

Features

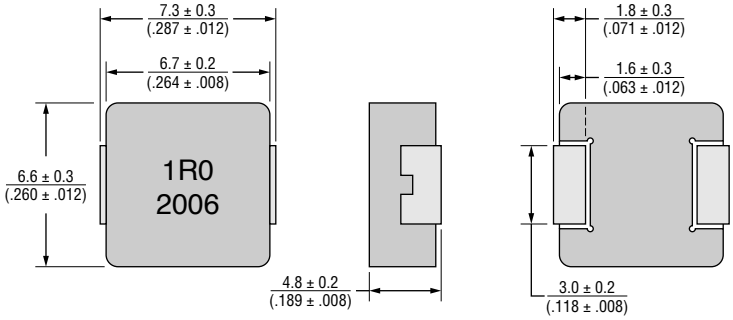
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

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



DIMENSIONS: MM (INCHES)

BOURNS®

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EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com
The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com
www.bourns.com

WARNING
Cancer and Reproductive Harm
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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Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

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[1]
Moisture Sensitivity Level.....1
ESD Classification (HBM).....N/A

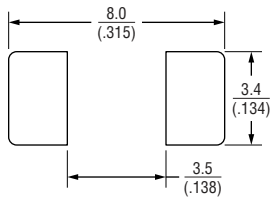
[1] Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

Core.....Metal alloy powder
Wire .....Enameled copper
Terminal Finish .....Sn
Packaging..... 800 pcs. per 13-inch reel

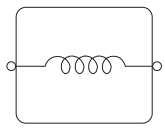
Please consult *Bourns® Model SRP-A Series Visual Inspection Guide* for detailed construction, processing and testing information.

Recommended Layout



DIMENSIONS: MM (INCHES)

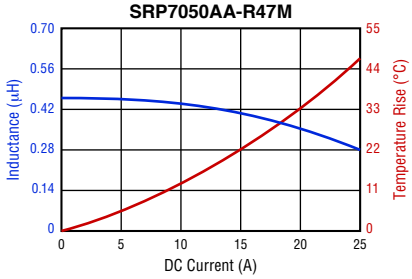
Electrical Schematic



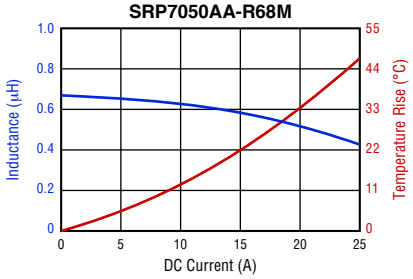
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L vs. I Charts

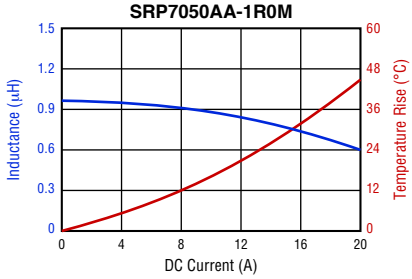
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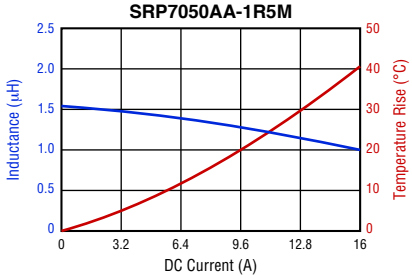
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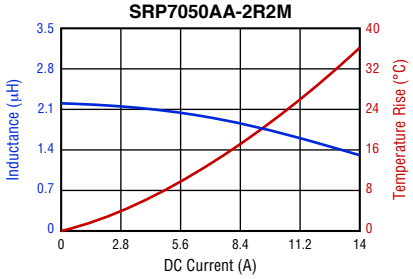
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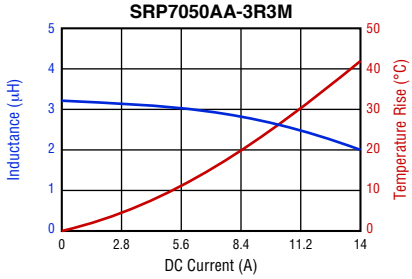
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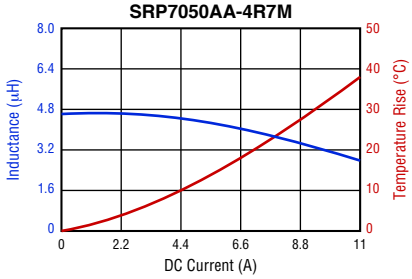
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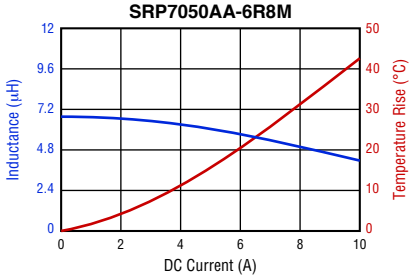
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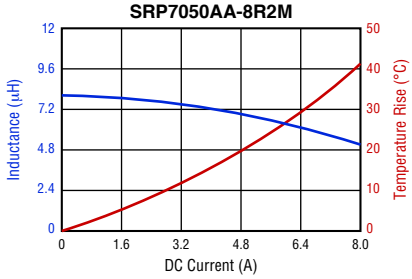
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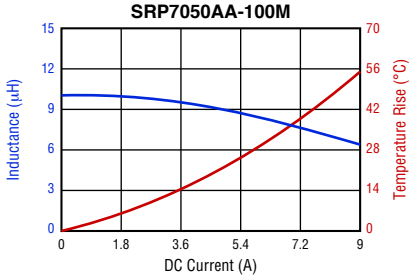
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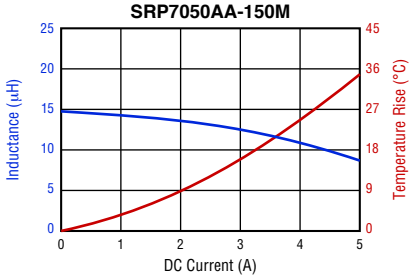
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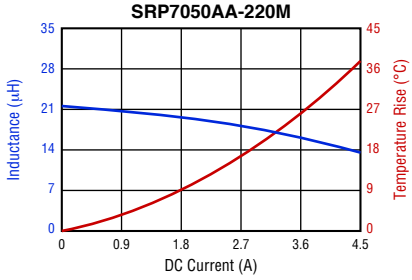
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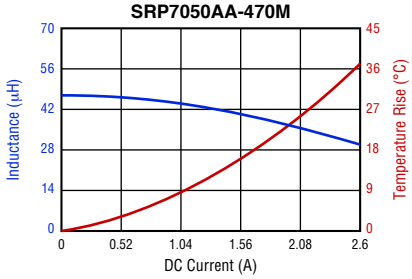
SRP7050AA-150M



SRP7050AA-220M



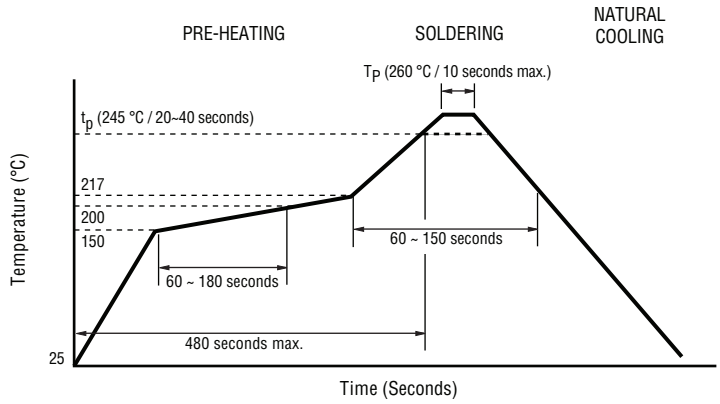
SRP7050AA-470M



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Soldering Profile



REFLOW TIMES: 3 MAX.

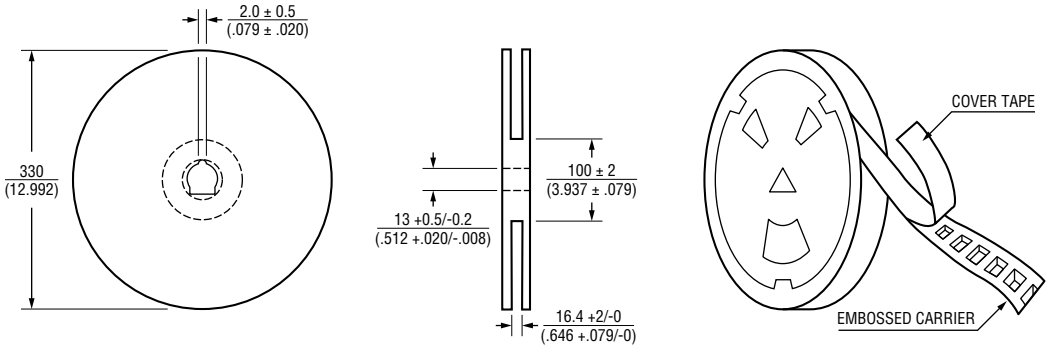
How to Order

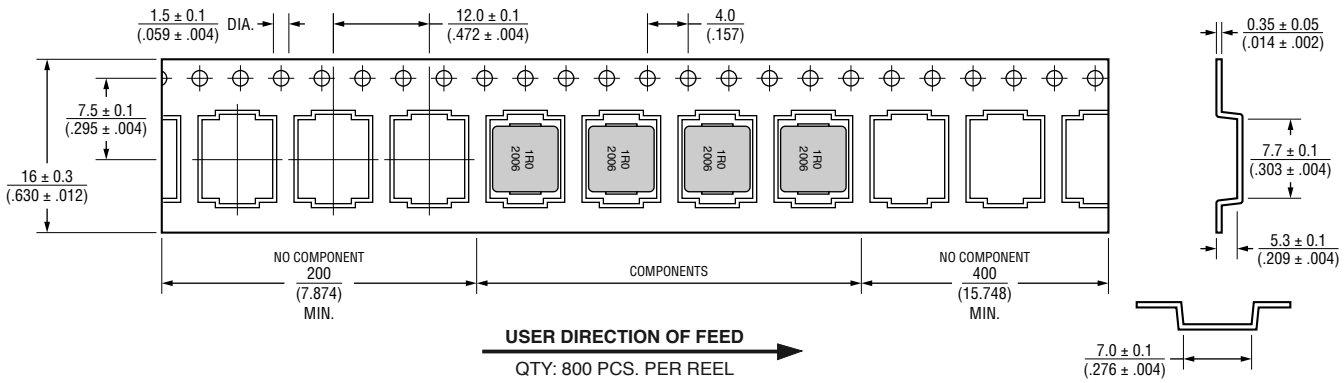
SRP7050AA - 1R0M

Model

Value Code (see table)

Packaging Specifications





DIMENSIONS: MM (INCHES)

02/21

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