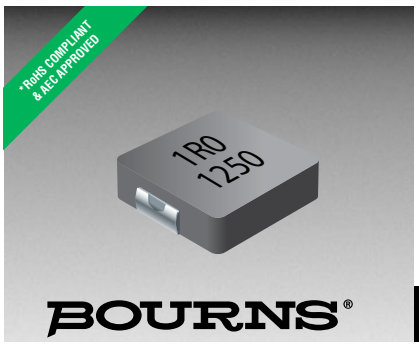
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Features

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

Applications

- Automotive systems:
  - Driver assistant
  - Information
  - Entertainment
  - Lighting
- DC/DC converters
- Power supplies

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	

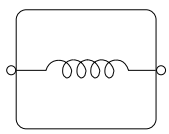
How to Order

SRP7028A - 100M

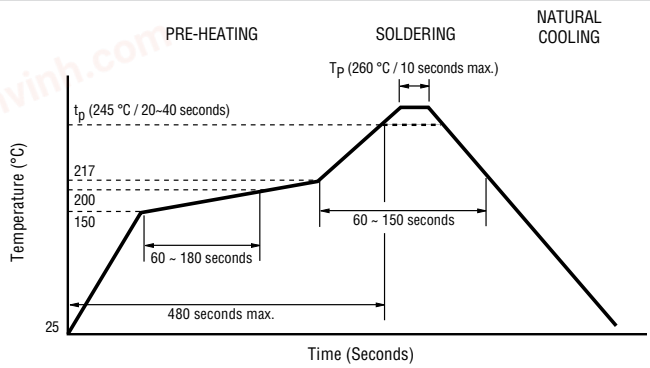
Model

Value Code (see table)

Electrical Schematic



Soldering Profile



REFLOW TIMES: 3 MAX.

General Specifications

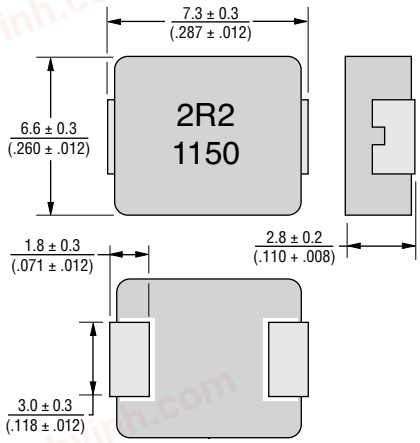
Test Voltage .....1.0 V
Test Frequency ..... 100 KHz
Operating Temperature
.....-40 °C to +150 °C
(Temperature rise included)
Storage Temperature .. -40 °C to +125 °C
Rated Current
..... Inductance drops 20 % at Isat
Temperature Rise .....40 °C at rated Irms
Resistance to Soldering Heat
..... +260 °C, 40 sec. max.
Moisture Sensitivity Level.....1
ESD Classification (HBM).....3B

Materials

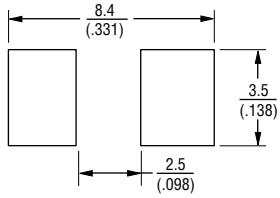
Core.....Carbonyl powder
Wire .....Enameled copper
Terminal Finish .....Sn
Packaging..... 1000 pcs. per 13-inch reel

Product Dimensions

Lead Frame Terminal



Recommended Layout



DIMENSIONS: MM (INCHES)

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

* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

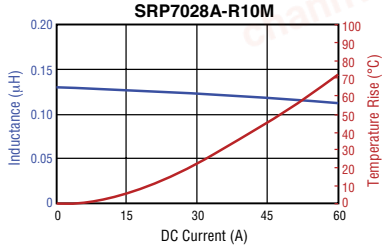
**Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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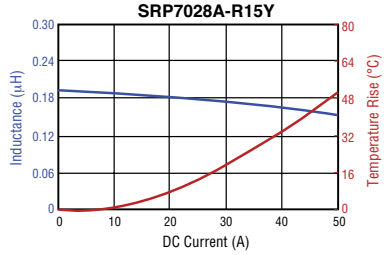
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L vs. I Charts

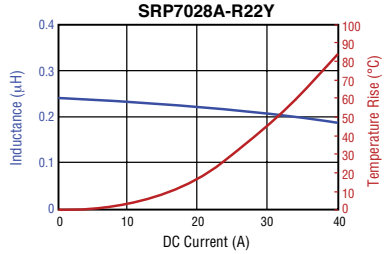
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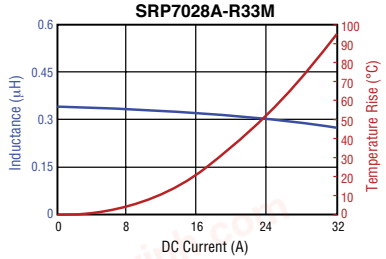
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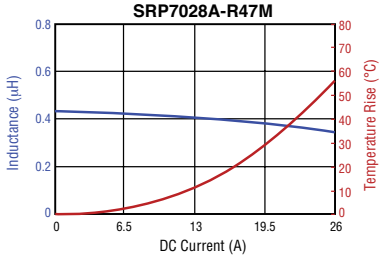
SRP7028A-R22Y



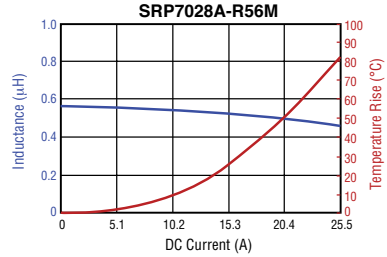
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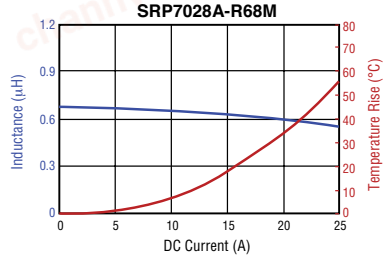
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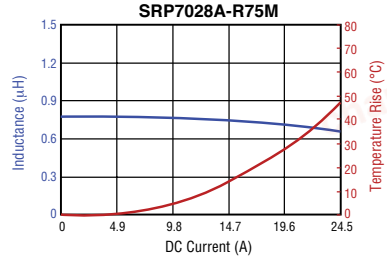
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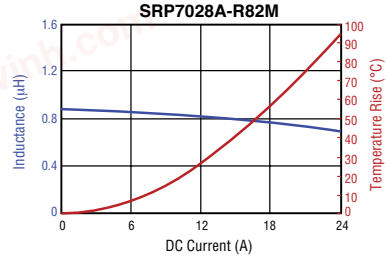
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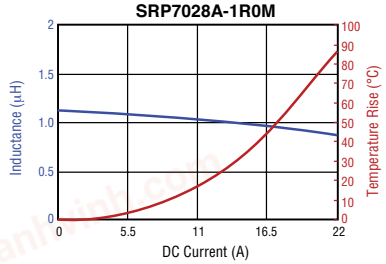
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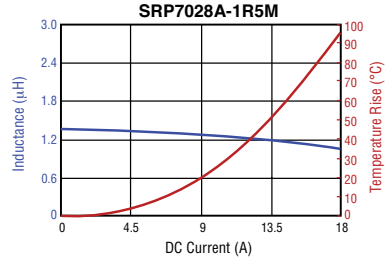
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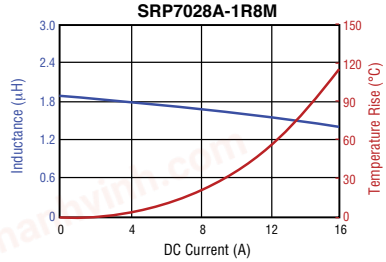
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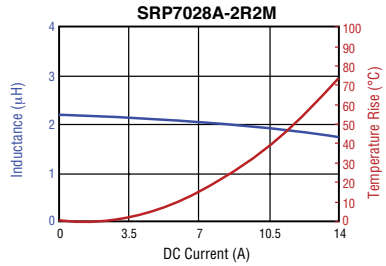
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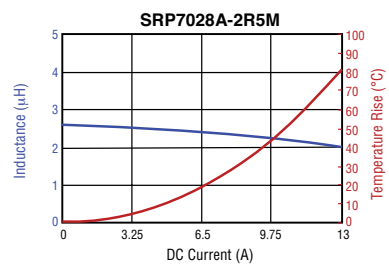
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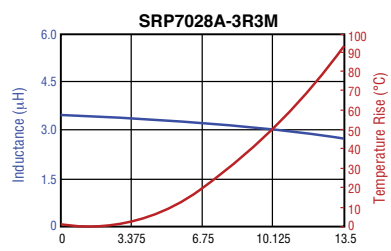
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SRP7028A-2R5M



SRP7028A-3R3M

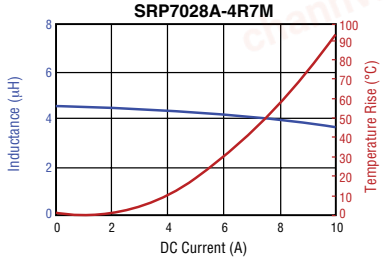


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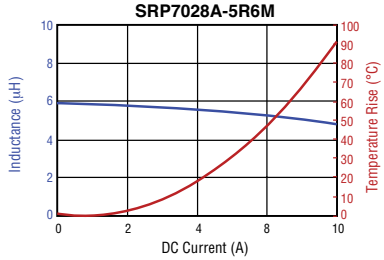
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L vs. I Charts (Continued)

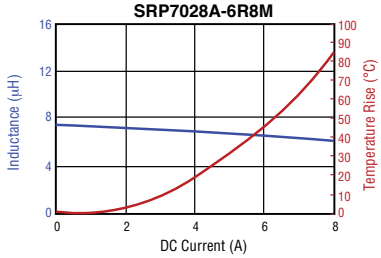
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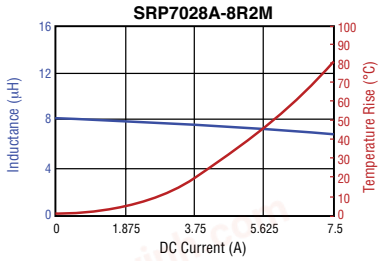
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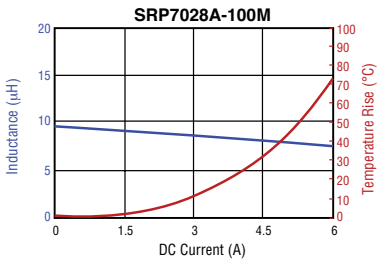
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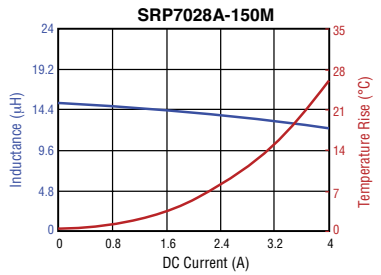
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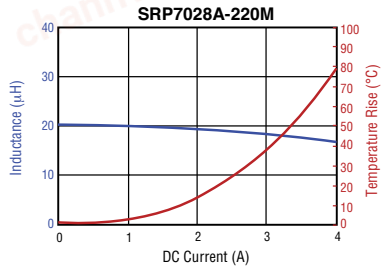
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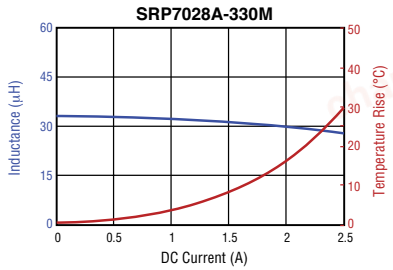
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SRP7028A-220M



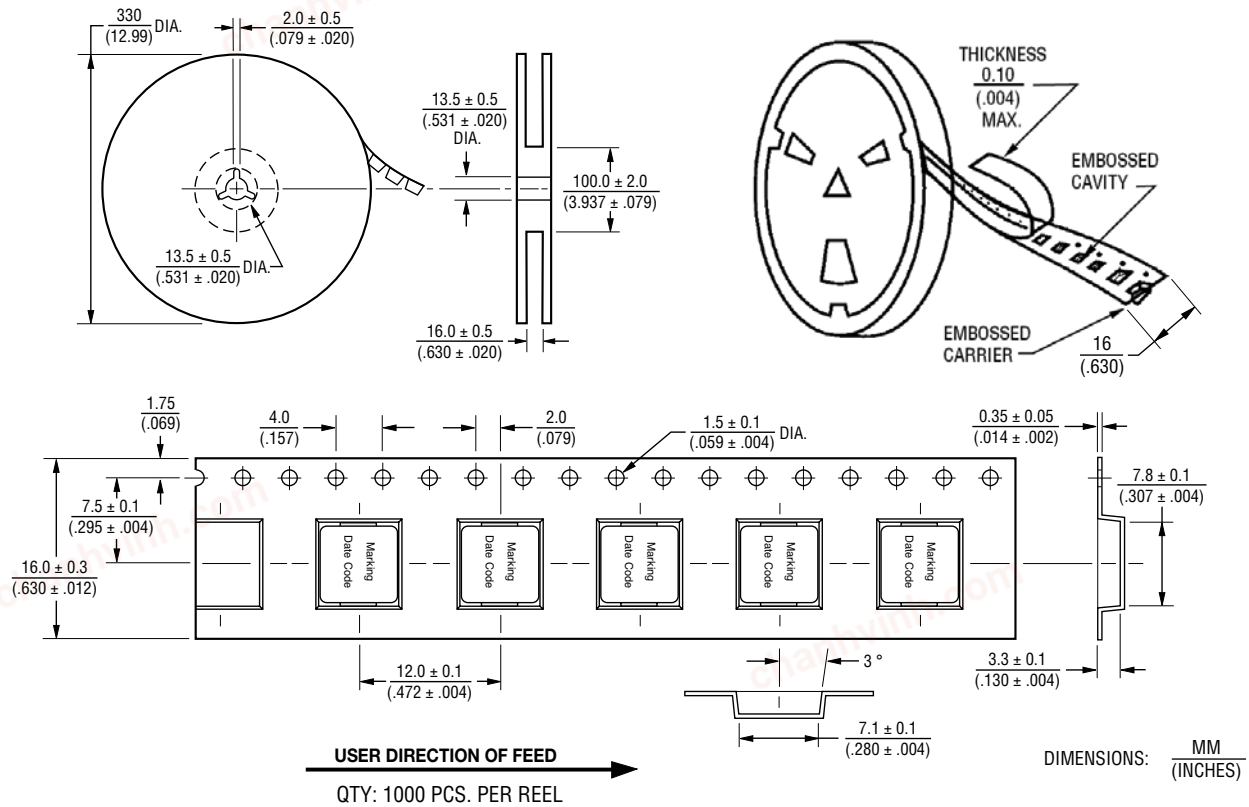
SRP7028A-330M



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Packaging Specifications



REV. 06/17

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