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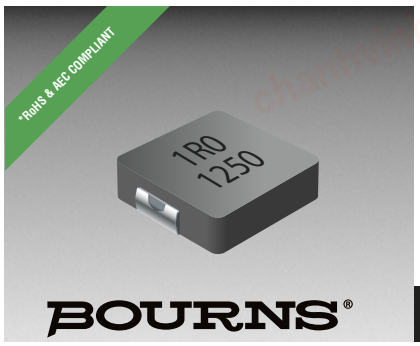


Features

- Shielded construction
- Carbonyl powder core
- High saturation current
- Inductance range: 0.10 to 33 µH
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

BOURNS®

SRP7028A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V L (µH)	Tol. (%)	Q (Min.) @100 KHz / 1 V	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A)	Isat (A)	Terminal Type
SRP7028A-R10M	0.10	± 20	5	300	1.2	1.7	32.5	60	Lead Frame
SRP7028A-R15Y	0.15	± 30	5	220	1.5	1.9	27	45	
SRP7028A-R22Y	0.22	± 30	5	150	2.1	2.8	23	40	
SRP7028A-R33M	0.33	± 20	10	140	3.5	3.9	20	32	
SRP7028A-R47M	0.47	± 20	10	80	4	4.2	17.5	26	
SRP7028A-R56M	0.56	± 20	15	70	4.7	5.0	16.5	25.5	
SRP7028A-R68M	0.68	± 20	15	67	4.8	5.5	15.5	25	
SRP7028A-R75M	0.75	± 20	15	65	5.5	6.6	14.5	24.5	
SRP7028A-R82M	0.82	± 20	15	61	6.7	8.0	13	24	
SRP7028A-1R0M	1.0	± 20	20	58	8.3	10.0	11	22	
SRP7028A-1R5M	1.5	± 20	20	38	13	15.0	9	18	
SRP7028A-1R8M	1.8	± 20	20	36	14	17.0	8.5	16	
SRP7028A-2R2M	2.2	± 20	20	32	18	20.0	8	14	
SRP7028A-2R5M	2.5	± 20	20	30	20	22.0	7	13	
SRP7028A-3R3M	3.3	± 20	20	25	28	30.0	6	12	
SRP7028A-4R7M	4.7	± 20	20	21	37	40.0	5.5	10	
SRP7028A-5R6M	5.6	± 20	20	19	43	48.0	5	9	
SRP7028A-6R8M	6.8	± 20	20	18	54	60.0	4.5	8	
SRP7028A-8R2M	8.2	± 20	20	17	64	68.0	4	7.5	
SRP7028A-100M	10	± 20	20	14	75	85.0	3.5	6	
SRP7028A-150M	15	± 20	20	12	107	123.0	3.0	4	
SRP7028A-220M	22	± 20	20	10	165	190.0	2.0	3.5	
SRP7028A-330M	33	± 20	20	8	200	240.0	2.0	2.5	

How to Order

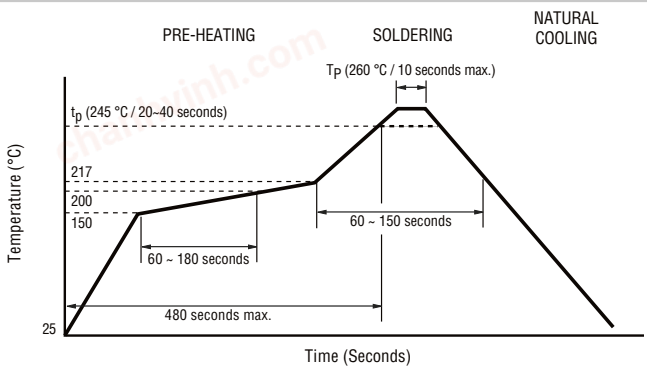
SRP7028A - 100M

Model

Value Code (see table)

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

Soldering Profile



REFLOW TIMES: 3 MAX.

WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* 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.

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General Specifications

Test Voltage ..... 1.0 V
Test Frequency ..... 100 KHz
Operating Temperature
..... -40 °C to +150 °C
(Temperature rise included)
Storage Temperature .. -40 °C to +125 °C
Rated Current
..... Inductance drops 20 % at Isat
Temperature Rise ..... 40 °C at rated Irms
Resistance to Soldering Heat
..... +260 °C, 40 sec. max.
Moisture Sensitivity Level 1
ESD Classification (HBM) ..... N/A

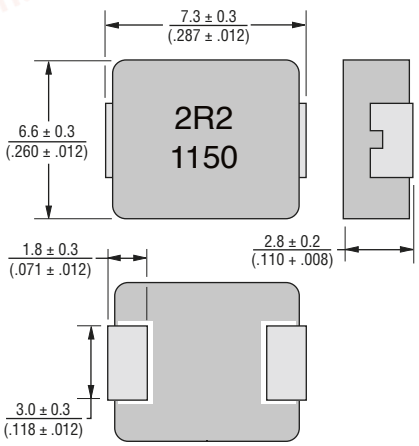
[1] Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

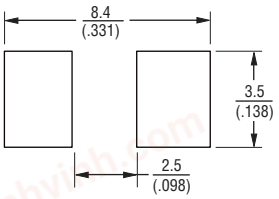
Core ..... Carbonyl powder
Wire ..... Enameled copper
Terminal Finish ..... Sn
Packaging ..... 1000 pcs. per 13-inch reel

Product Dimensions

Lead Frame Terminal



Recommended Layout



DIMENSIONS: MM (INCHES)

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SRP7028A Series - Shielded Power Inductors

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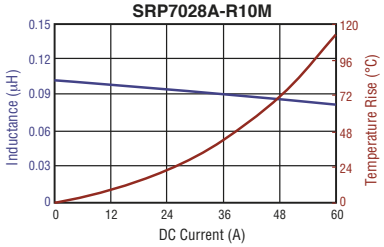
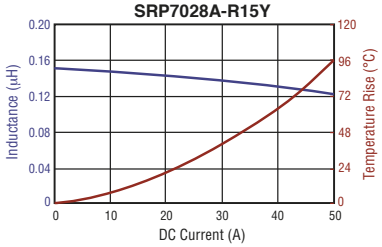
L vs. I Charts

SRP7028A-R10M



SRP7028A-R15Y



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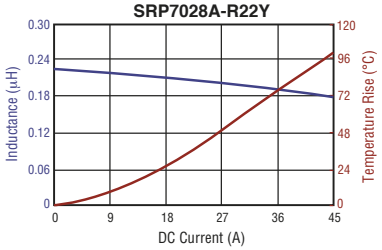

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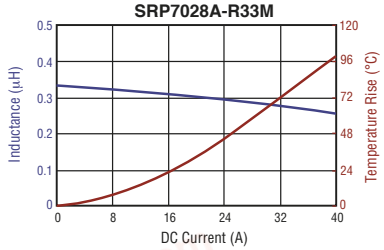

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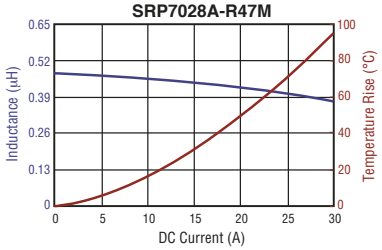
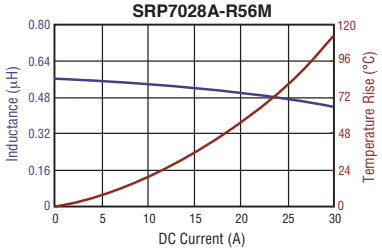
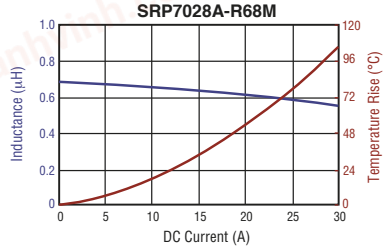


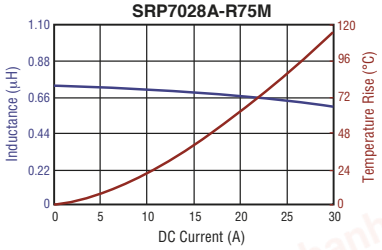
SRP7028A-R56M



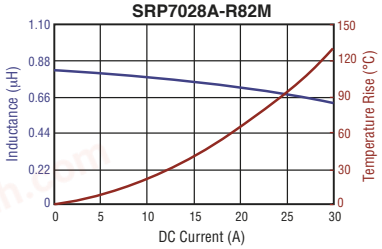
SRP7028A-R68M



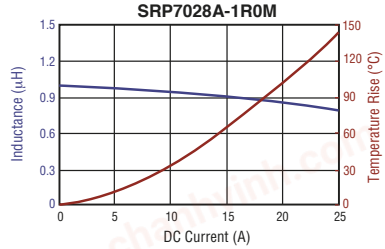
SRP7028A-R75M



SRP7028A-R82M



SRP7028A-1R0M



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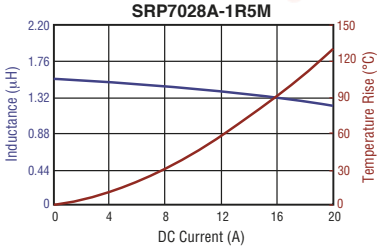

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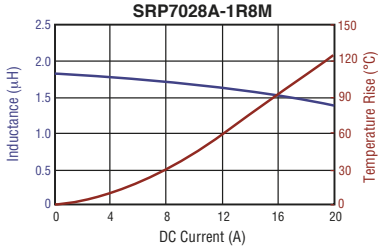

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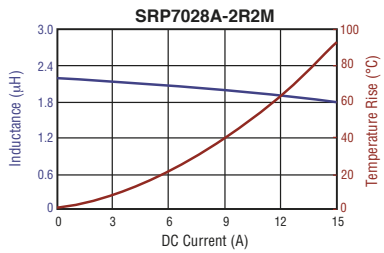
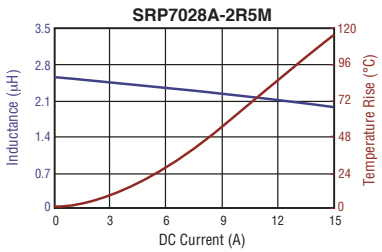
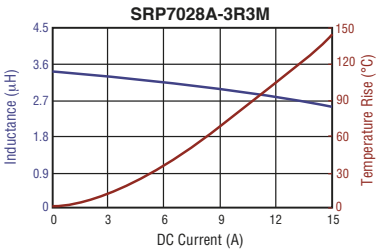


SRP7028A-2R5M



SRP7028A-3R3M



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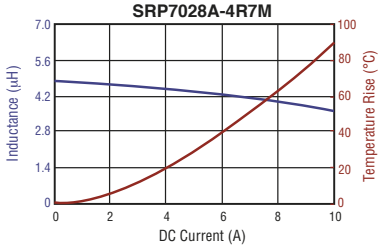
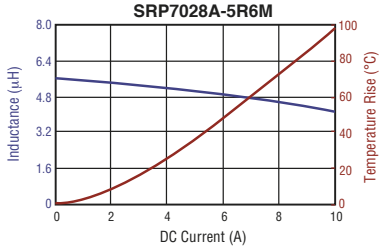
L vs. I Charts (Continued)

SRP7028A-4R7M



SRP7028A-5R6M



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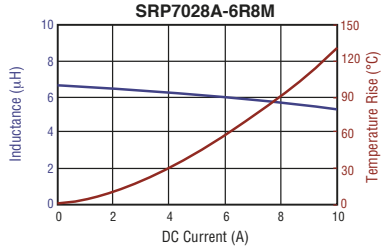

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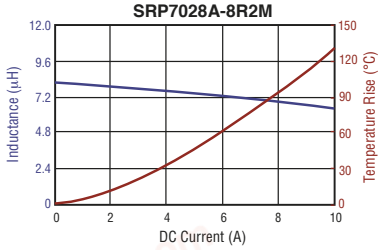
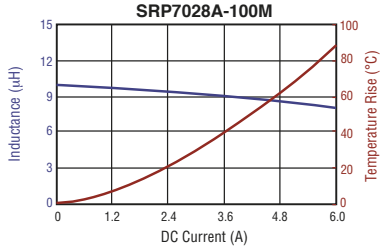


SRP7028A-100M



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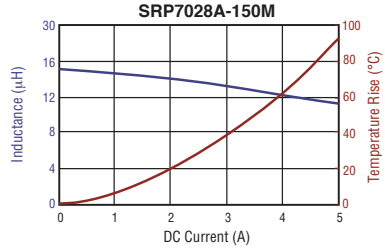
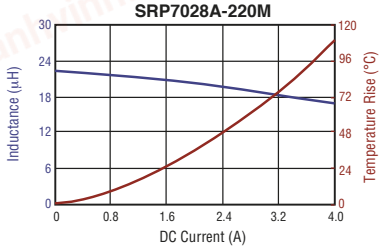
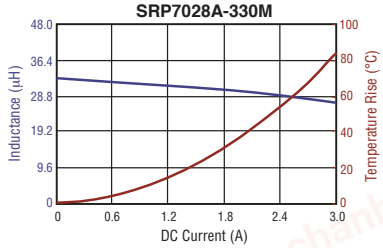


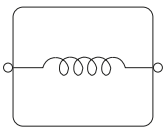
SRP7028A-220M



SRP7028A-330M



Electrical Schematic



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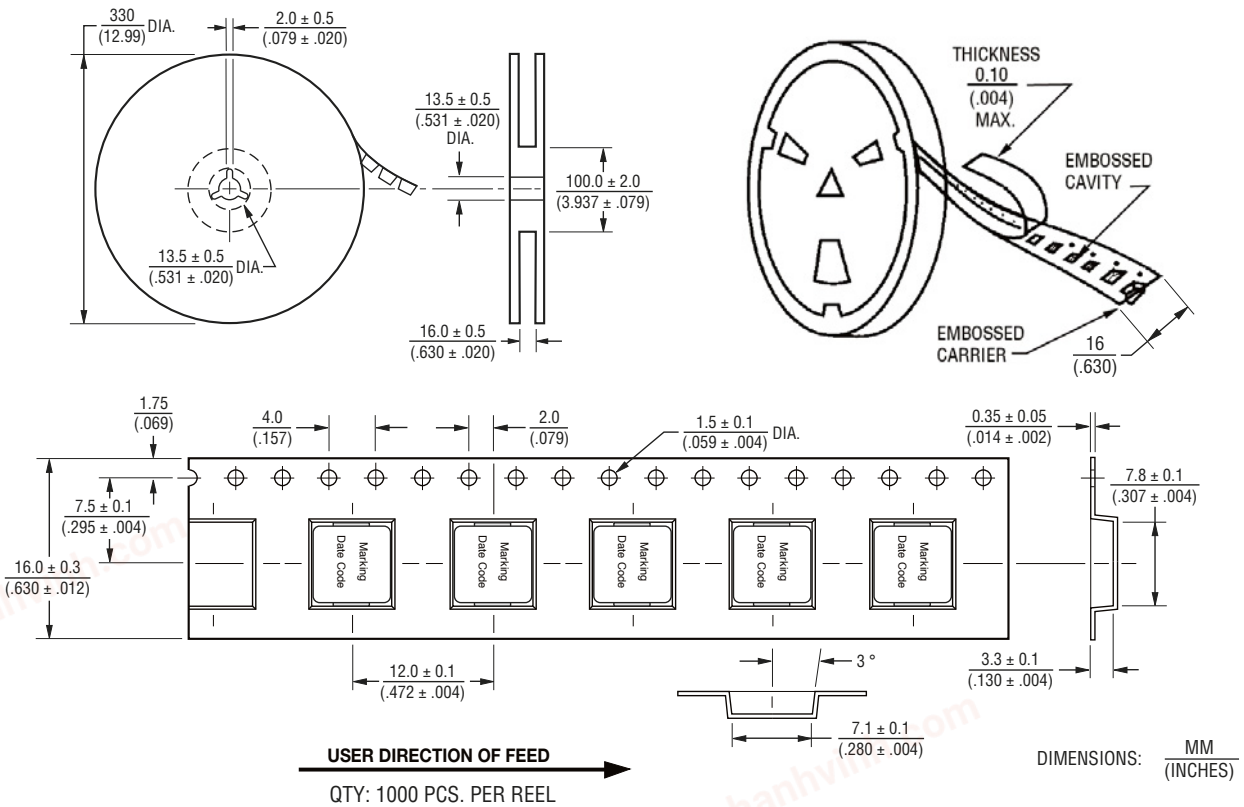
Packaging Specifications



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