



BOURNNS®

Features

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

SRP7028A 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 Ω) Typ.	DCR (m Ω) Max.	Irms (A)	Isat (A)	Terminal Type
	L (μ H)	Tol. (%)							
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	

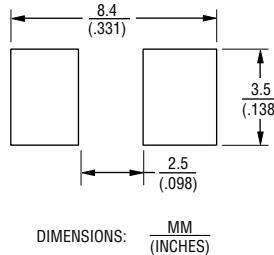
How to Order

SRP7028A - 100M

Model _____

Value Code (see table) _____

Recommended Layout



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:



General Specifications

Test Voltage 1.0 V

Test Frequency 100 KHz

Operating Temperature -55 °C to +150 °C

(Temperature rise included)

Storage Temperature ... -55 °C to +150 °C

Rated Current Inductance drops 20 % 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 Carbonyl powder

Wire Enamelled copper

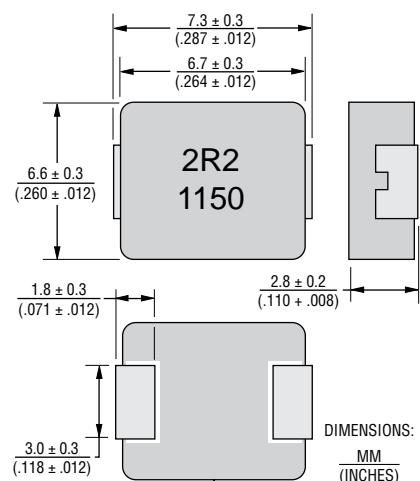
Terminal Finish Sn

Packaging 1000 pcs. per 13-inch reel

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

Product Dimensions

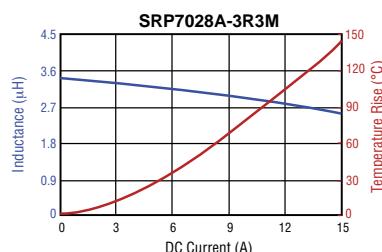
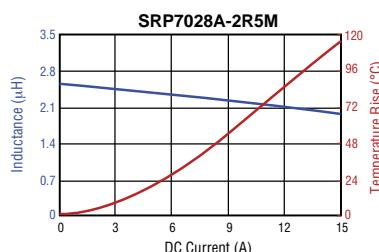
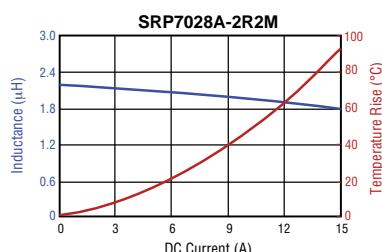
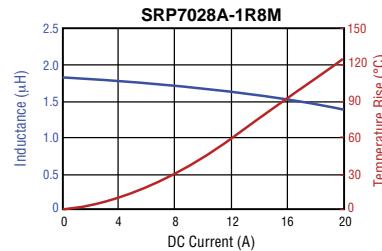
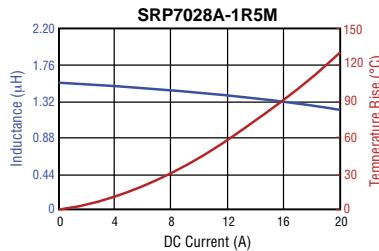
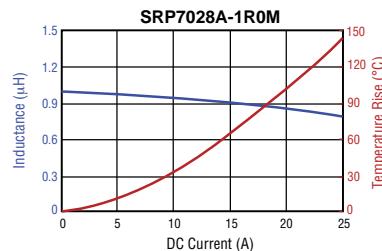
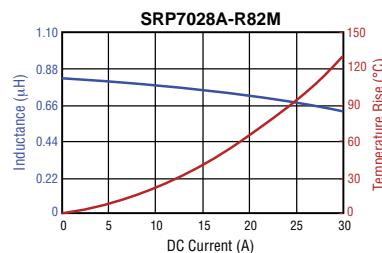
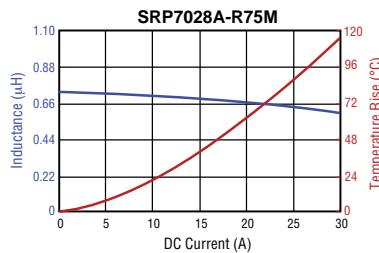
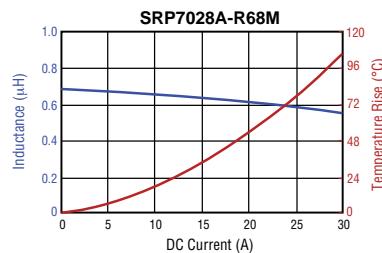
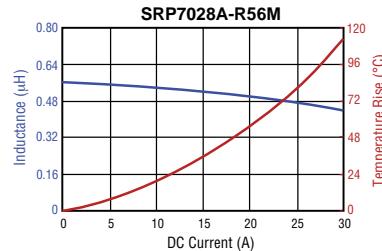
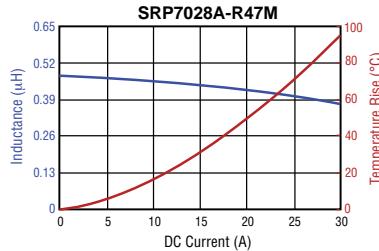
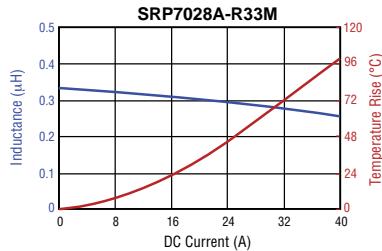
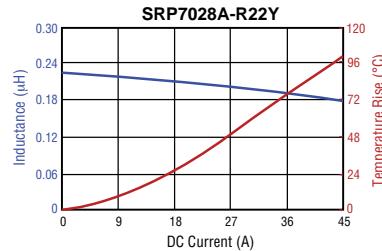
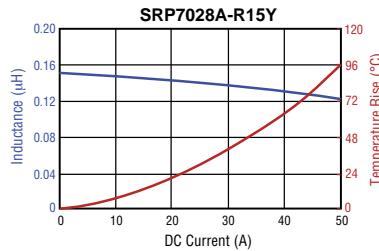
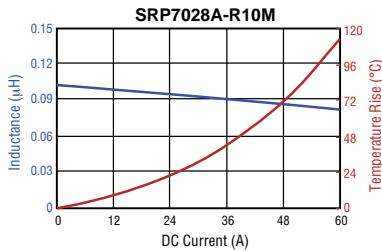
Lead Frame Terminal



SRP7028A Series - Shielded Power Inductors

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L vs. I Charts



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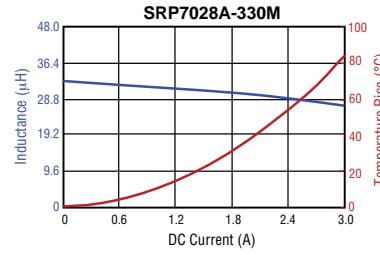
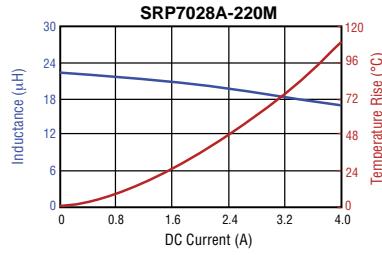
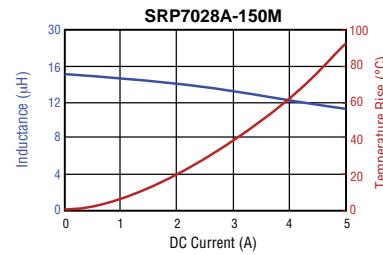
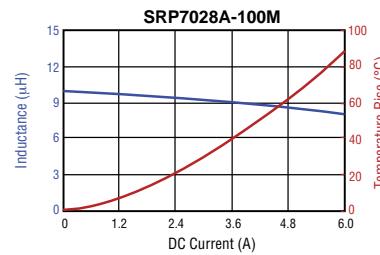
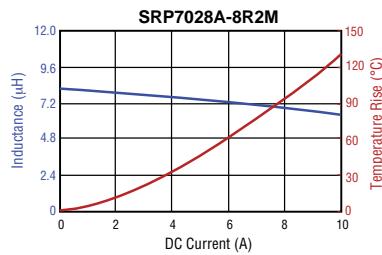
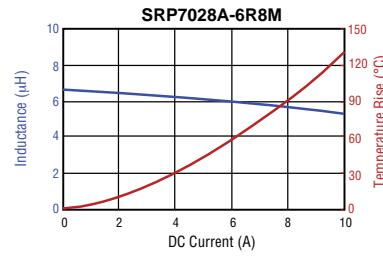
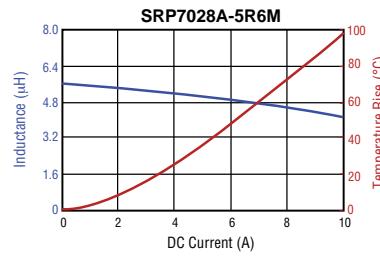
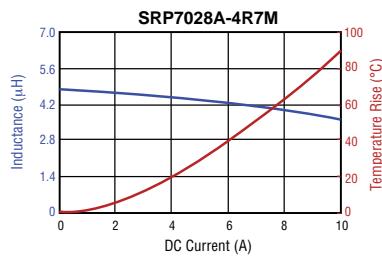
Users should verify actual device performance in their specific applications.

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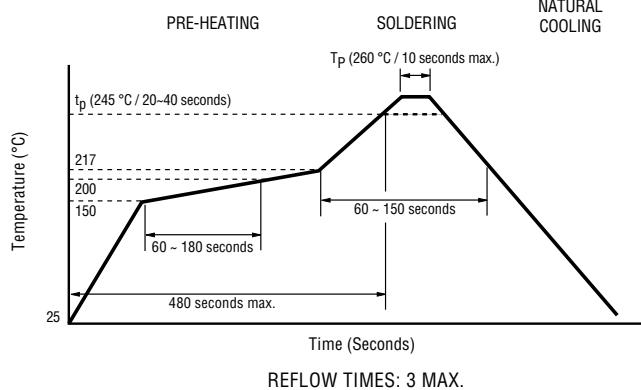
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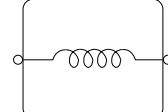
L vs. I Charts (Continued)



Soldering Profile



Electrical Schematic



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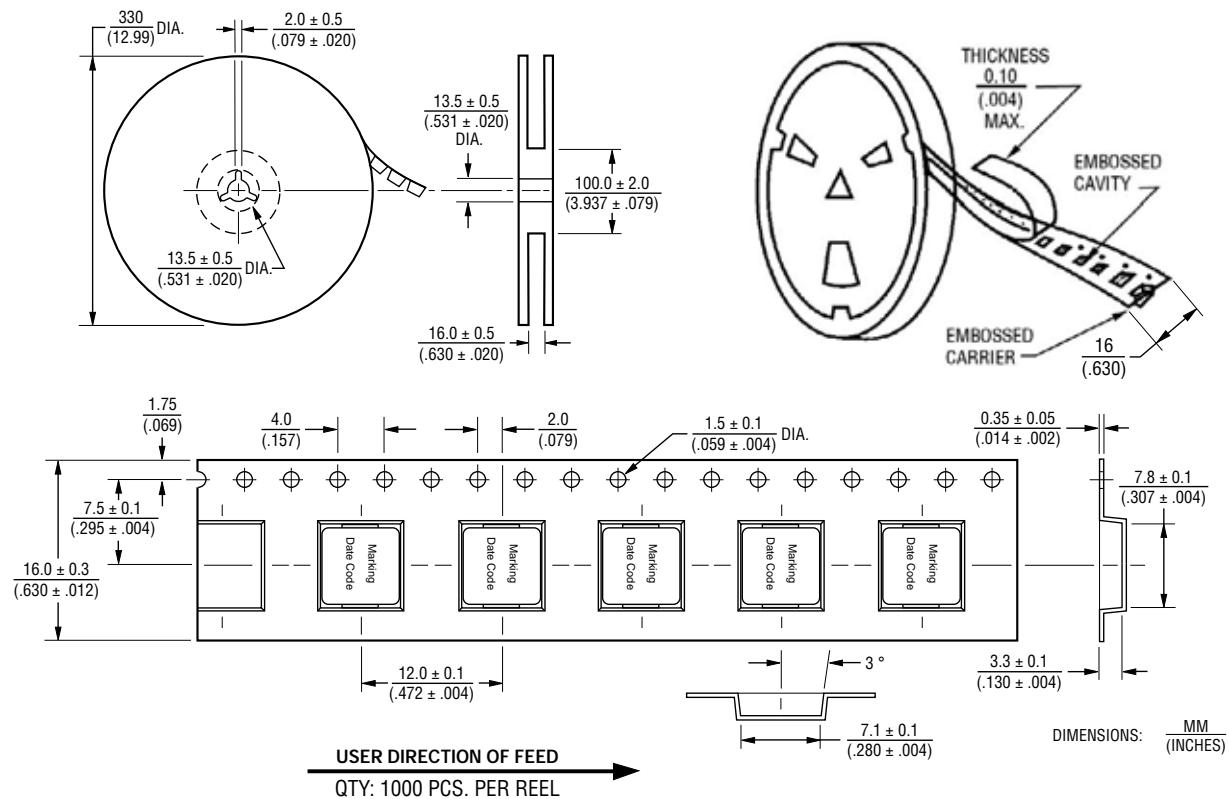
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Packaging Specifications



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