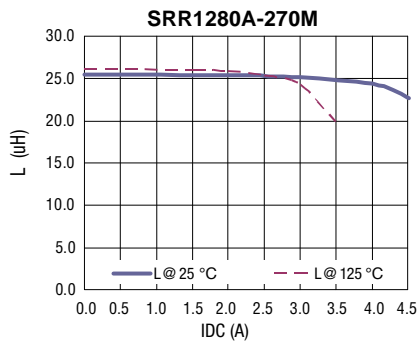
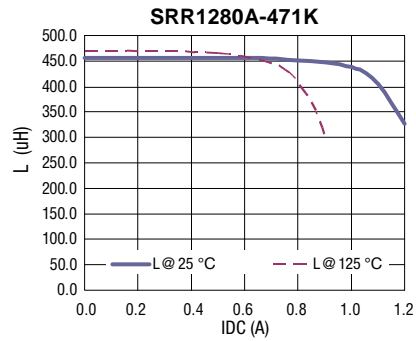
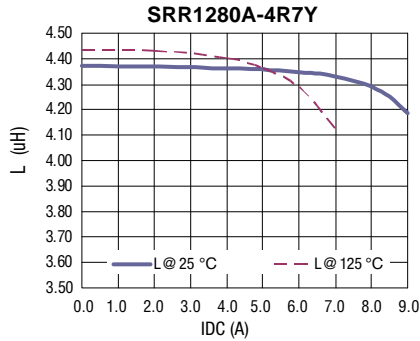


## Soldering Profile

Peak Temperature: 245 °C max.  
 Max. Peak Temperature -5°C: 30 sec. max.  
 Max. Time Above 217°C: 60-150 sec. max.



## L vs. IDC



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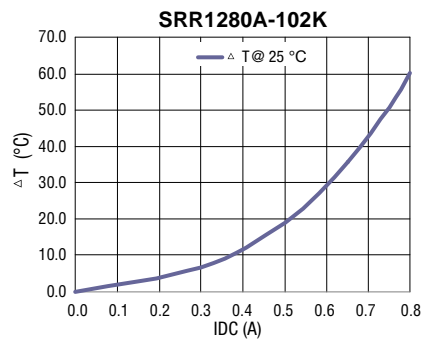
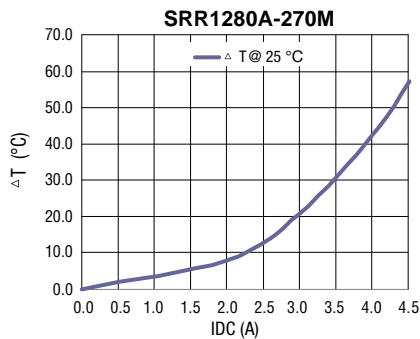
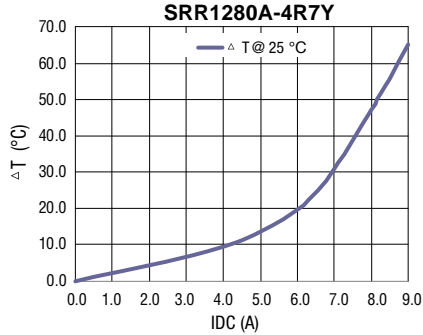
Users should verify actual device performance in their specific applications.

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## Temperature vs. IDC



## Packaging Specifications



REV. 11/19

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