



Features

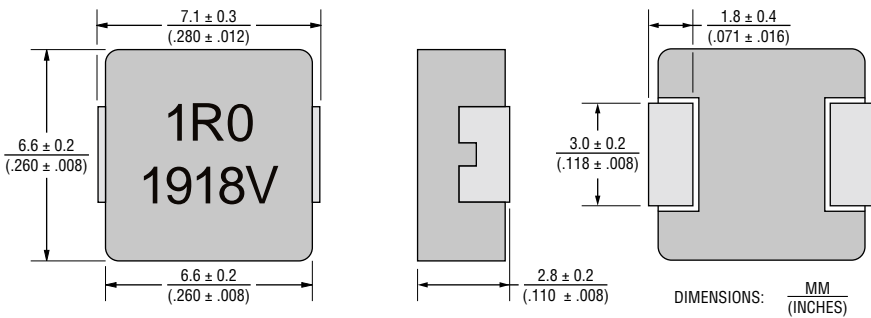
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- High temperature 180 °C
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP6030VA Series – Shielded Power Inductors

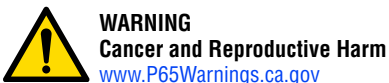
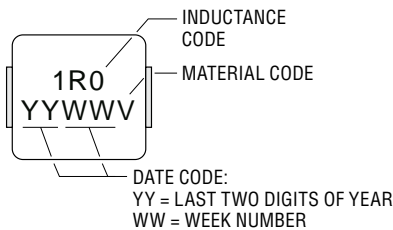
Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 0.1 V		Q Min. @ 100 kHz	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	I rms (A) Typ.	I sat (A) Typ.
	L (μH)	Tol. %						
SRP6030VA-R47M	0.47	± 20 %	10	65	3.5	4.0	20	21
SRP6030VA-R56M	0.56	± 20 %	10	56	4.2	4.8	19	20
SRP6030VA-R68M	0.68	± 20 %	10	50	4.8	5.6	17	19
SRP6030VA-R82M	0.82	± 20 %	10	46	5.7	6.8	16	18
SRP6030VA-1R0M	1.0	± 20 %	10	43	6.6	8.0	15	16
SRP6030VA-1R5M	1.5	± 20 %	10	32	11.2	13.2	13	14
SRP6030VA-2R2M	2.2	± 20 %	10	29	21.5	25.8	11	13
SRP6030VA-3R3M	3.3	± 20 %	10	22	32.0	37.0	9.0	9.5
SRP6030VA-4R7M	4.7	± 20 %	10	18	36.0	42.0	7.0	8.5
SRP6030VA-5R6M	5.6	± 20 %	10	17	36.0	42.0	6.5	7.2
SRP6030VA-6R8M	6.8	± 20 %	10	15	43.0	50.0	6.0	6.5
SRP6030VA-100M	10	± 20 %	10	12	62.0	68.0	5.0	5.0
SRP6030VA-150M	15	± 20 %	10	10	95.0	114.0	4.1	3.2
SRP6030VA-220M	22	± 20 %	10	9	140.0	168.0	3.4	3.0

Product Dimensions



Typical Part Marking



* 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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Additional Information

Click these links for more information:



General Specifications

Operating Temperature -55 °C to +180 °C
 (Temperature rise included)
 Storage Temperature (Component) -55 °C to +180 °C
 Rated Current Inductance drops 30 % at Isat
 Temperature Rise 40 °C at rated Irms¹
 MSL 1
 ESD Classification (HBM)..... N/A

Note 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
 WireEnameled copper
 Terminal Finish Sn/Ni
 Packaging..... 1000 pcs. per 13-inch reel

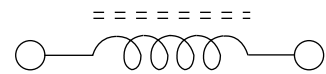
How to Order

SRP6030VA - 100M

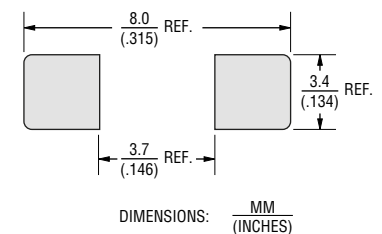
Model _____

Value Code (see table) _____

Schematic



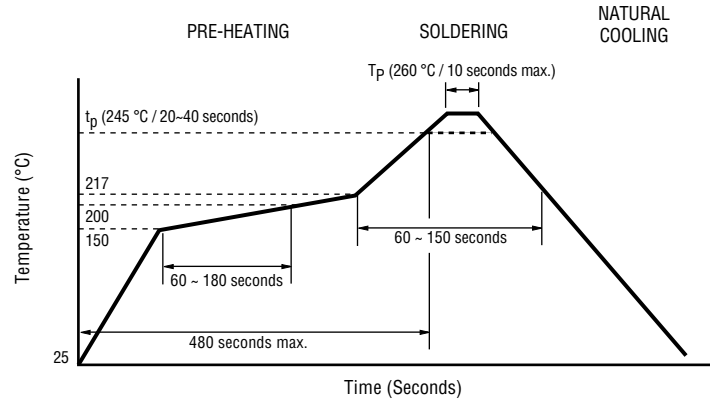
Recommended Layout



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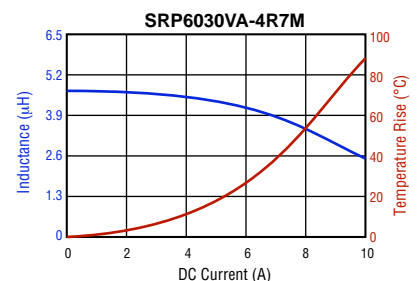
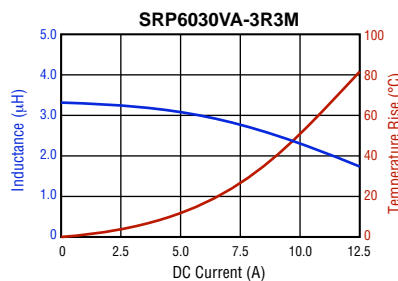
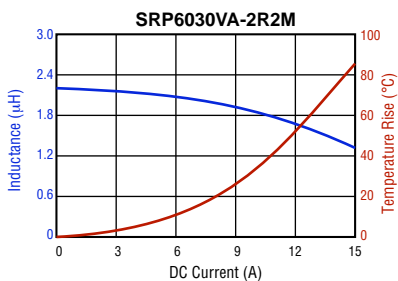
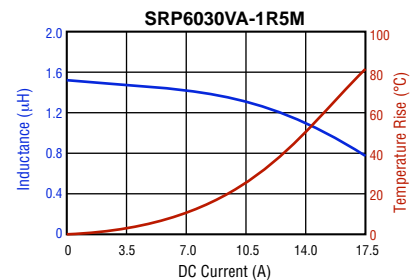
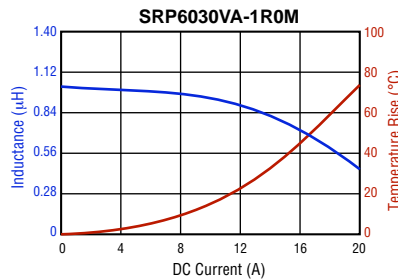
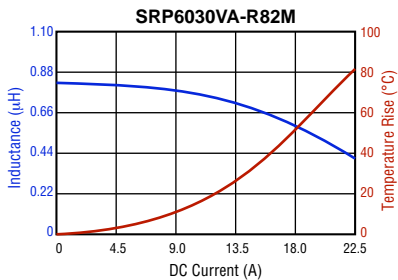
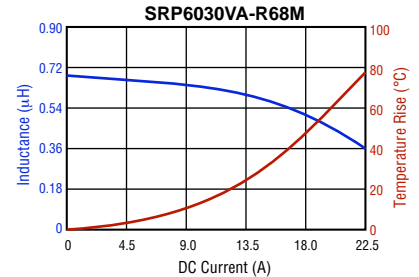
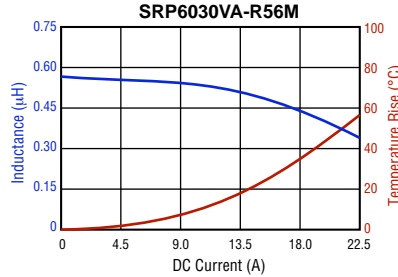
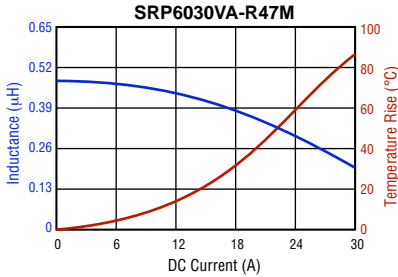


Soldering Profile



REFLOW TIMES: 3 MAX.

L vs. I Charts



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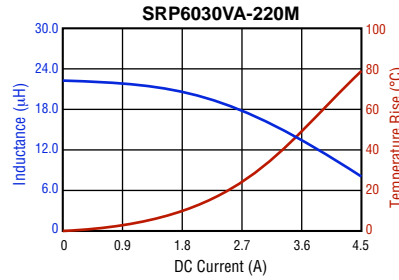
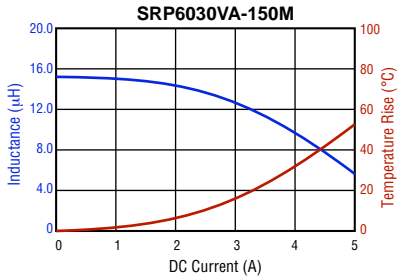
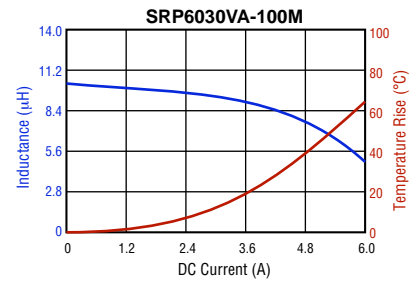
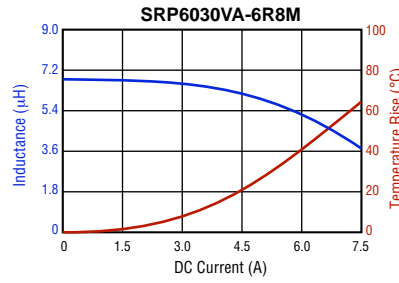
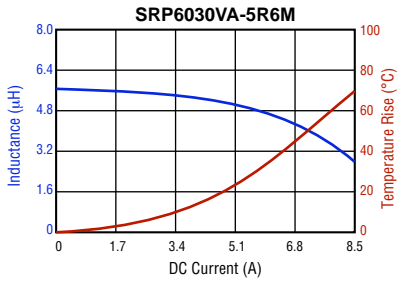
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L vs. I Charts (Continued)



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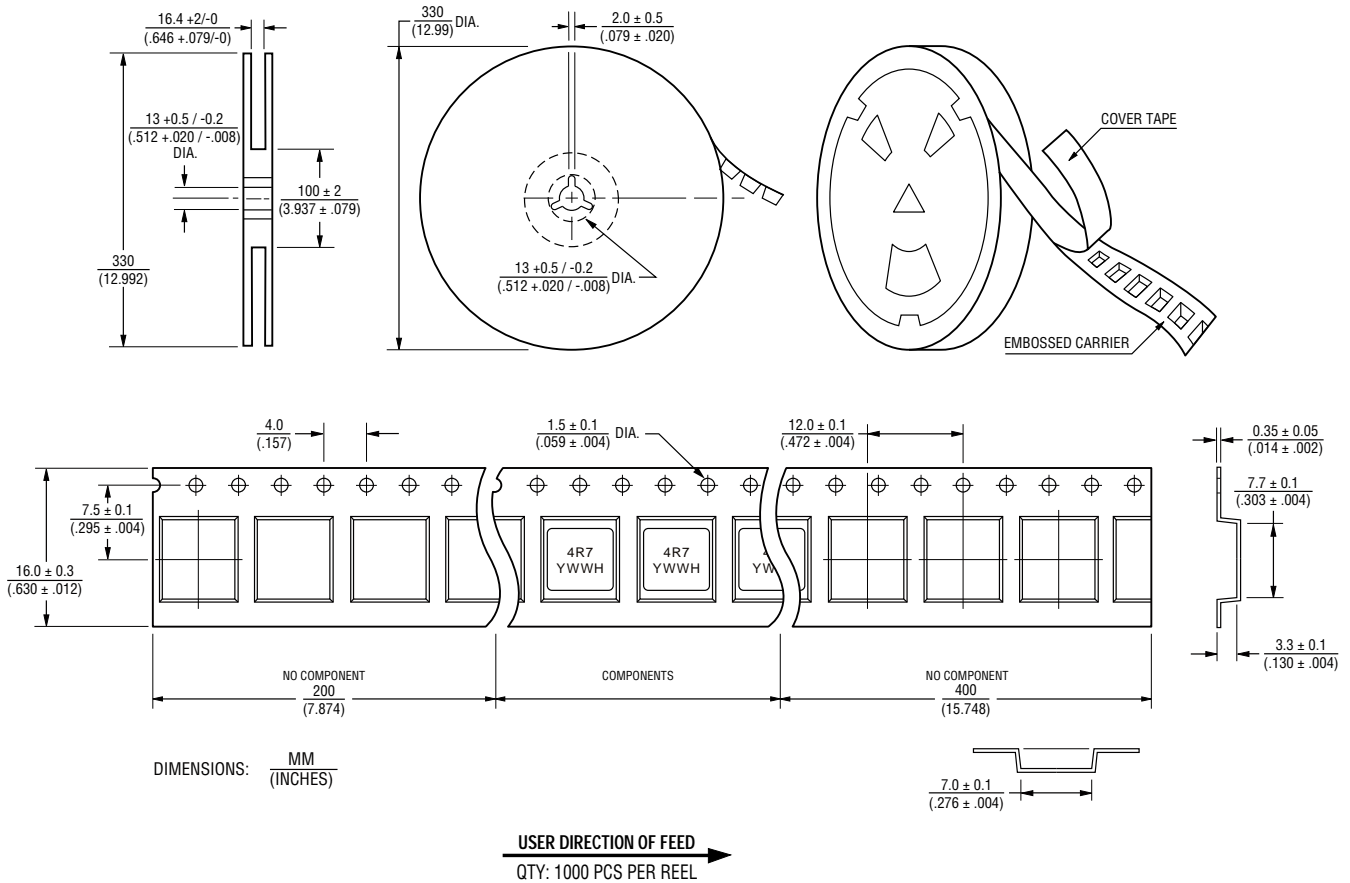
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Packaging Specifications



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