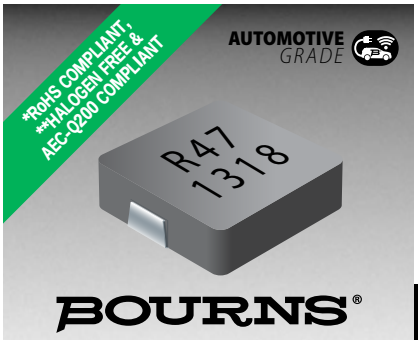


Features

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

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

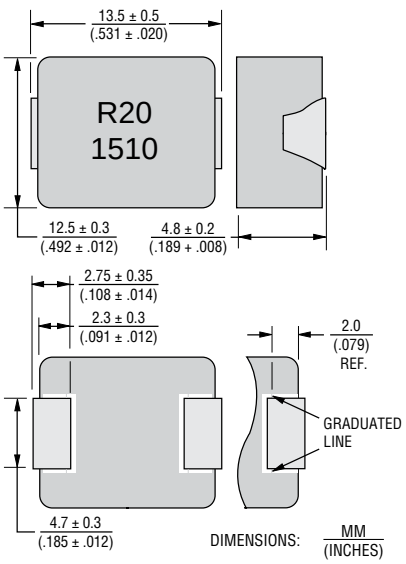
SRP1245A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

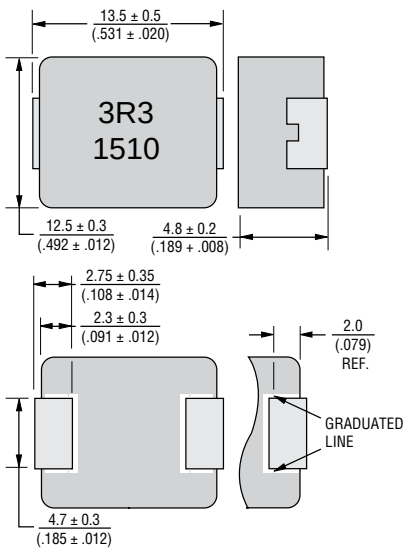
Bourns Part Number	Inductance @ 100 KHz / 1 V		Q (Min.) @100 KHz / 1 V	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A)	Isat (A)	Terminal Type
	L (µH)	Tol. (%)							
SRP1245A-R20M	0.20	20	10	130	0.45	0.55	52	110	Non-Lead Frame
SRP1245A-R22M	0.22	20	10	120	0.5	0.7	52	110	
SRP1245A-R33M	0.33	20	15	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	Lead Frame
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	
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



Lead Frame Terminal



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

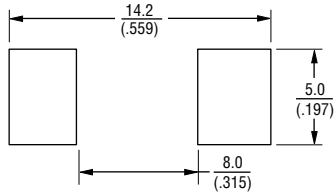
Core.....Carbonyl powder
Wire .....Enameled copper
Terminal Finish ..... Sn
Packaging..... 500 pcs. per 13-inch reel

How to Order

SRP1245A - 100M

Model
Value Code (see table)

Recommended Layout



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

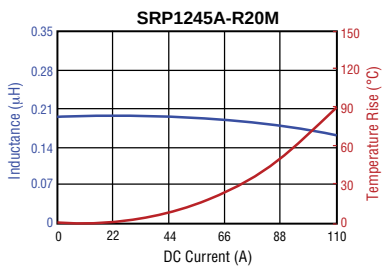
WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

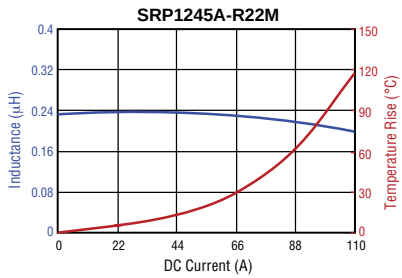
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

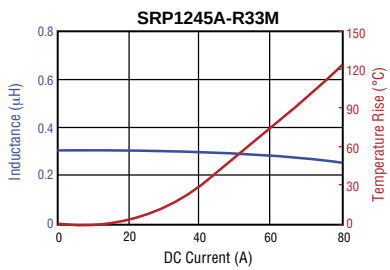
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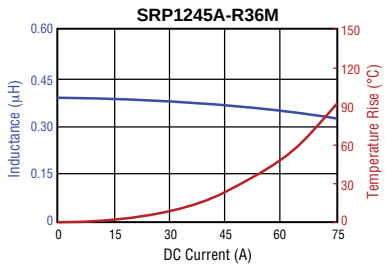
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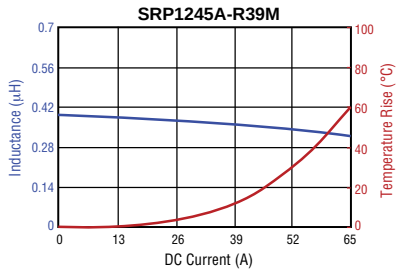
L vs. I Charts

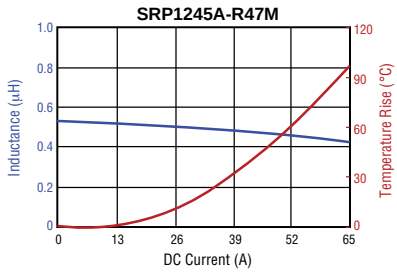


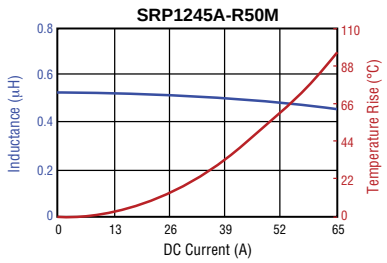


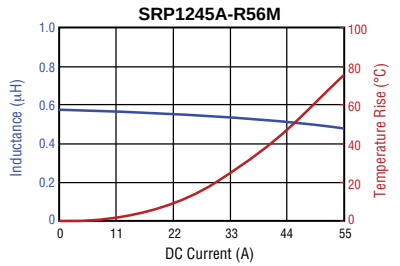


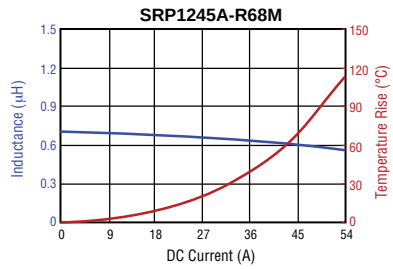


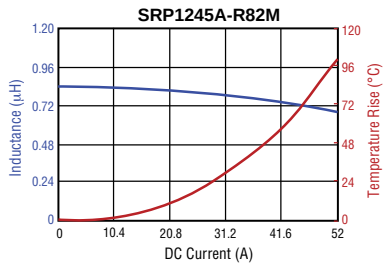


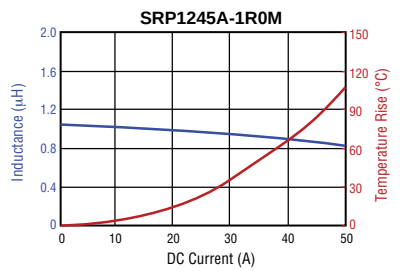


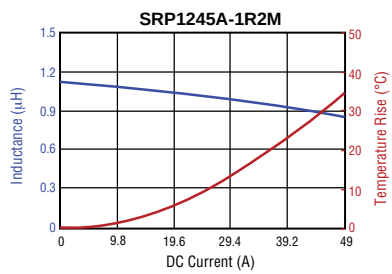


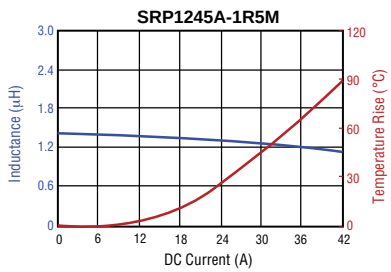


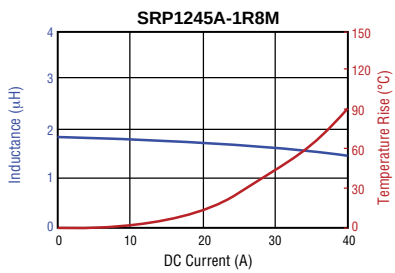


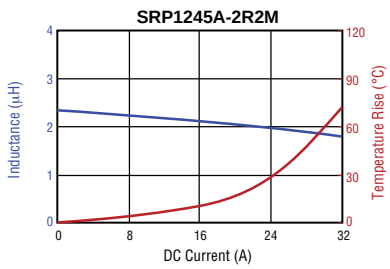










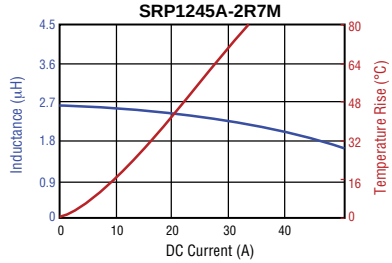


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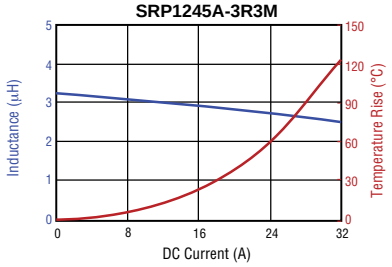
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L vs. I Charts

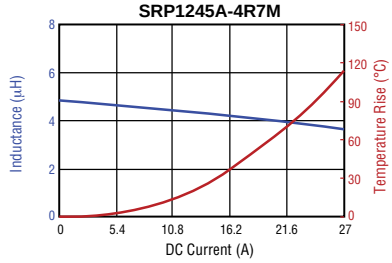
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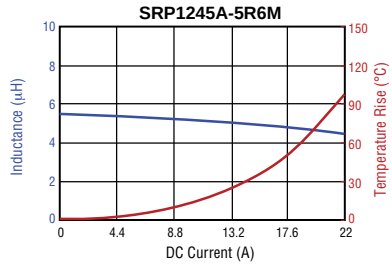
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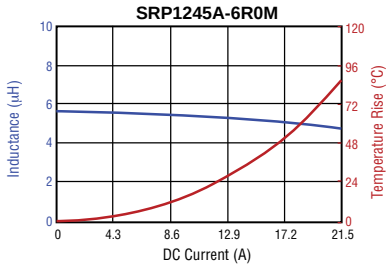
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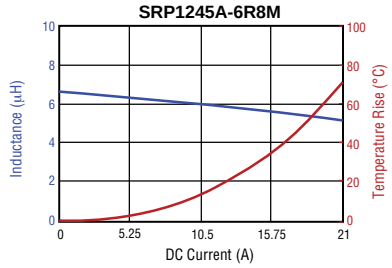
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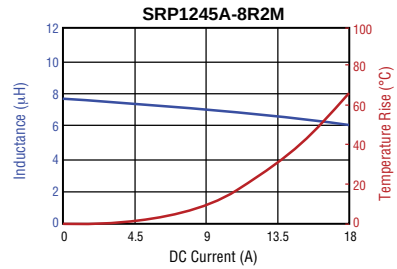
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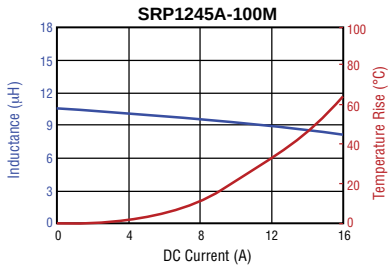
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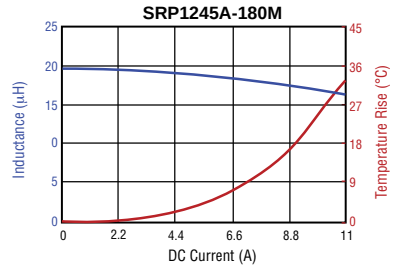
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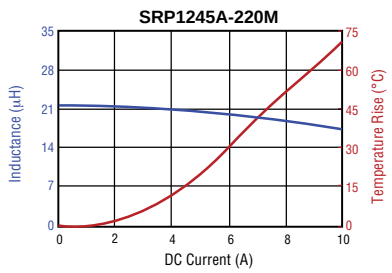
SRP1245A-100M



SRP1245A-180M



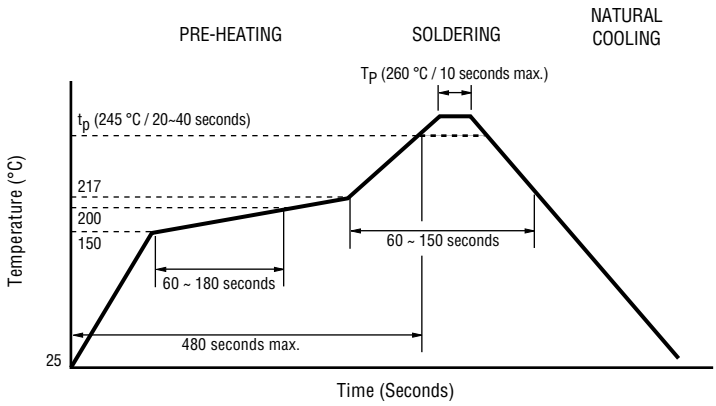
SRP1245A-220M



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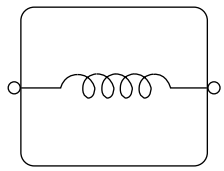
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Soldering Profile

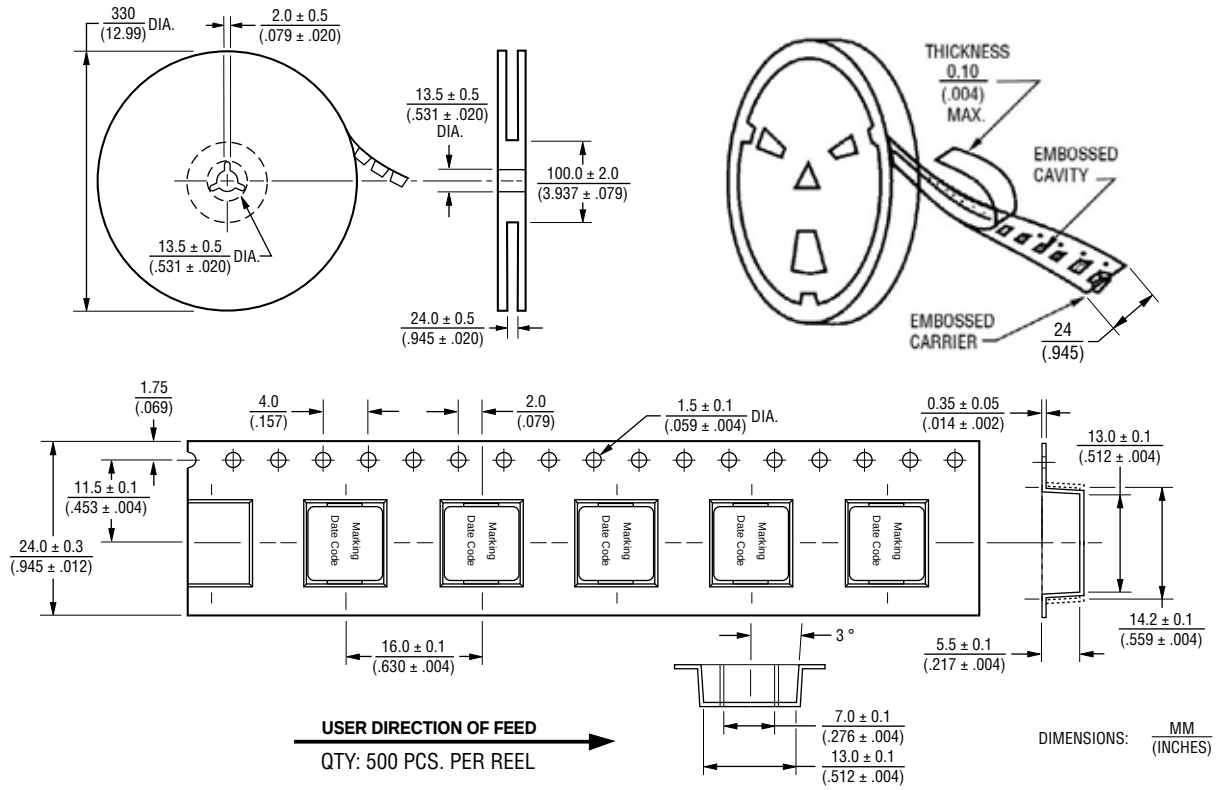


REFLOW TIMES: 3 MAX.

Electrical Schematic



Packaging Specifications



REV. 06/24

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