

Features

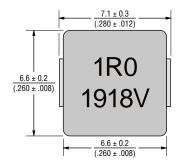
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- High temperature 180 °C
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

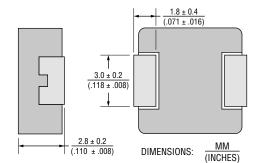
SRP6030VA Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

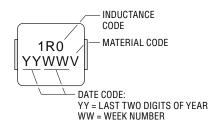
Bourns	Inductance @ 100 kHz / 0.1 V		Q Min. @	SRF (MHz)	DCR (mΩ)	DCR (mΩ)	I rms (A)	I sat (A)
Part Number	L (μH)	Tol. %	100 kHz	Typ.	Typ.	Max.	Typ.	Typ.
SRP6030VA-R47M	0.47	± 20 %	10	65	3.5	4.0	20	21
SRP6030VA-R56M	0.56	± 20 %	10	56	4.2	4.8	19	20
SRP6030VA-R68M	0.68	± 20 %	10	50	4.8	5.6	17	19
SRP6030VA-R82M	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



General Specifications

Operating Temperature

......55 °C to +180 °C (Temperature rise included) Storage Temperature (Component)

.....55 °C to +180 °C

Rated Current

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

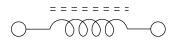
Core......Metal alloy powder Wire......Enameled copper Terminal Finish......Sn/Ni Packaging.... 1000 pcs. per 13-inch reel

How to Order

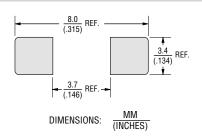
SRP6030VA - 100M

Value Code (see table) -

Schematic



Recommended Layout



Users should verify actual device performance in their specific applications.

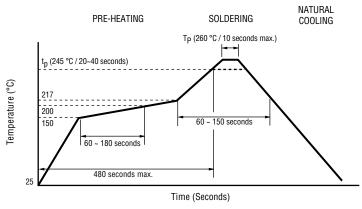
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^{*} RoHS Directive 2015/863, Mar 31, 2015 and Annex.

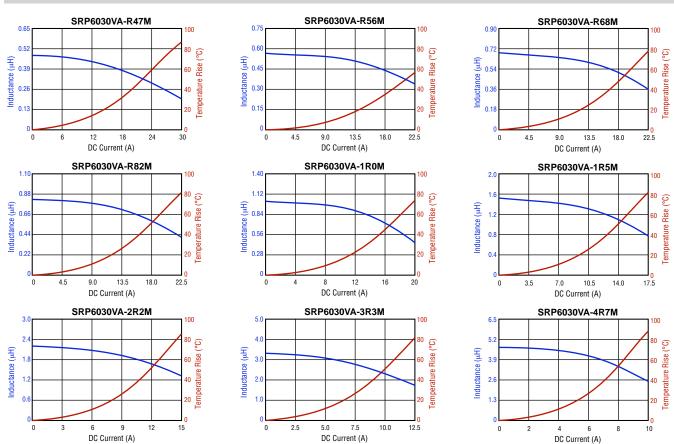
^{**} Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less. Specifications are subject to change without notice.

Soldering Profile



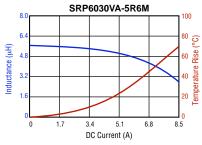
REFLOW TIMES: 3 MAX.

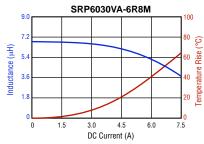
L vs. I Charts

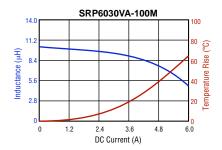


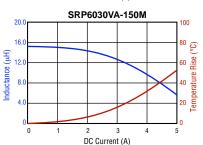
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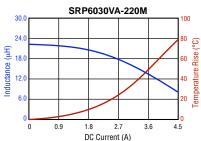
L vs. I Charts (Continued)







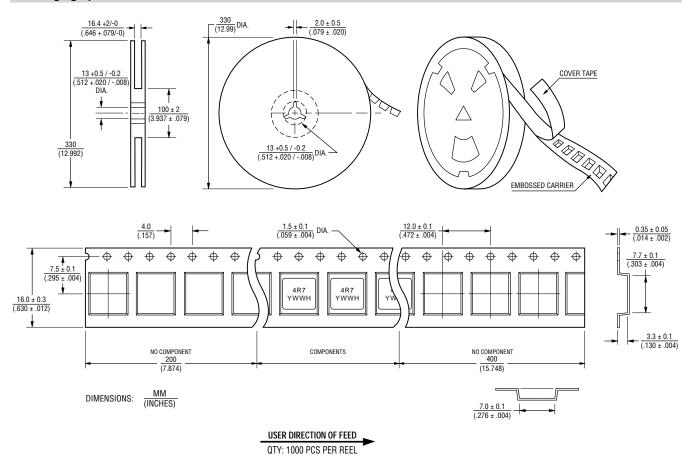




SRP6030VA Series - Shielded Power Inductors

BOURNS

Packaging Specifications



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03/20

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