



**THE DATASHEET OF  
SRR0735A-681M**





### Features

- Shielded construction
- Inductance range: 10 to 680  $\mu$ H
- Heating current up to 2.1 A
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*



This series is currently available but not recommended for new designs. The [Model SRR0735HA Series](#) is the recommended replacement.

**BOURNS®**

## SRR0735A Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

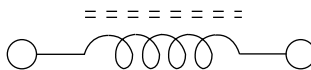
| Bourns Part Number | Inductance @ 1 KHz / 1 V |          | DCR ( $\Omega$ ) Max. | I rms (A) | I sat (A) |
|--------------------|--------------------------|----------|-----------------------|-----------|-----------|
|                    | L ( $\mu$ H)             | Tol. (%) |                       |           |           |
| SRR0735A-100M      | 10                       | $\pm$ 20 | 0.072                 | 2.10      | 1.85      |
| SRR0735A-120M      | 12                       | $\pm$ 20 | 0.085                 | 1.90      | 1.60      |
| SRR0735A-150M      | 15                       | $\pm$ 20 | 0.105                 | 1.60      | 1.52      |
| SRR0735A-180M      | 18                       | $\pm$ 20 | 0.125                 | 1.40      | 1.40      |
| SRR0735A-220M      | 22                       | $\pm$ 20 | 0.160                 | 1.20      | 1.28      |
| SRR0735A-270M      | 27                       | $\pm$ 20 | 0.185                 | 1.10      | 1.15      |
| SRR0735A-330M      | 33                       | $\pm$ 20 | 0.220                 | 1.00      | 1.04      |
| SRR0735A-390M      | 39                       | $\pm$ 20 | 0.250                 | 0.95      | 0.96      |
| SRR0735A-470M      | 47                       | $\pm$ 20 | 0.320                 | 0.85      | 0.88      |
| SRR0735A-560M      | 56                       | $\pm$ 20 | 0.350                 | 0.78      | 0.80      |
| SRR0735A-680M      | 68                       | $\pm$ 20 | 0.400                 | 0.72      | 0.74      |
| SRR0735A-820M      | 82                       | $\pm$ 20 | 0.480                 | 0.63      | 0.65      |
| SRR0735A-101M      | 100                      | $\pm$ 20 | 0.630                 | 0.54      | 0.60      |
| SRR0735A-121M      | 120                      | $\pm$ 20 | 0.720                 | 0.53      | 0.55      |
| SRR0735A-151M      | 150                      | $\pm$ 20 | 0.930                 | 0.47      | 0.48      |
| SRR0735A-181M      | 180                      | $\pm$ 20 | 1.15                  | 0.43      | 0.45      |
| SRR0735A-221M      | 220                      | $\pm$ 20 | 1.32                  | 0.40      | 0.42      |
| SRR0735A-271M      | 270                      | $\pm$ 20 | 1.70                  | 0.37      | 0.37      |
| SRR0735A-331M      | 330                      | $\pm$ 20 | 2.00                  | 0.33      | 0.33      |
| SRR0735A-391M      | 390                      | $\pm$ 20 | 2.30                  | 0.30      | 0.30      |
| SRR0735A-471M      | 470                      | $\pm$ 20 | 2.80                  | 0.26      | 0.27      |
| SRR0735A-561M      | 560                      | $\pm$ 20 | 3.50                  | 0.23      | 0.25      |
| SRR0735A-681M      | 680                      | $\pm$ 20 | 4.00                  | 0.21      | 0.22      |

### How to Order

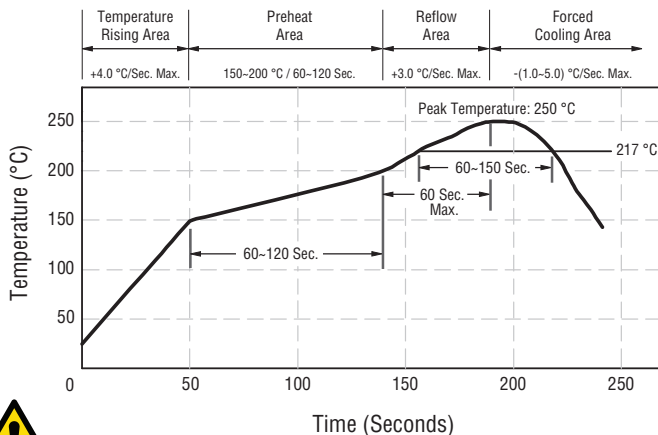
**SRR0735A - 100M**

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

### Electrical Schematic



### Soldering Profile



Peak Temperature: 250 °C max.

Max. Peak Temperature -5 °C: 30 sec. max.

Max. Time Above 217 °C: 60~150 sec. max.



**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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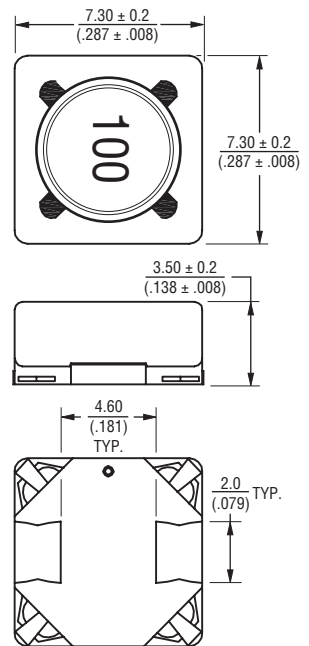
### General Specifications

Operating Temperature .....-40 °C to +125 °C  
(Temperature rise included)  
Storage Temperature .....-40 °C to +125 °C  
Temperature Rise .....40 °C typ. at rated I rms  
Inductance Drop ..... 25 % typ. at I sat

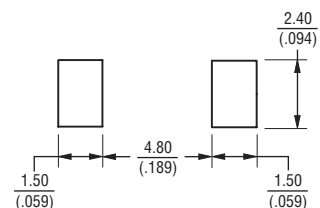
### Materials

Core ..... Ferrite  
Wire ..... Enameled copper  
Terminal Finish ..... Sn  
Packaging ..... 1500 pcs. per reel

### Product Dimensions



### Recommended Layout

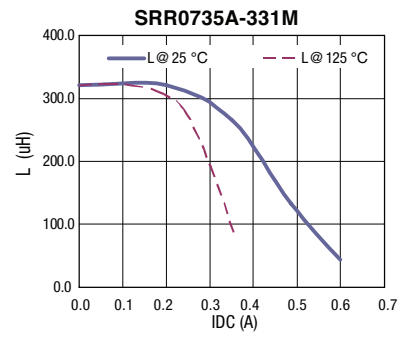
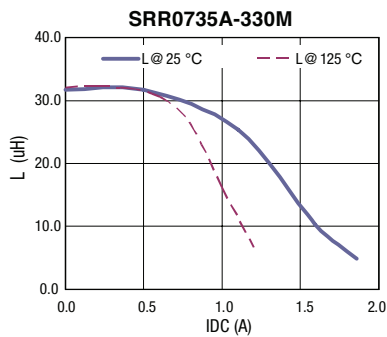
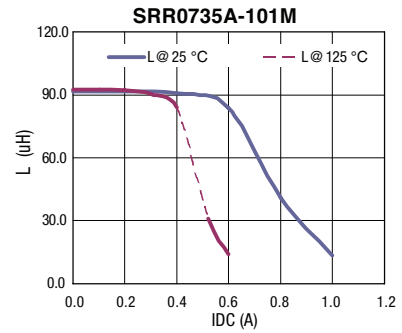
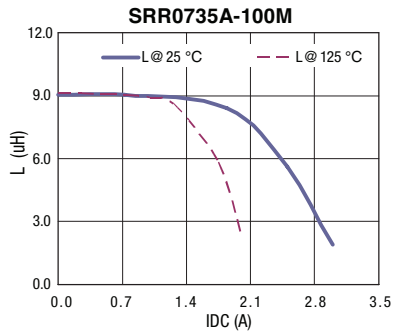


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

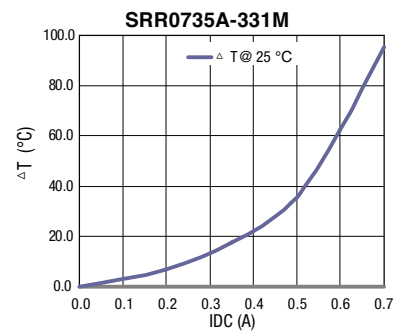
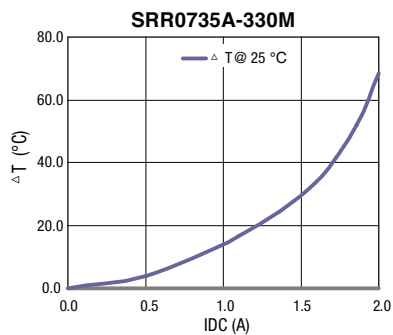
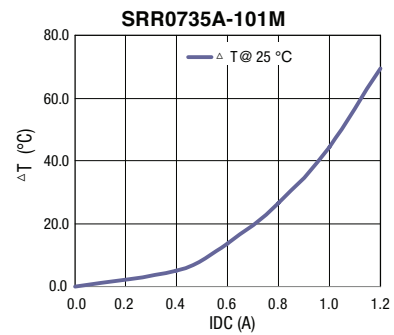
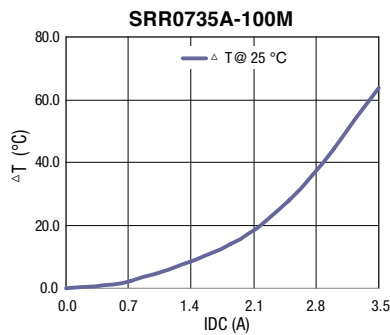
# SRR0735A Series - Shielded Power Inductors



## L vs. IDC



## Temperature vs. IDC

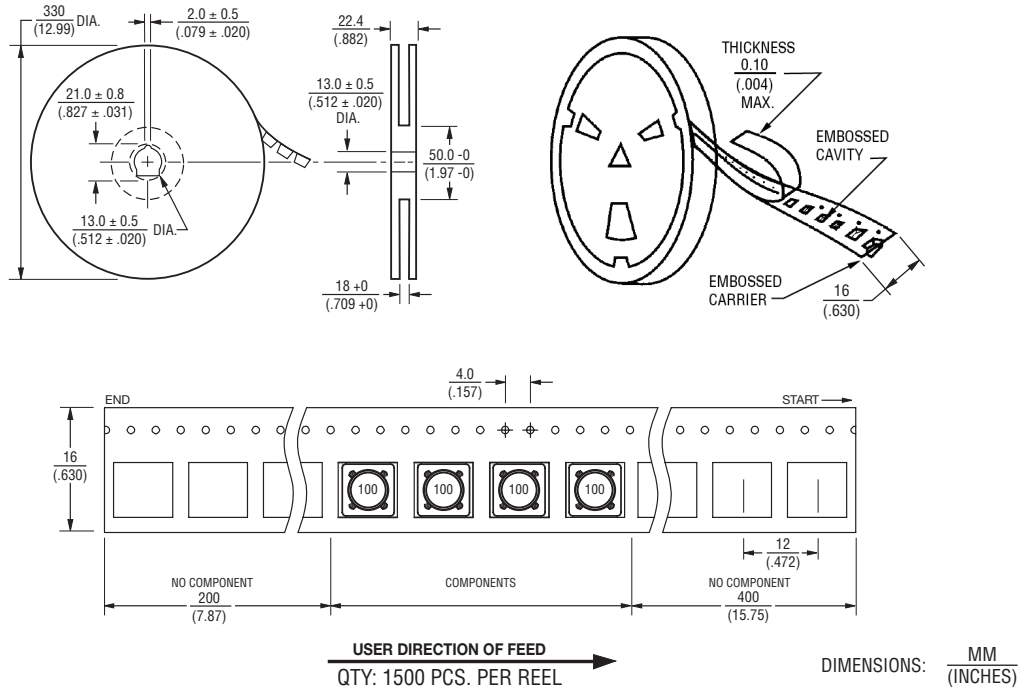


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# SRR0735A Series - Shielded Power Inductors

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## Packaging Specifications



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