



## Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Inductance range 1 to 100  $\mu$ H
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## Applications

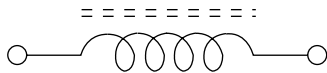
- Automotive systems:
  - Driver assistant
  - Infotainment
  - Lighting
- DC/DC converters
- Power supplies

## SRP2313AA Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 1 V		Q (Min.) @ 100 kHz / 1 V	SRF (MHz) Typ.	DCR (m $\Omega$ ) Typ.	DCR (m $\Omega$ ) Max.	I <sub>rms</sub> (A) Typ.	Isat (A) Typ.	Terminal Type
	L ( $\mu$ H)	Tol. (%)							
SRP2313AA-1R0M	1.0	20	60	23	0.8	0.95	70	60	Lead Frame
SRP2313AA-1R5M	1.5	20	60	21	1.0	1.15	57	48	
SRP2313AA-2R2M	2.2	20	60	19	1.05	1.25	52	43	
SRP2313AA-3R3M	3.3	20	60	15	1.5	1.75	47	37	
SRP2313AA-4R7M	4.7	20	40	11	1.9	2.2	44	34	
SRP2313AA-6R8M	6.8	20	40	9	2.7	3.1	36	32	
SRP2313AA-100M	10	20	40	7	3.8	4.15	30	20	
SRP2313AA-220M	22	20	30	5	9.2	11	18	14	
SRP2313AA-230M	23	20	30	5	9.2	11	18	14	
SRP2313AA-330M	33	20	30	4	13.5	15.4	16	10.5	
SRP2313AA-470M	47	20	20	3.5	17.3	20.8	14	10	
SRP2313AA-680M	68	20	20	3	26.2	29.5	12	9	
SRP2313AA-101M	100	20	20	2	36.0	40.0	11	9	

### Electrical Schematic

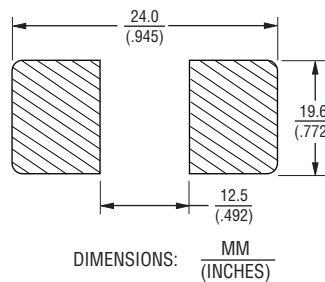


### How to Order

#### SRP2313AA - 100M

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

### Recommended Layout



### General Specifications

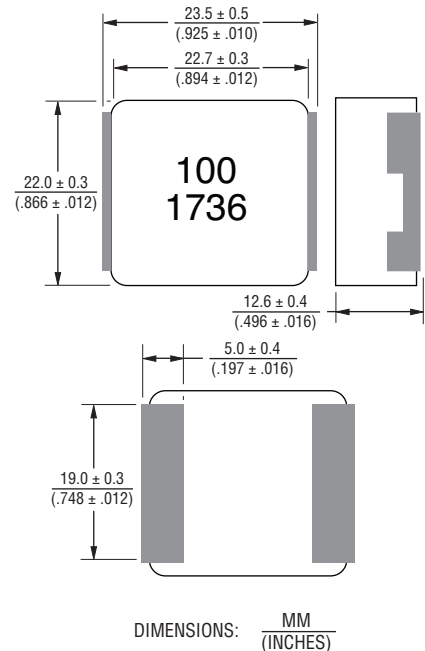
Operating Temperature .....-55 °C to +155 °C  
(Temperature rise included)  
Storage Temperature (Component) .....-55 °C to +155 °C  
Rated Current ..... Inductance drops 30 % at Isat  
Temperature Rise ... 40 °C at rated I<sub>rms</sub><sup>1</sup>  
Moisture Sensitivity Level ..... 1  
ESD Classification (HBM) ..... N/A

<sup>1</sup> Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

### Materials

Core ..... Metal alloy powder  
Wire ..... Enameled copper  
Terminal Finish ..... Sn  
Packaging ..... 80 pcs. per 13-inch reel

### Product Dimensions



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\* 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.

Specifications are subject to change without notice.

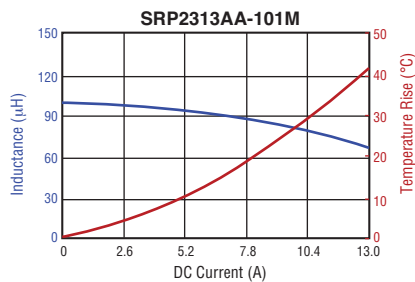
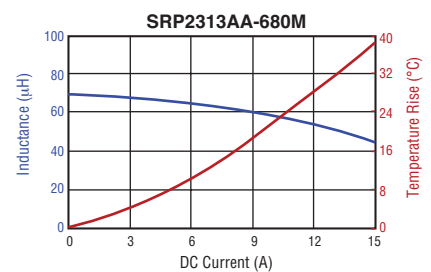
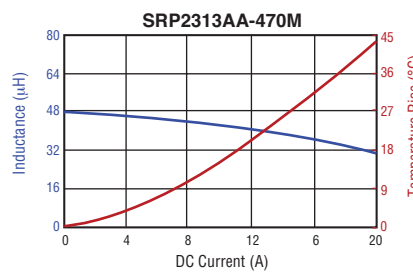
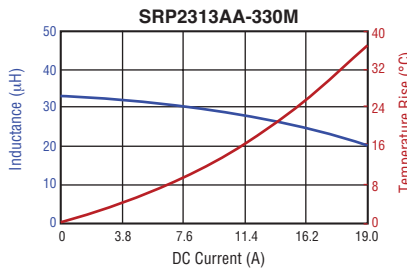
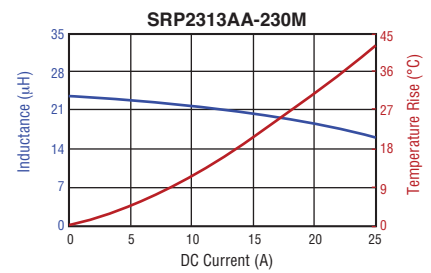
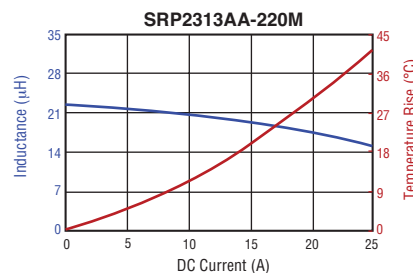
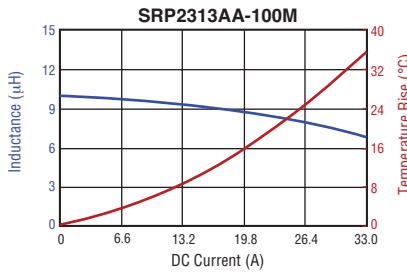
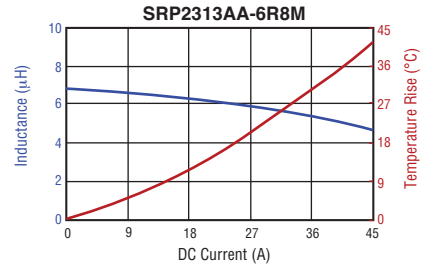
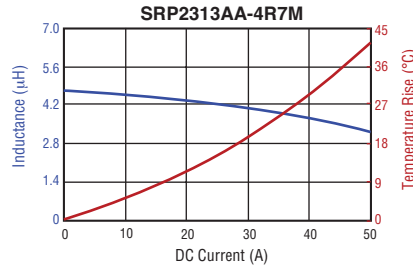
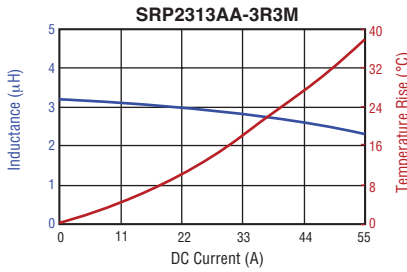
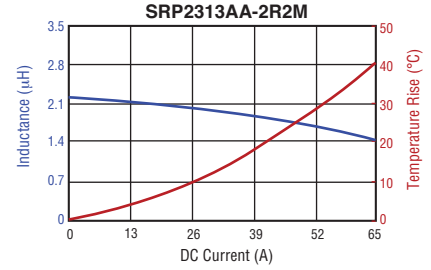
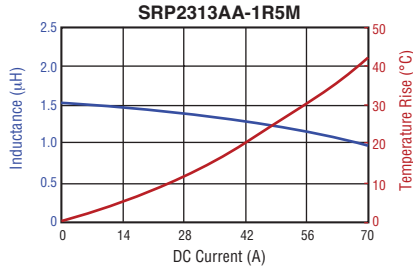
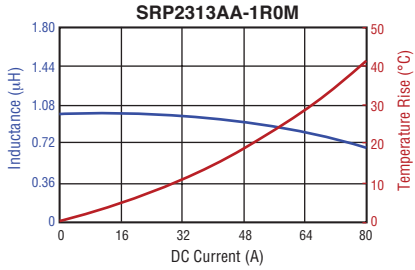
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

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# SRP2313AA Series - Shielded Power Inductors



## L vs. I Charts

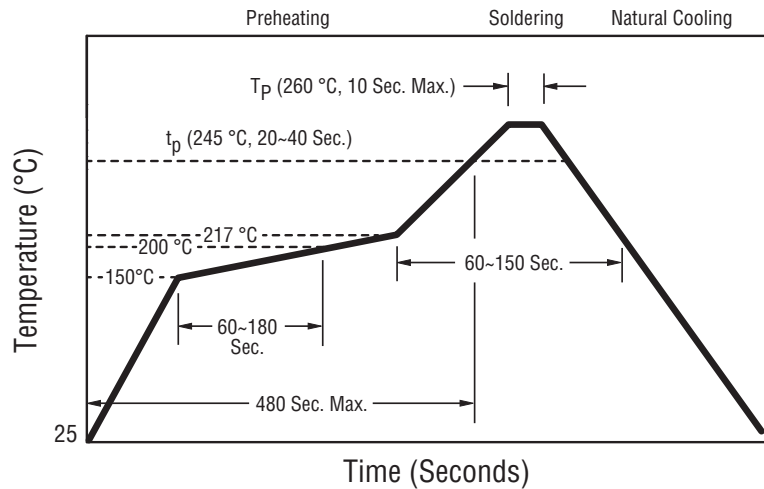


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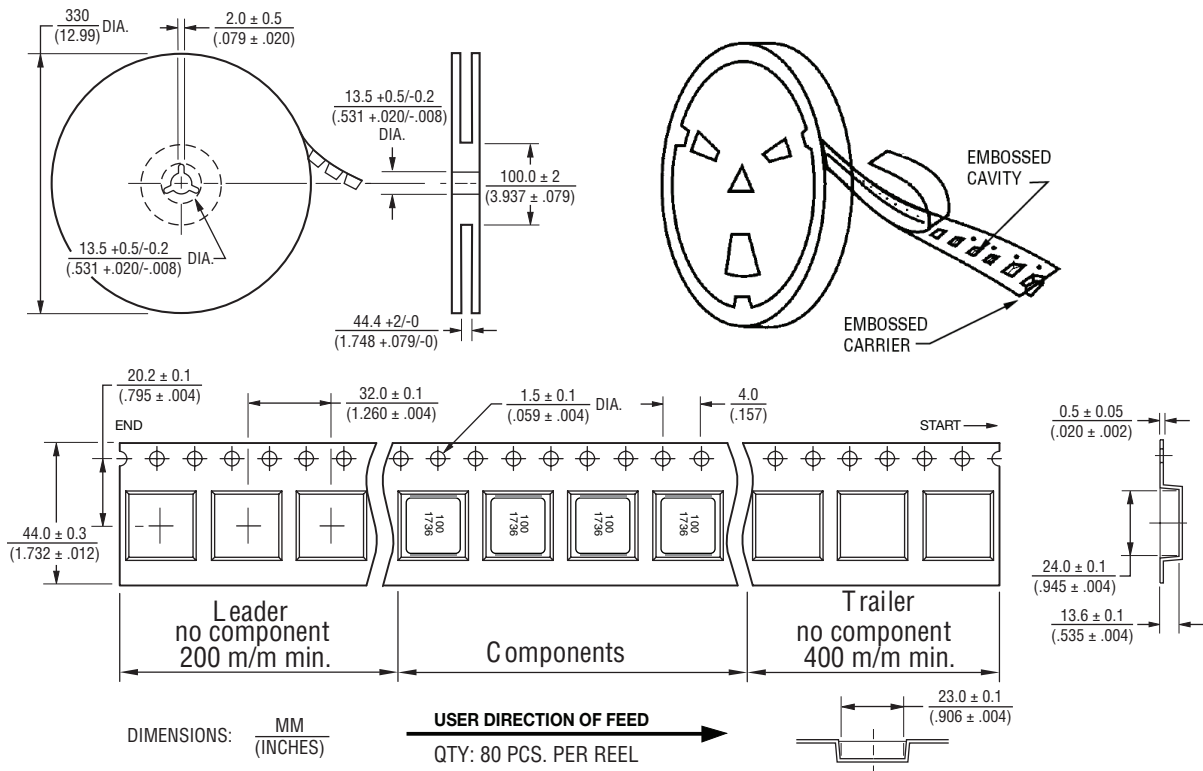
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**BOURNS®**

## Soldering Profile



## Packaging Specifications



REV. 05/23/18

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