

Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range: 0.15 to 22 μ H
- RoHS compliant* and halogen free**

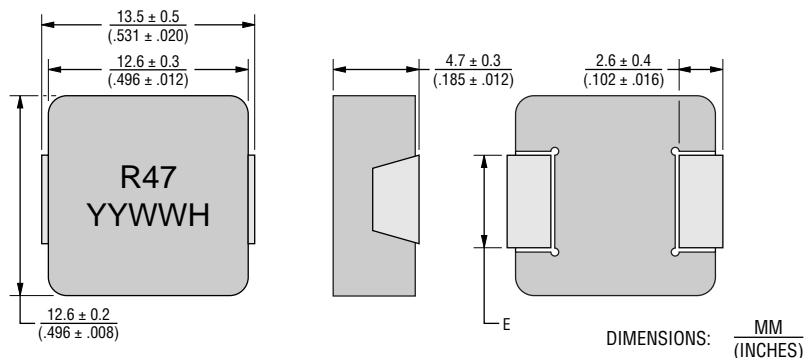
SRP1245C Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

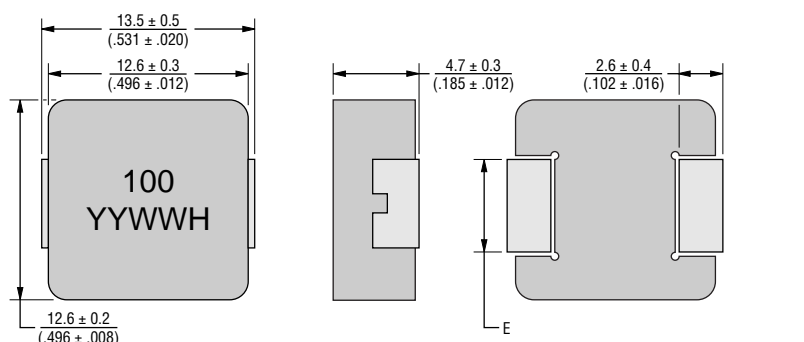
Bourns Part Number	Inductance @ 100 kHz / 1 V		Q (Min.) @100 kHz	SRF (MHz) Typ.	DCR (m Ω) Typ.	DCR (m Ω) Max.	I _{rms} (A) Typ.	I _{sat} (A) Typ.	Terminal Type
	L (μ H)	Tol. (%)							
SRP1245C-R15Y	0.15	30	15	147	0.36	0.41	55	100	non-leadframe
SRP1245C-R22M	0.22	20	15	120	0.5	0.55	48	95	
SRP1245C-R36M	0.36	20	20	100	0.75	0.83	41	80	
SRP1245C-R47M	0.47	20	20	70	0.96	1.15	38	65	
SRP1245C-R68M	0.68	20	20	58	1.4	1.6	32	54	
SRP1245C-1R0M	1.0	20	20	42	2	2.4	30	50	leadframe
SRP1245C-1R5M	1.5	20	20	32	3	3.5	27	48	
SRP1245C-2R2M	2.2	20	20	27	4.3	5	25	40	
SRP1245C-3R3M	3.3	20	20	25	7.3	8.4	20	32	
SRP1245C-4R7M	4.7	20	20	20	11.4	15	14	27	
SRP1245C-6R8M	6.8	20	20	16	14.5	16.7	12	23	
SRP1245C-8R2M	8.2	20	20	13	18.6	21.5	11.5	20	
SRP1245C-100M	10	20	20	10	21.4	25.5	11	17	
SRP1245C-150M	15	20	20	8	32.6	38	9	13	
SRP1245C-220M	22	20	20	6	50	58	7.5	11	

Product Dimensions

Non-Lead Frame Terminal



Lead Frame Terminal



E: SRP1245C-R47M through -R68M: $\frac{4.0 \pm 0.3}{(.157 \pm .012)}$

E: SRP1245C-R15Y through -R36M and SRP1245C-1R0M through -2R2M: $\frac{4.7 \pm 0.3}{(.185 \pm .012)}$

General Specifications

Operating Temperature

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

Storage Temperature .. -40 °C to +125 °C
Rated Current

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

¹ Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all can affect the part temperature. Part temperature should be verified in the end application.

Materials

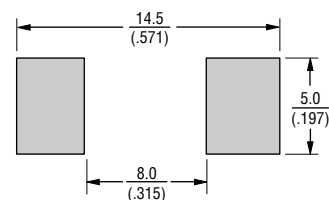
Core..... Metal alloy powder
Wire..... Enameled copper
Terminal Finish Sn
Packaging..... 500 pcs. per 13-inch reel

How to Order

SRP1245C - 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.

* 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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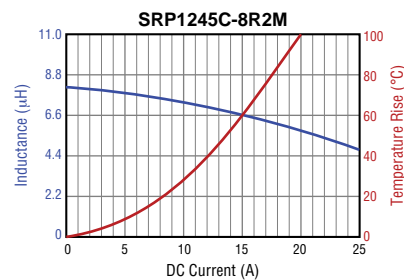
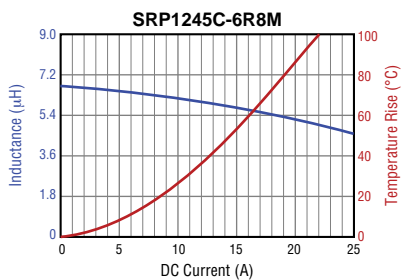
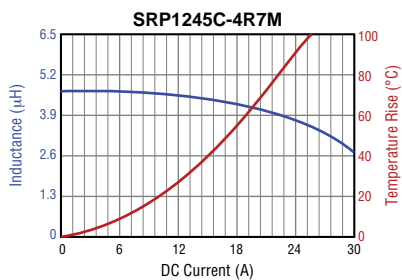
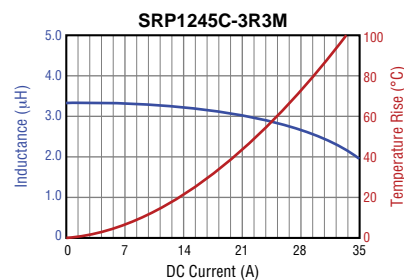
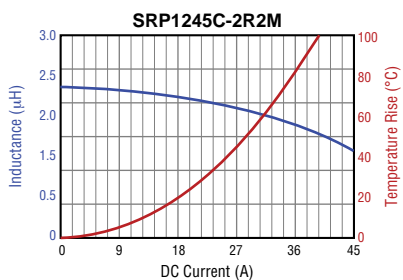
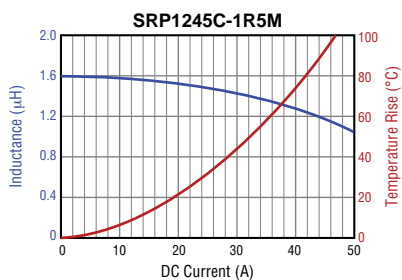
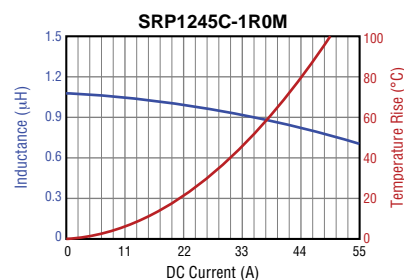
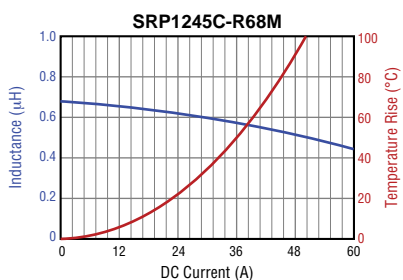
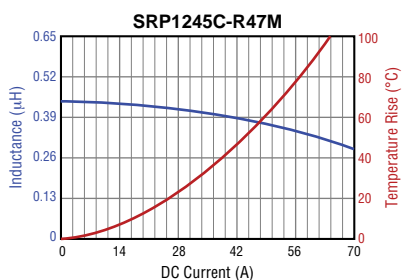
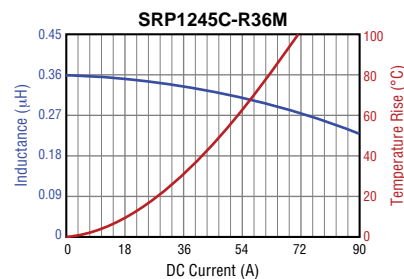
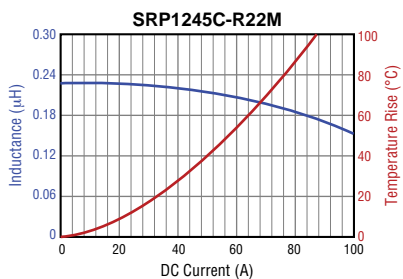
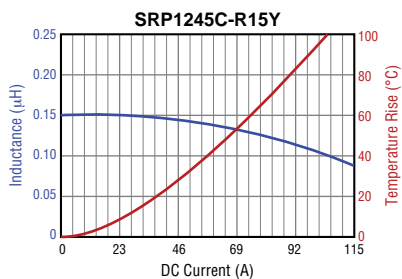


WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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L vs. I Charts



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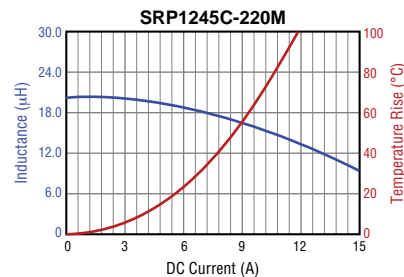
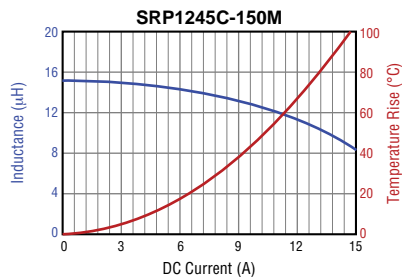
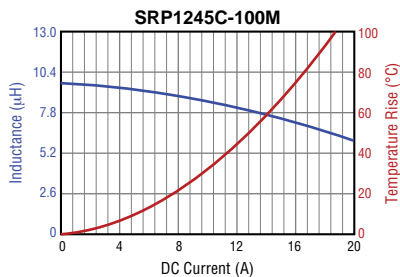
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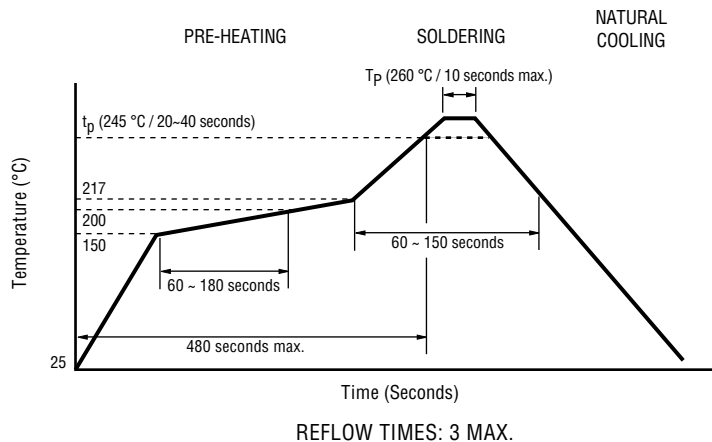
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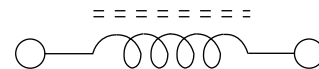
L vs. I Charts



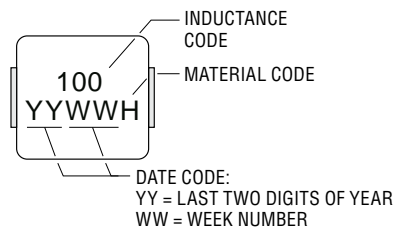
Soldering Profile



Electrical Schematic



Typical Part Marking



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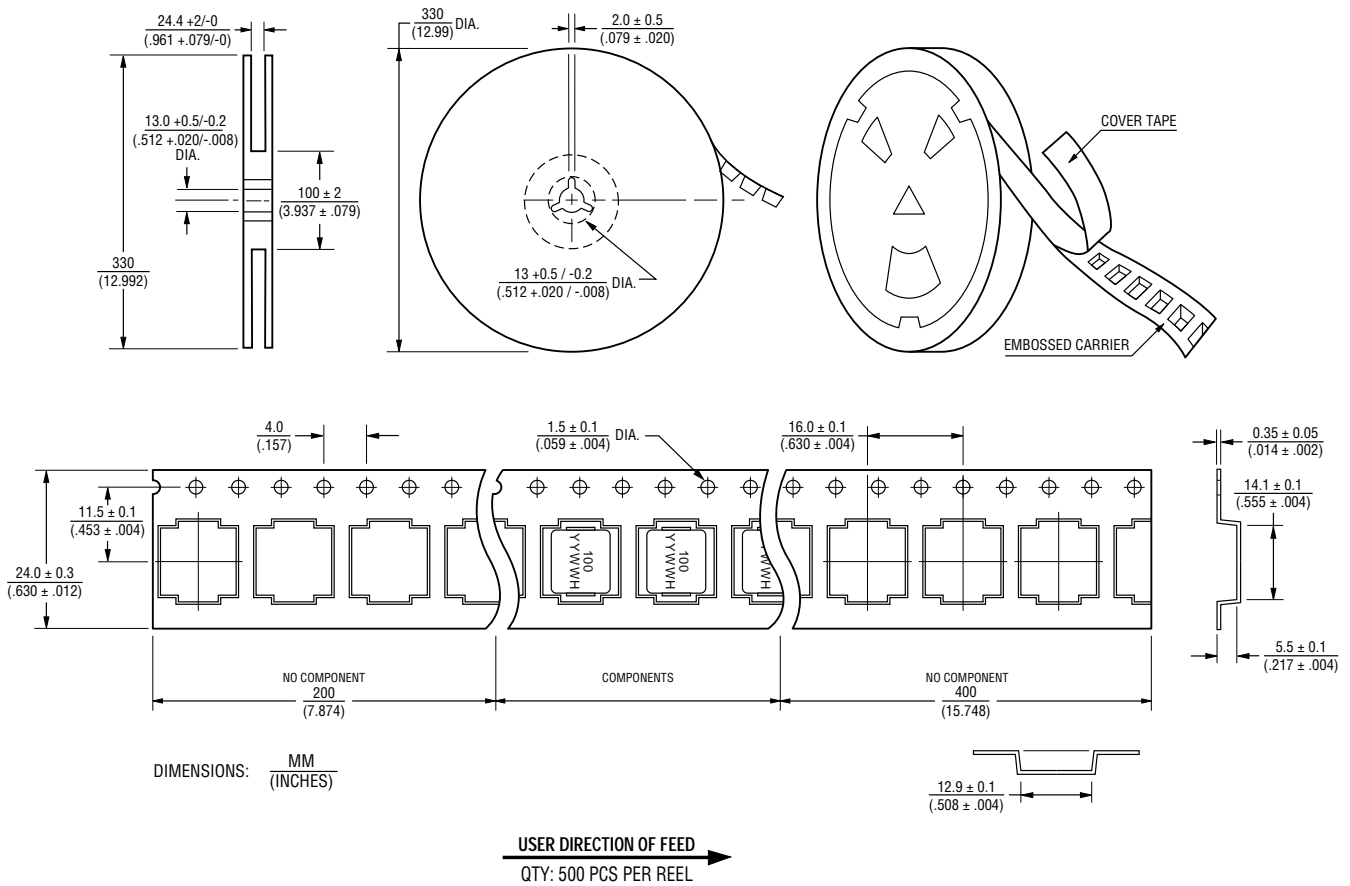
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Packaging Specifications



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