



## Features

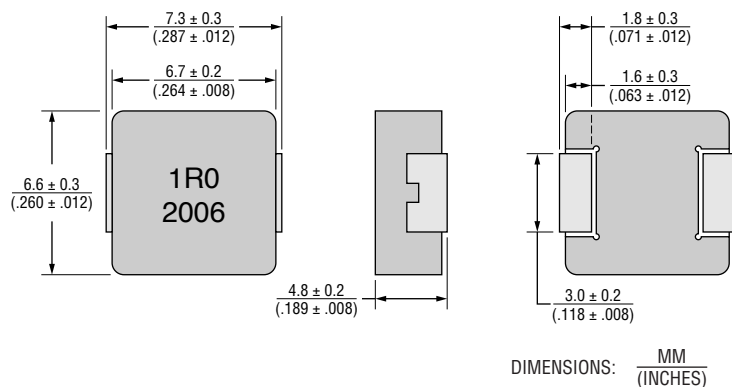
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## SRP7050AA Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V		Q (Typ.) @100 KHz / 1 V	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A) Typ.	Isat (A) Typ.
	L (μH)	Tol. (%)						
SRP7050AA-R47Y	0.47	20	10	89	2.9	3.3	22	22
SRP7050AA-R68M	0.68	20	10	65	3.6	4.1	20	20
SRP7050AA-1R0M	1.0	20	10	47	5.6	6.2	17	16
SRP7050AA-1R5M	1.5	20	10	32	6.6	7.3	15	13
SRP7050AA-2R2M	2.2	20	10	24	10	11.5	14	10
SRP7050AA-3R3M	3.3	20	10	21	14	16.2	13	9.5
SRP7050AA-4R7M	4.7	20	10	19	20.8	24	11	8.8
SRP7050AA-6R8M	6.8	20	10	14	30	36	9.0	7.6
SRP7050AA-8R2M	8.2	20	10	13	38.5	45	7.5	6.5
SRP7050AA-100M	10	20	10	12	44	53	7.0	6.0
SRP7050AA-150M	15	20	10	10	73	85	5.0	4.0
SRP7050AA-220M	22	20	10	8	122	142	4.2	3.6
SRP7050AA-470M	47	20	10	6	275	320	2.6	1.8

### Product Dimensions



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www.bourns.com



**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

.....-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 Irms!

Moisture Sensitivity Level..... 1

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

1 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

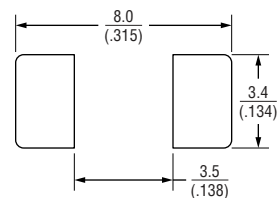
Wire..... Enameled copper

Terminal Finish ..... Sn

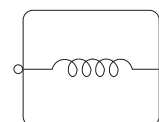
Packaging..... 800 pcs. per 13-inch reel

Please consult [Bourns® Model SRP-A Series Visual Inspection Guide](#) for detailed construction, processing and testing information.

### Recommended Layout



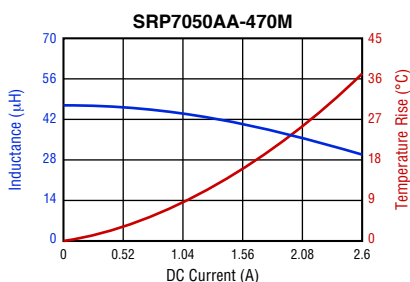
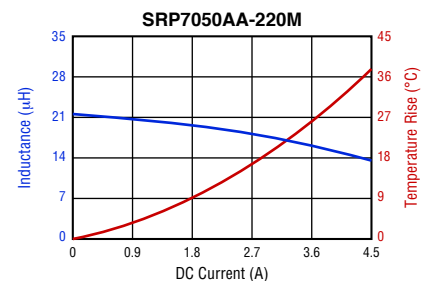
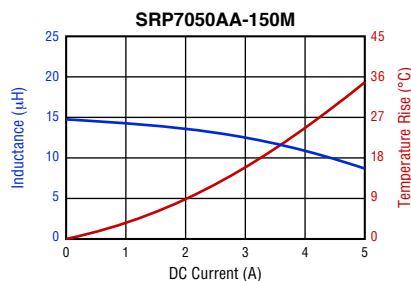
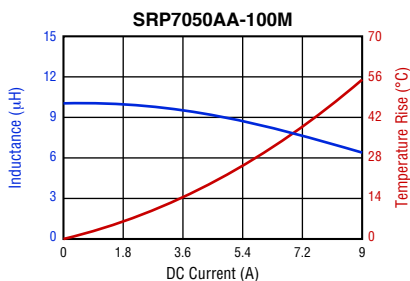
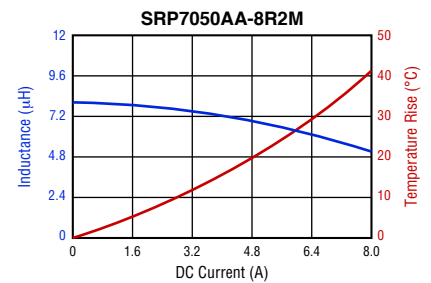
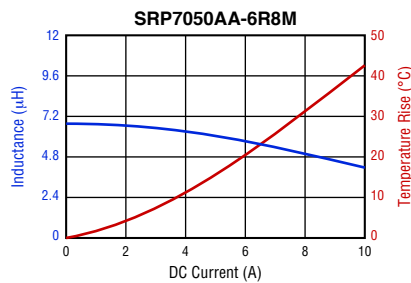
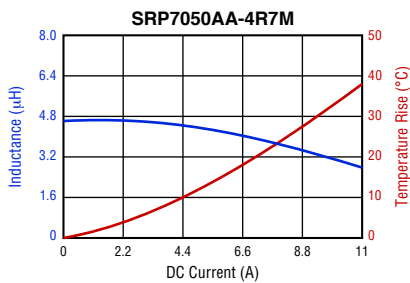
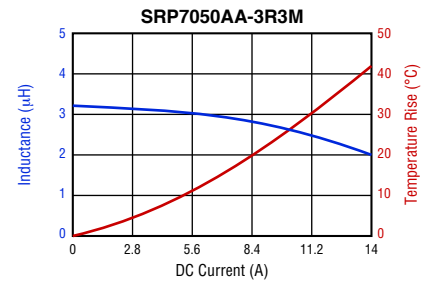
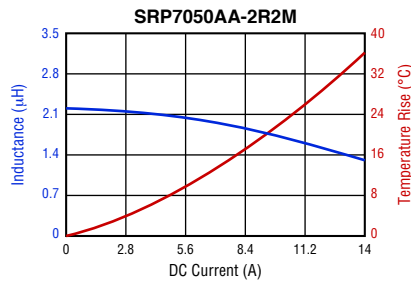
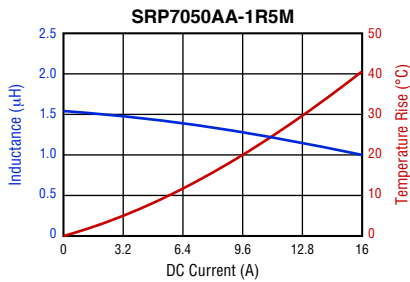
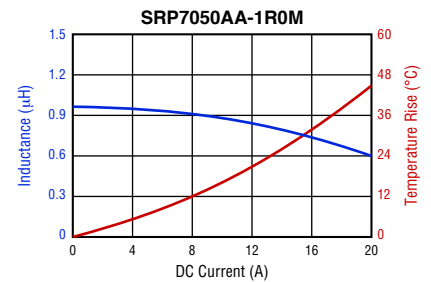
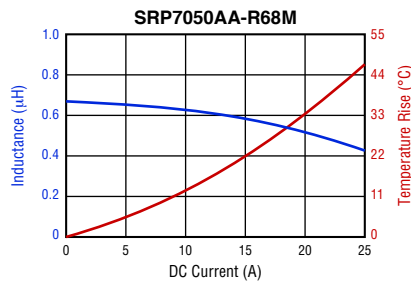
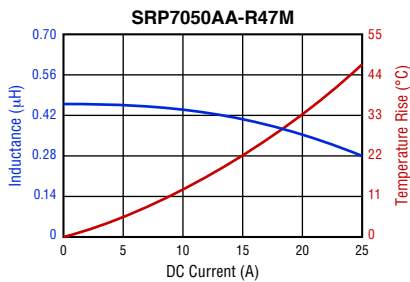
### Electrical Schematic



# SRP7050AA Series - Shielded Power Inductors

**BOURNS®**

## L vs. I Charts

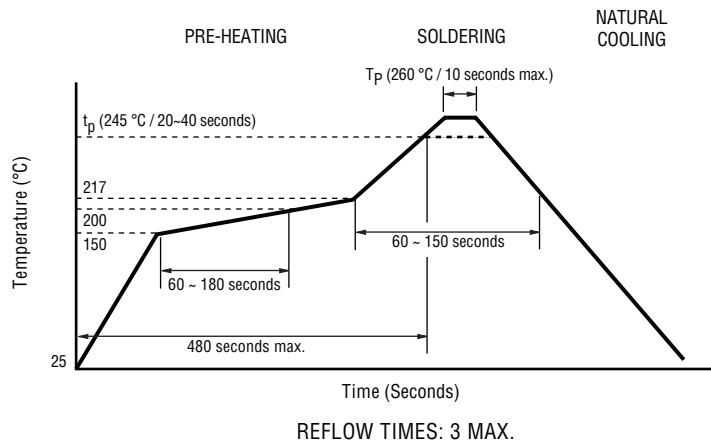


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## SRP7050AA Series - Shielded Power Inductors

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### Soldering Profile



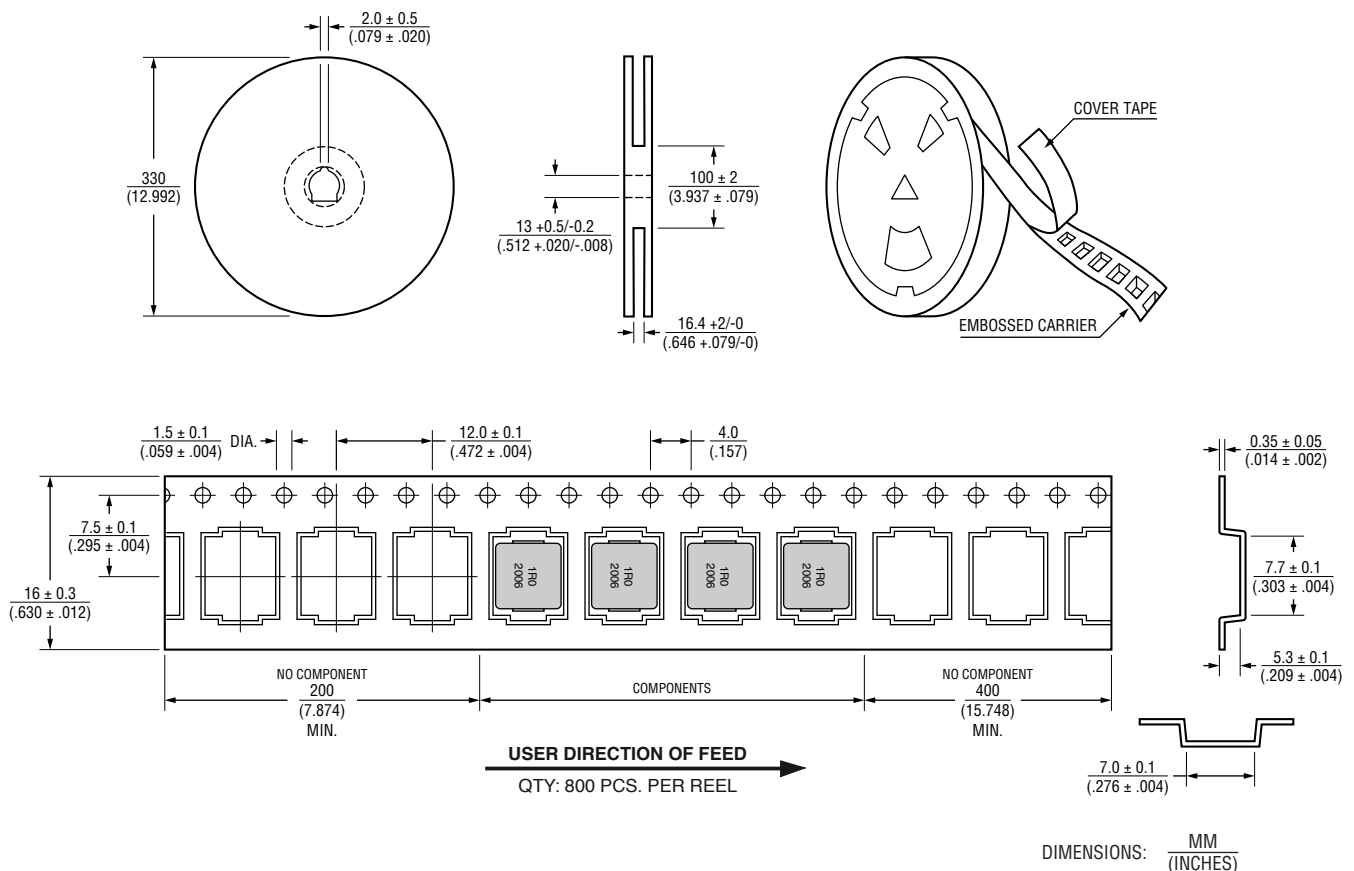
### How to Order

**SRP7050AA - 1R0M**

Model \_\_\_\_\_

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

### Packaging Specifications



02/21

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