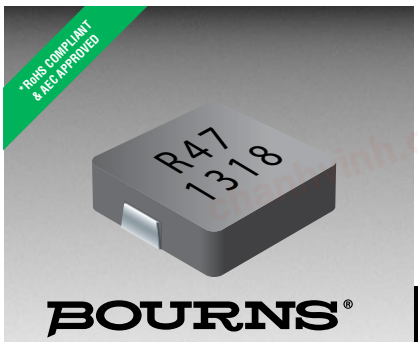
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Features

- Shielded construction
- Carbonyl powder core
- High saturation current
- Inductance range: 0.20 to 22 µH
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

Applications

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

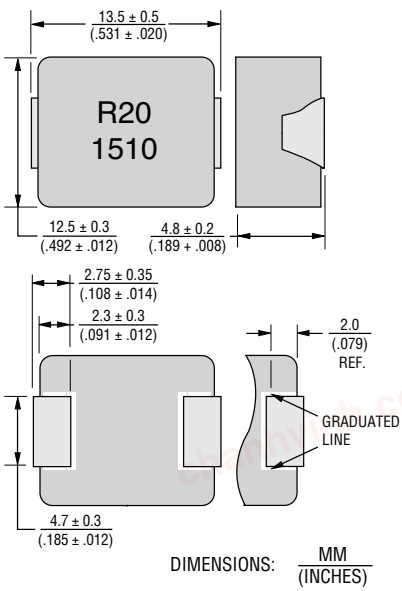
SRP1245A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V		Q (Min.) @100 KHz / 1 V	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A)	Isat (A)	Terminal Type
	L (µH)	Tol. (%)							
SRP1245A-R20M	0.20	20	10	130	0.45	0.55	52	110	Non-Lead Frame
SRP1245A-R22M	0.22	20	10	120	0.5	0.7	52	110	
SRP1245A-R33M	0.33	20	15	90	0.7	0.9	42	80	
SRP1245A-R36M	0.36	20	15	80	0.75	0.95	42	75	
SRP1245A-R39M	0.39	20	15	78	0.78	0.95	42	70	
SRP1245A-R47M	0.47	20	20	70	0.86	1.1	38	65	
SRP1245A-R50M	0.50	20	20	65	0.9	1.3	37	60	
SRP1245A-R56M	0.56	20	20	60	1	1.5	36	55	
SRP1245A-R68M	0.68	20	20	50	1.4	1.7	34	54	
SRP1245A-R82M	0.82	20	20	45	1.7	2.1	31	52	
SRP1245A-1R0M	1.0	20	20	40	1.85	2.5	29	50	
SRP1245A-1R2M	1.2	20	20	35	2.5	3.0	28	49	
SRP1245A-1R5M	1.5	20	20	30	2.8	3.3	27	48	
SRP1245A-1R8M	1.8	20	20	27	4	4.9	21	40	Lead Frame
SRP1245A-2R2M	2.2	20	20	24	4.2	5.5	20	32	
SRP1245A-2R7M	2.7	20	20	23	4.7	6.7	17	32	
SRP1245A-3R3M	3.3	20	20	22	6.8	9.2	15	32	
SRP1245A-4R7M	4.7	20	20	15	11.4	15.0	12	27	
SRP1245A-5R6M	5.6	20	20	13	12.3	16.5	11.5	22	
SRP1245A-6R0M	6.0	20	20	12	13	16.5	11.5	21.5	
SRP1245A-6R8M	6.8	20	20	12	14.5	18.5	11	21	
SRP1245A-8R2M	8.2	20	20	11	16.8	22.5	9.5	18	
SRP1245A-100M	10	20	20	10	21.4	25.5	9	16	
SRP1245A-180M	18	20	20	7	40	45.0	7.5	11	
SRP1245A-220M	22	20	20	6	50	58	6.5	10	

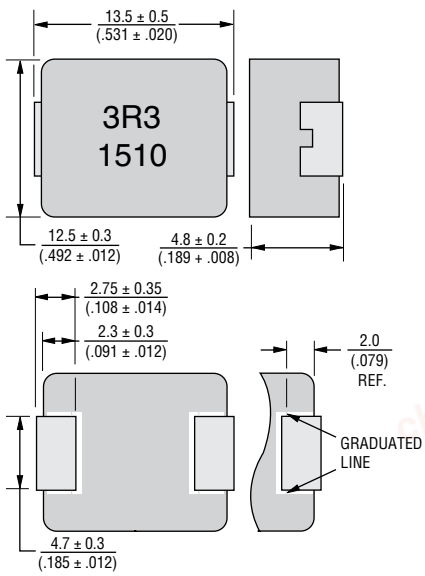
Product Dimensions

Non-Lead Frame Terminal



DIMENSIONS: MM / (INCHES)

Lead Frame Terminal



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

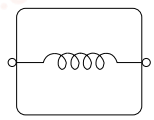
Core.....Carbonyl powder
Wire .....Enameled copper
Terminal Finish .....Sn
Packaging..... 500 pcs. per 13-inch reel

How to Order

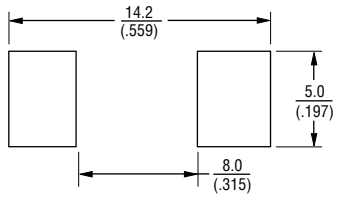
SRP1245A - 100M

Model
Value Code (see table)

Electrical Schematic



Recommended Layout



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

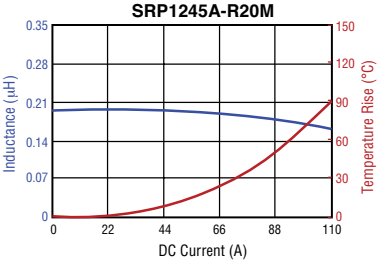
* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
**Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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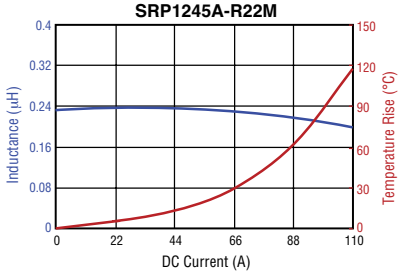
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L vs. I Charts

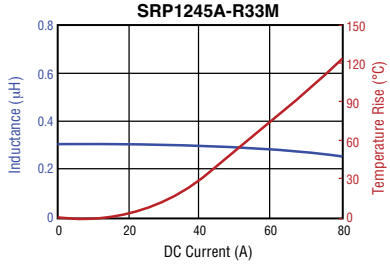
SRP1245A-R20M



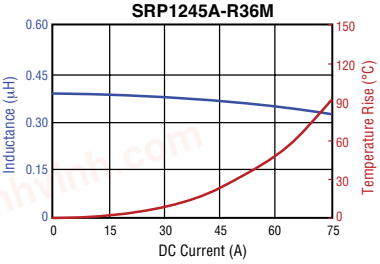
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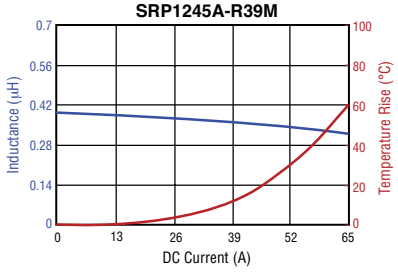
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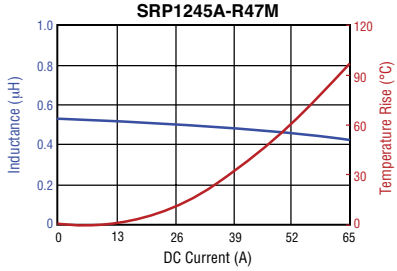
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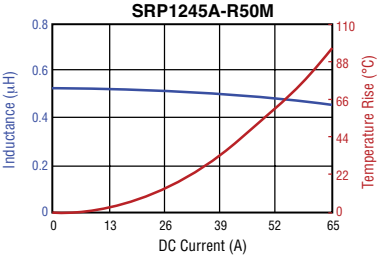
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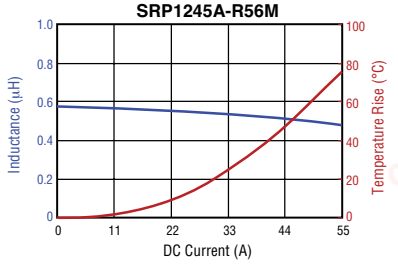
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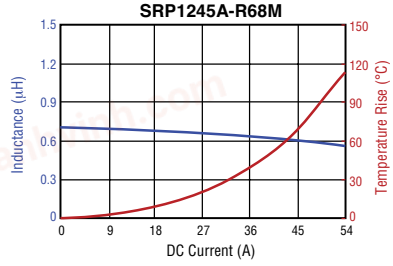
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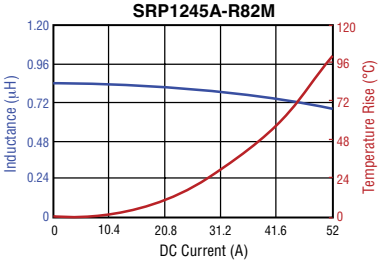
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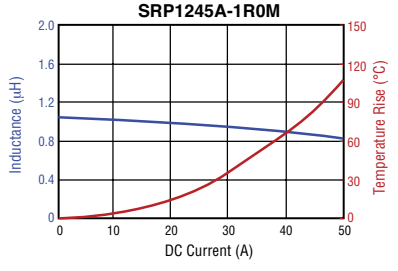
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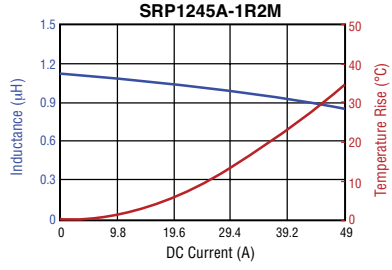
SRP1245A-R82M



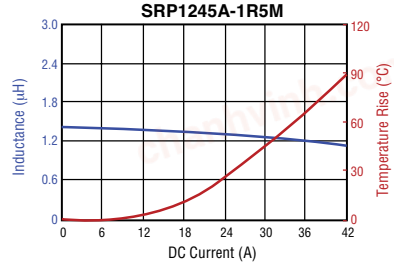
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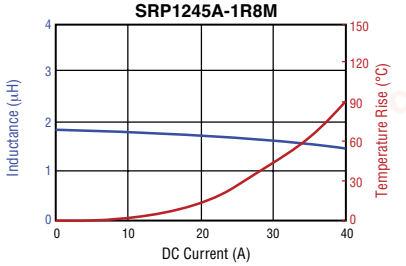
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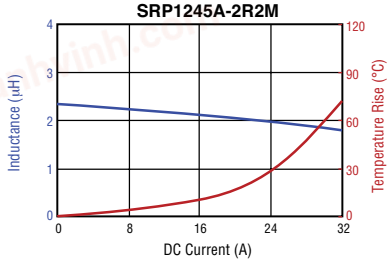
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SRP1245A-1R8M



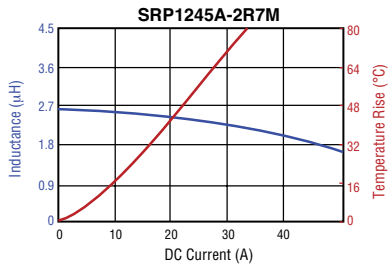
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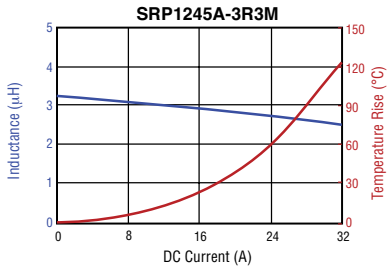


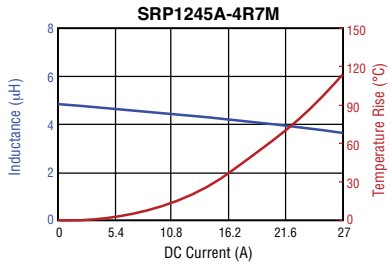
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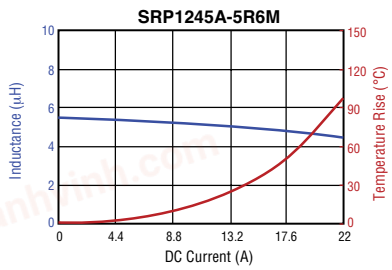
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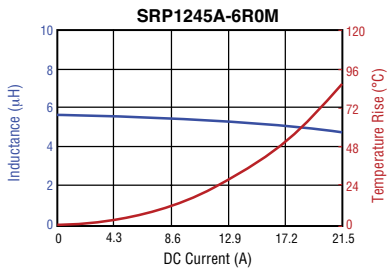
L vs. I Charts

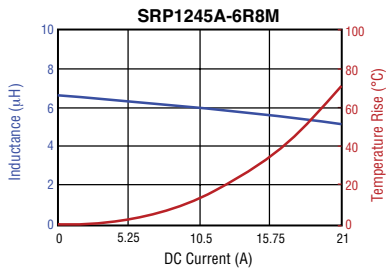


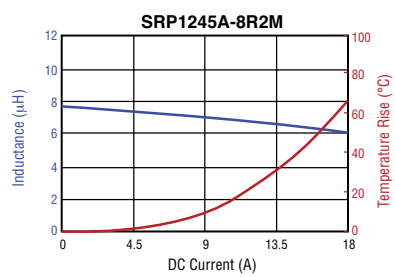


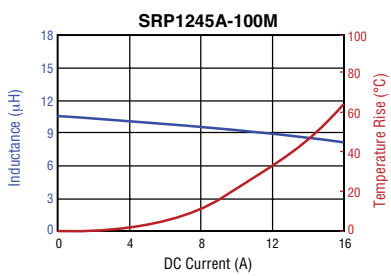


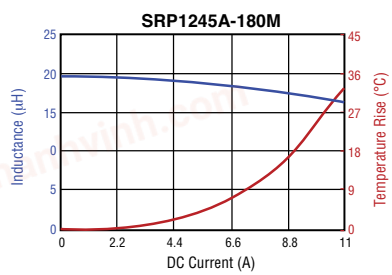


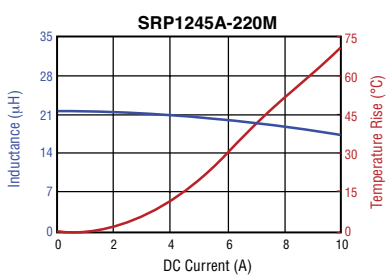




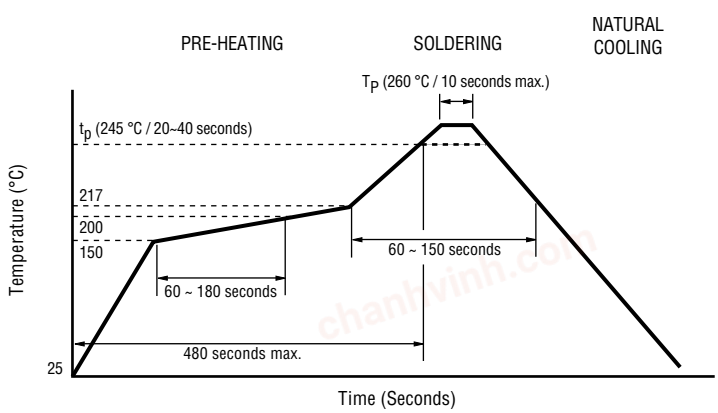








Soldering Profile

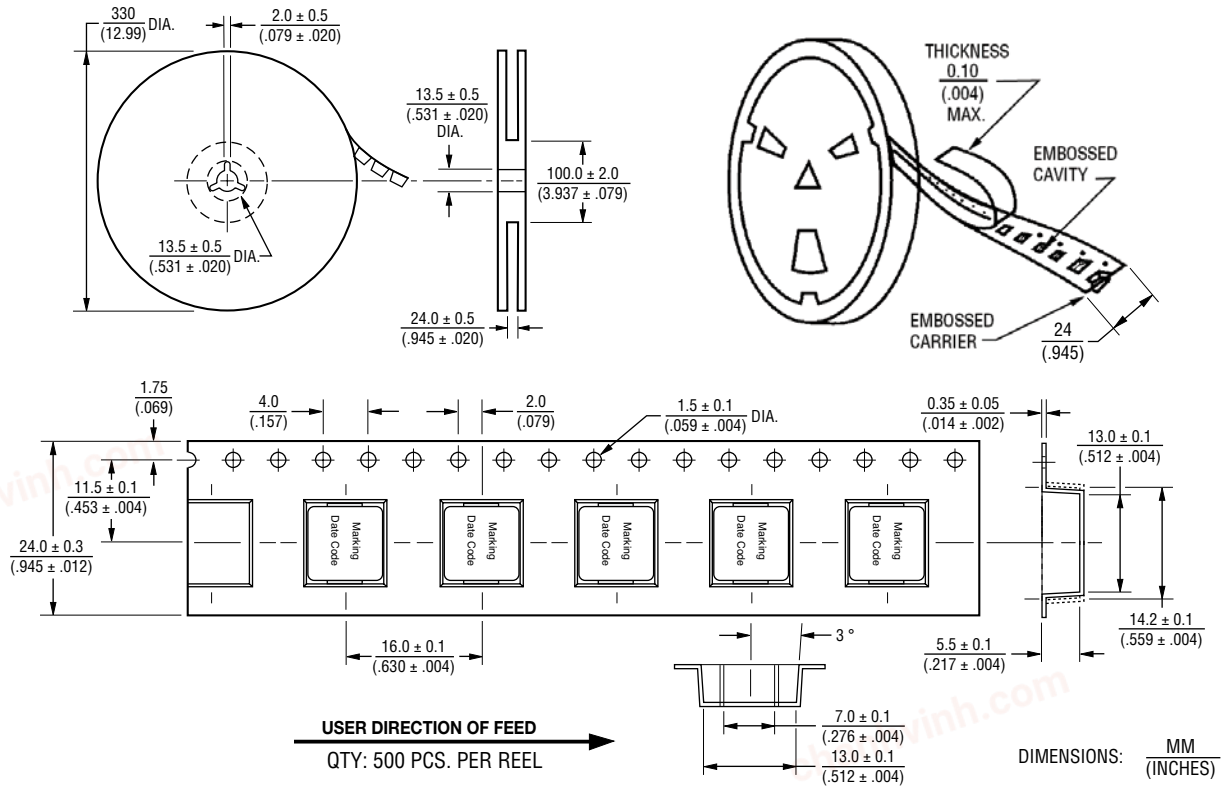


REFLOW TIMES: 3 MAX.

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Packaging Specifications



REV. 06/17

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