



### Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Inductance range 1.5 to 68  $\mu$ H
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*

### Applications

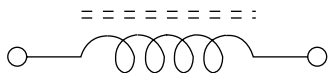
- Automotive systems:
  - Driver assistant
  - Infotainment
  - Lighting
- DC/DC converters
- Power supplies

## 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) Max.	Isat (A) Max.	Terminal Type
	L ( $\mu$ H)	Tol. (%)							
SRP2313AA-1R5M	1.5	20	60	21	1.0	1.15	57	48	Lead Frame
SRP2313AA-2R2M	2.2	20	60	19	1.05	1.25	52	43	Lead Frame
SRP2313AA-3R3M	3.3	20	60	15	1.5	1.75	47	37	Lead Frame
SRP2313AA-4R7M	4.7	20	40	11	1.9	2.2	44	34	Lead Frame
SRP2313AA-6R8M	6.8	20	40	9	2.7	3.1	36	32	Lead Frame
SRP2313AA-100M	10	20	40	7	3.8	4.15	30	20	Lead Frame
SRP2313AA-220M	22	20	30	5	9.2	11	18	14	Lead Frame
SRP2313AA-230M	23	20	30	5	9.2	11	18	14	Lead Frame
SRP2313AA-330M	33	20	30	4	13.5	15.4	16	10.5	Lead Frame
SRP2313AA-470M	47	20	20	3.5	17.3	20.8	14	10	Lead Frame
SRP2313AA-680M	68	20	20	3	26.2	29.5	12	9	Lead Frame

### Electrical Schematic

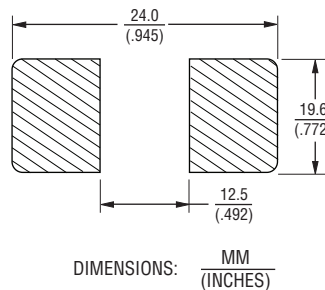


### How to Order

**SRP2313AA - 100M**

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

### Recommended Layout



### General Specifications

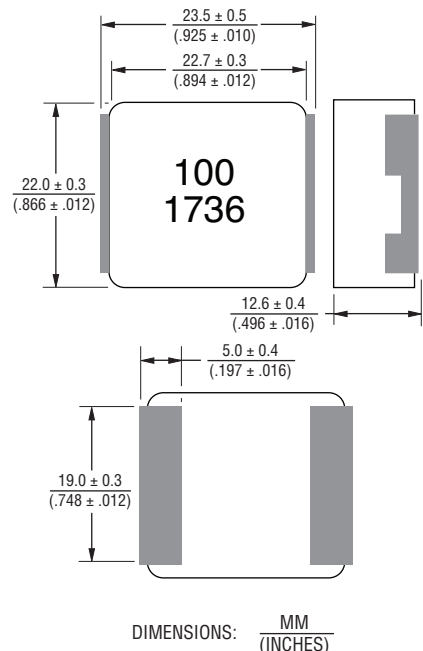
Operating Temperature .....-55 °C to +155 °C  
(Temperature rise included)  
Storage Temperature (Component) .....-55 °C to +155 °C  
Rated Current ..... Inductance drops 30 % at Isat  
Temperature Rise ... 40 °C at rated I<sub>rms</sub><sup>1</sup>  
Moisture Sensitivity Level ..... 1  
ESD Classification (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 ..... 120 pcs. per 13-inch reel

### Product Dimensions



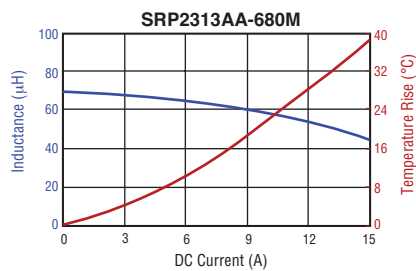
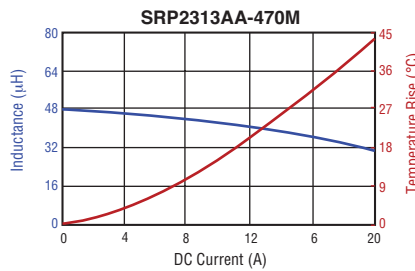
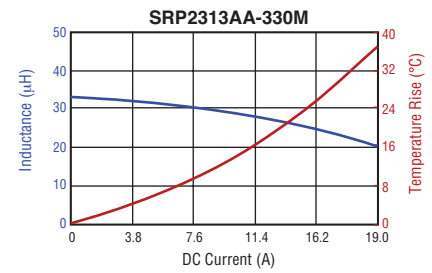
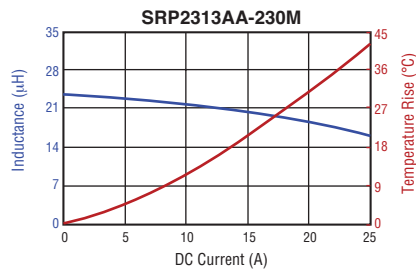
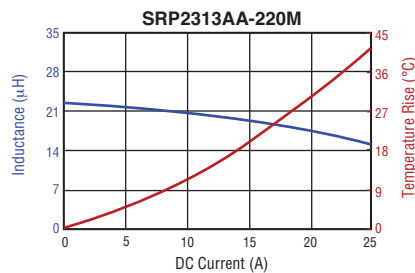
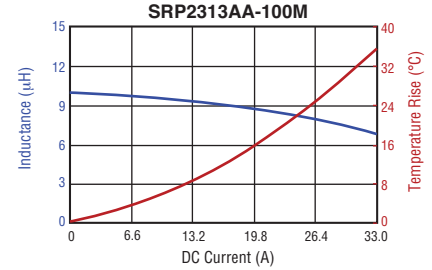
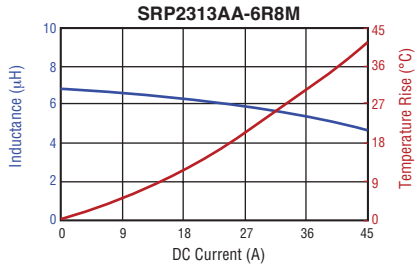
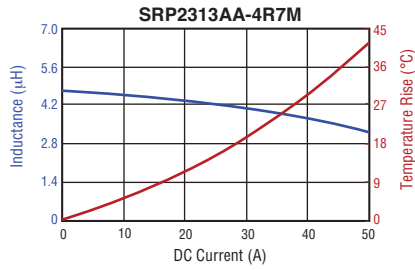
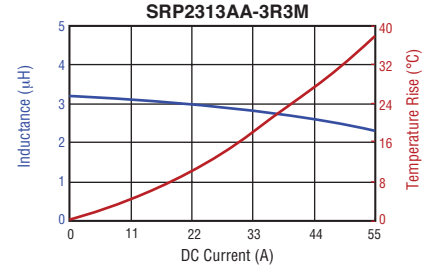
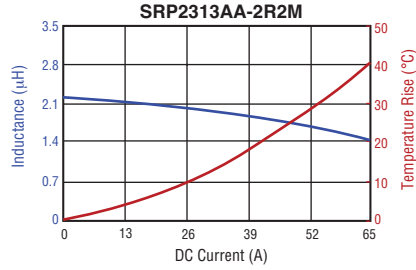
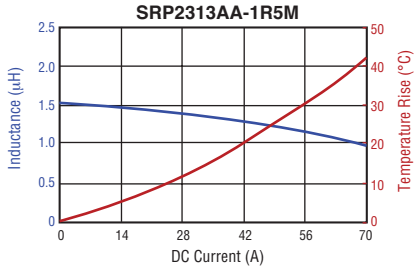
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\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
\*\*Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or 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.  
Users should verify actual device performance in their specific applications.

# SRP2313AA Series - Shielded Power Inductors



## L vs. I Charts

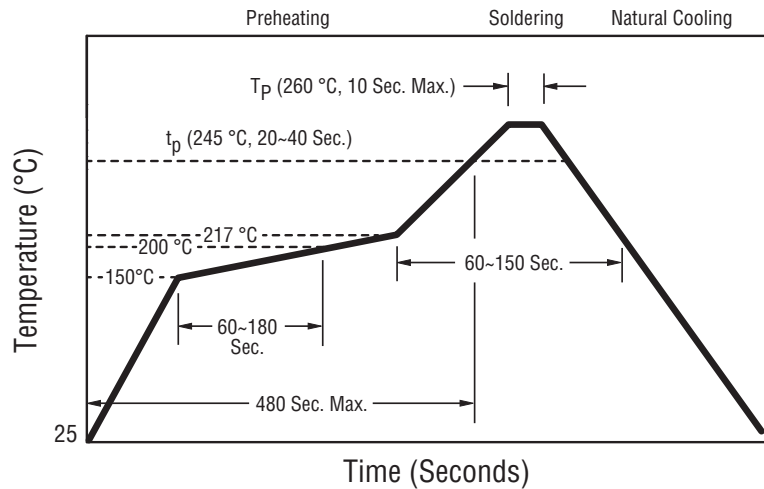


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**BOURNS®**

## Soldering Profile



## Packaging Specifications

