



Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range: 0.10 to 22 μ H
- RoHS compliant* and halogen free**

SRP7028C 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.	I _{rms} (A) Typ.	Isat (A) Typ.	Terminal Type
	L (μ H)	Tol. (%)							
SRP7028C-R10M	0.10	± 20	5	196	1.2	1.7	37.5	60.0	Lead Frame
SRP7028C-R15M	0.15	± 20	5	190	1.5	1.9	27.0	50.0	
SRP7028C-R24M	0.24	± 30	10	118	2.5	3.1	23.0	39.0	
SRP7028C-R25M	0.25	± 20	10	118	2.5	3.1	23.0	39.0	
SRP7028C-R33M	0.33	± 20	10	115	3.5	3.9	20.0	32.0	
SRP7028C-R47M	0.47	± 20	10	62	4.0	4.3	17.5	27.0	
SRP7028C-R68M	0.68	± 20	15	55	4.8	5.5	15.5	25.0	
SRP7028C-1R0M	1.00	± 20	15	45	8.3	10.0	11.0	22.0	
SRP7028C-1R5M	1.50	± 20	15	40	11.0	14.0	9.0	18.0	
SRP7028C-2R2M	2.20	± 20	15	32	15.0	18.0	8.0	14.0	
SRP7028C-3R3M	3.30	± 20	15	25	27.0	30.0	6.0	13.5	
SRP7028C-4R7M	4.70	± 20	15	21	37.0	40.0	5.5	10.0	
SRP7028C-6R8M	6.80	± 20	15	16	54.0	60.0	4.5	8.3	
SRP7028C-8R2M	8.20	± 20	15	15	60.0	66.0	4.1	6.8	
SRP7028C-100M	10.00	± 20	15	14	63.0	68.0	3.5	6.0	
SRP7028C-150M	15.00	± 20	20	12	107.0	123.0	3.0	4.0	
SRP7028C-220M	22.00	± 20	20	10	155.0	180.0	2.2	3.6	

How to Order

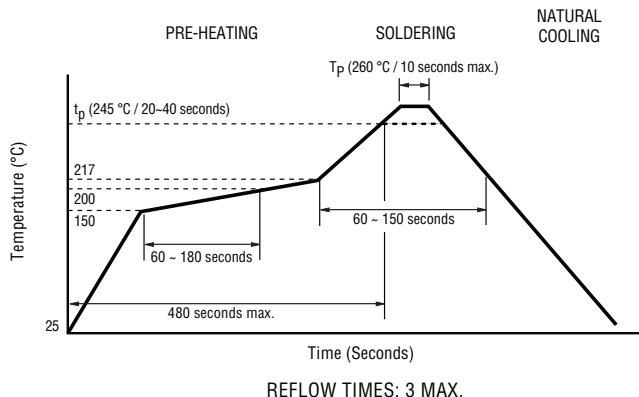
SRP7028C - 100M

Model

Value Code (see table)

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

Soldering Profile



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. Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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General Specifications

Operating Temperature

.....-40 °C to +125 °C
(Temperature rise included)

Storage Temperature (Component)

..... -40 °C to +125 °C

Rated Current

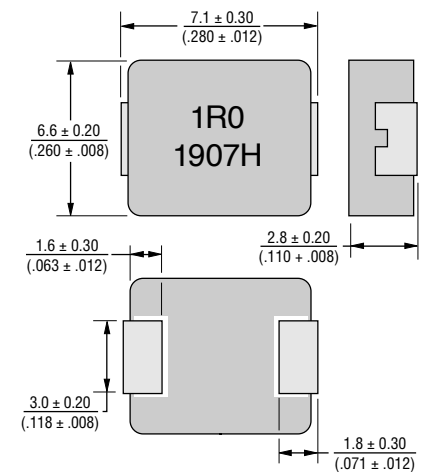
..... Inductance drops 30 % at Isat
Temperature Rise ... 40 °C at rated I_{rms}
Moisture Sensitivity Level..... 1
ESD Classification (HBM)..... N/A

Note 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.

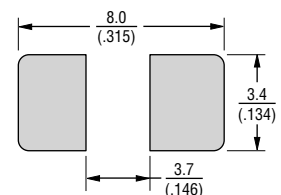
Materials

Core..... Metal alloy powder
Wire..... Enameled copper
Terminal Finish..... Sn/Ni
Packaging..... 1000 pcs. per 13-inch reel

Product Dimensions



Recommended Layout

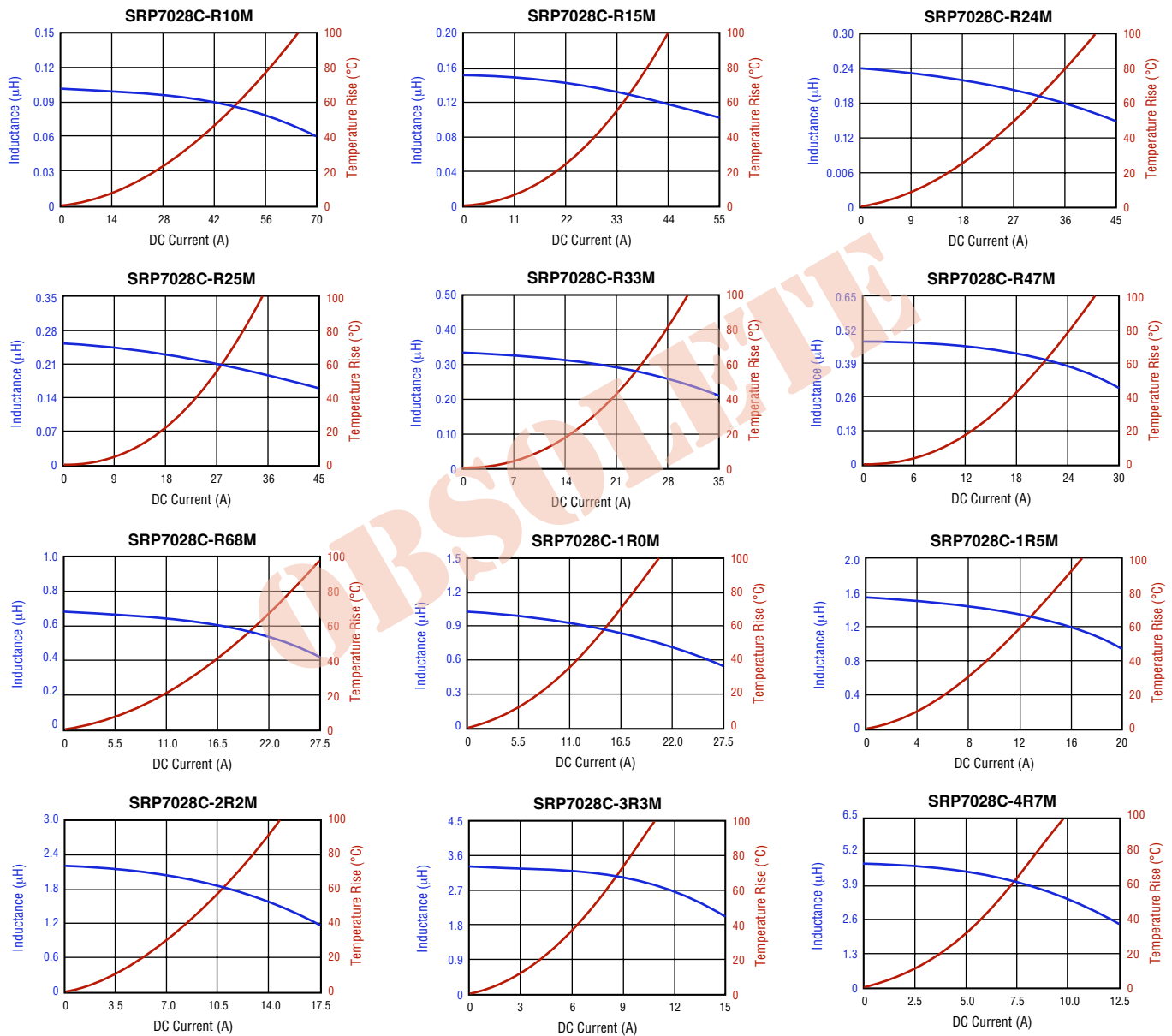


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

SRP7028C Series - Shielded Power Inductors

BOURNS®

L vs. I Charts



BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

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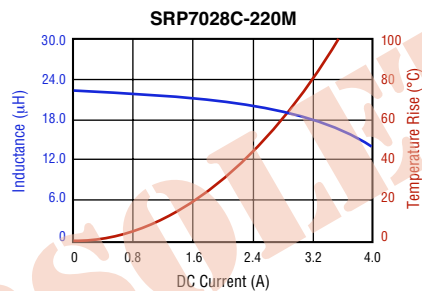
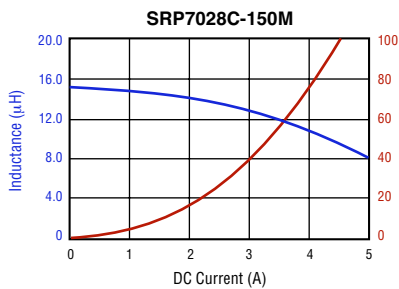
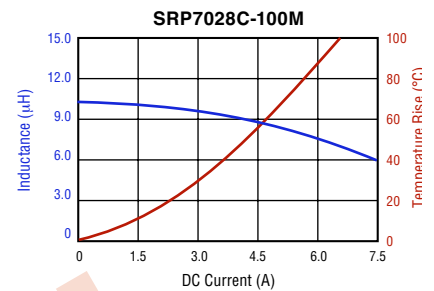
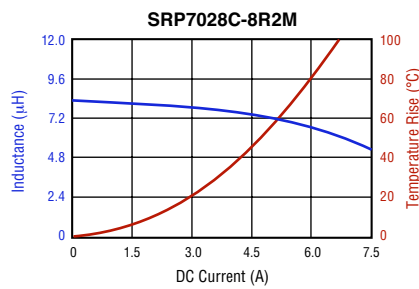
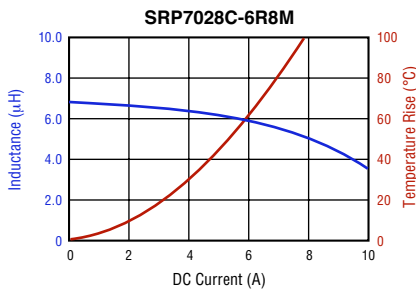
Users should verify actual device performance in their specific applications.

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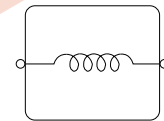
SRP7028C Series - Shielded Power Inductors

BOURNS®

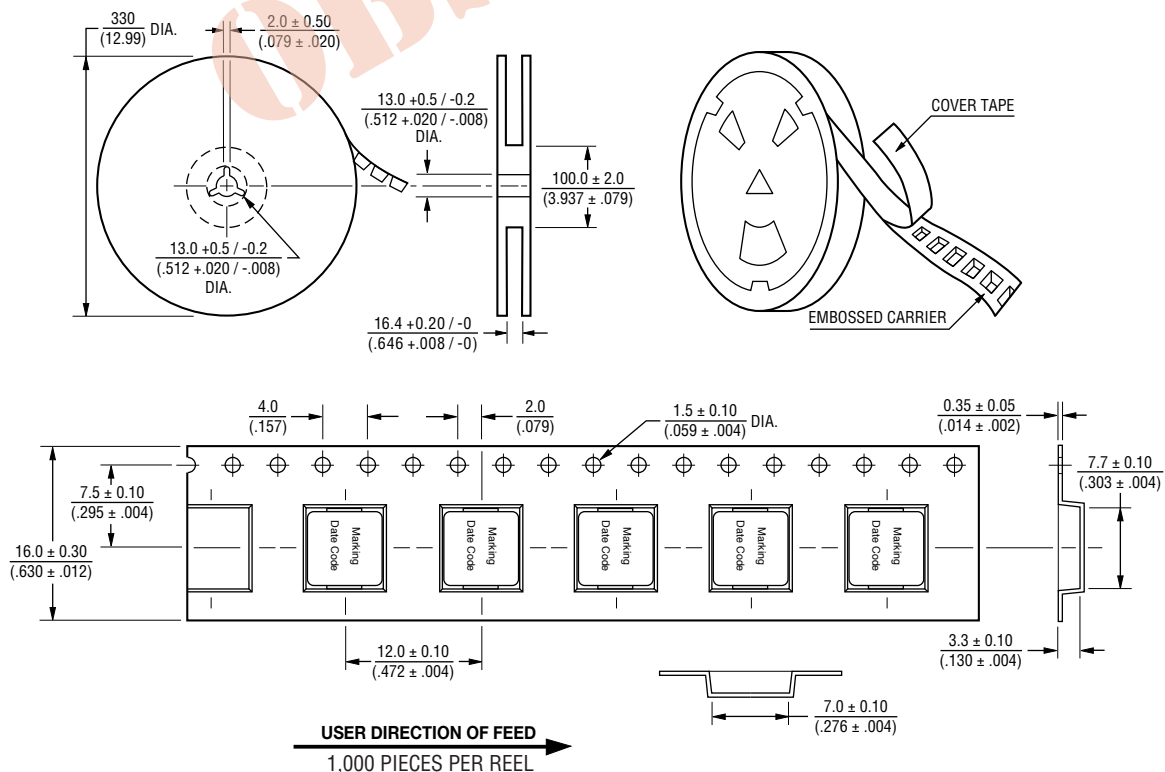
L vs. I Charts (Continued)



Electrical Schematic



Packaging Specifications



REV. 05/22

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