

SRP6030VA-150M Datasheet

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DiGi Electronics Part Number	SRP6030VA-150M-DG
Manufacturer	Bourns Inc.
Manufacturer Product Number	SRP6030VA-150M
Description	FIXED IND 15UH 4.1A 114MOHM SMD
Detailed Description	15 μ H Shielded Drum Core, Wirewound Inductor 4.1 A 114mOhm Max Nonstandard



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Purchase and inquiry

Manufacturer Product Number:

SRP6030VA-150M

Series:

SRP6030VA

Type:

Drum Core, Wirewound

Inductance:

15 μ H

Current Rating (Amps):

4.1 A

Shielding:

Shielded

Q @ Freq:

10 @ 100kHz

Ratings:

AEC-Q200

Inductance Frequency - Test:

100 kHz

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.118" (3.00mm)

Manufacturer:

Bourns Inc.

Product Status:

Active

Material - Core:

Metal

Tolerance:

\pm 20%

Current - Saturation (Isat):

3.2A

DC Resistance (DCR):

114mOhm Max

Frequency - Self Resonant:

10MHz

Operating Temperature:

-55°C ~ 180°C

Features:

-

Package / Case:

Nonstandard

Size / Dimension:

0.280" L x 0.260" W (7.10mm x 6.60mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



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

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 Irms
 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.

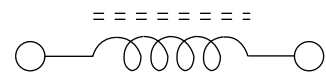
Materials

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

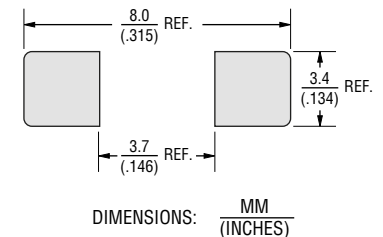
How to Order

SRP6030VA - 100M
 Model _____
 Value Code (see table) _____

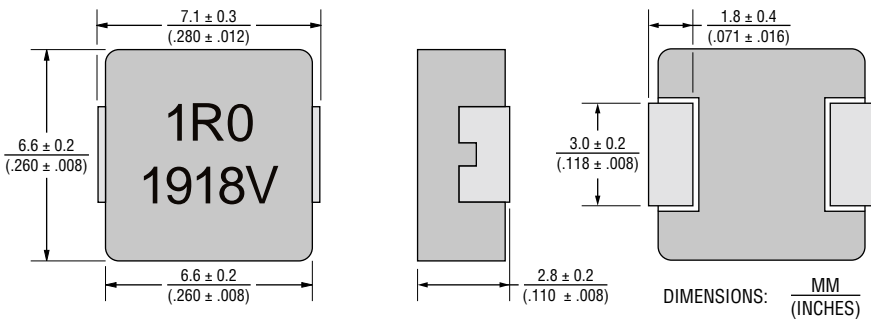
Schematic



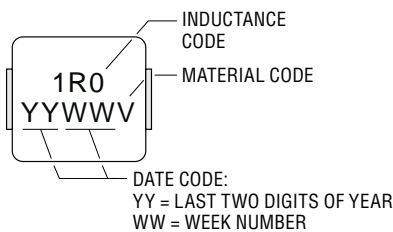
Recommended Layout



Product Dimensions



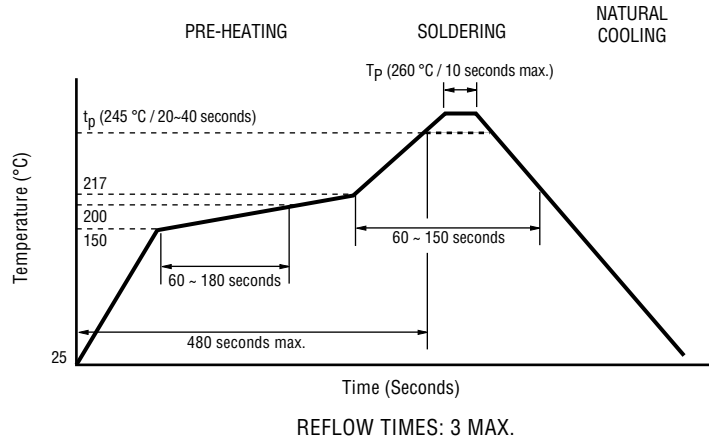
Typical Part Marking



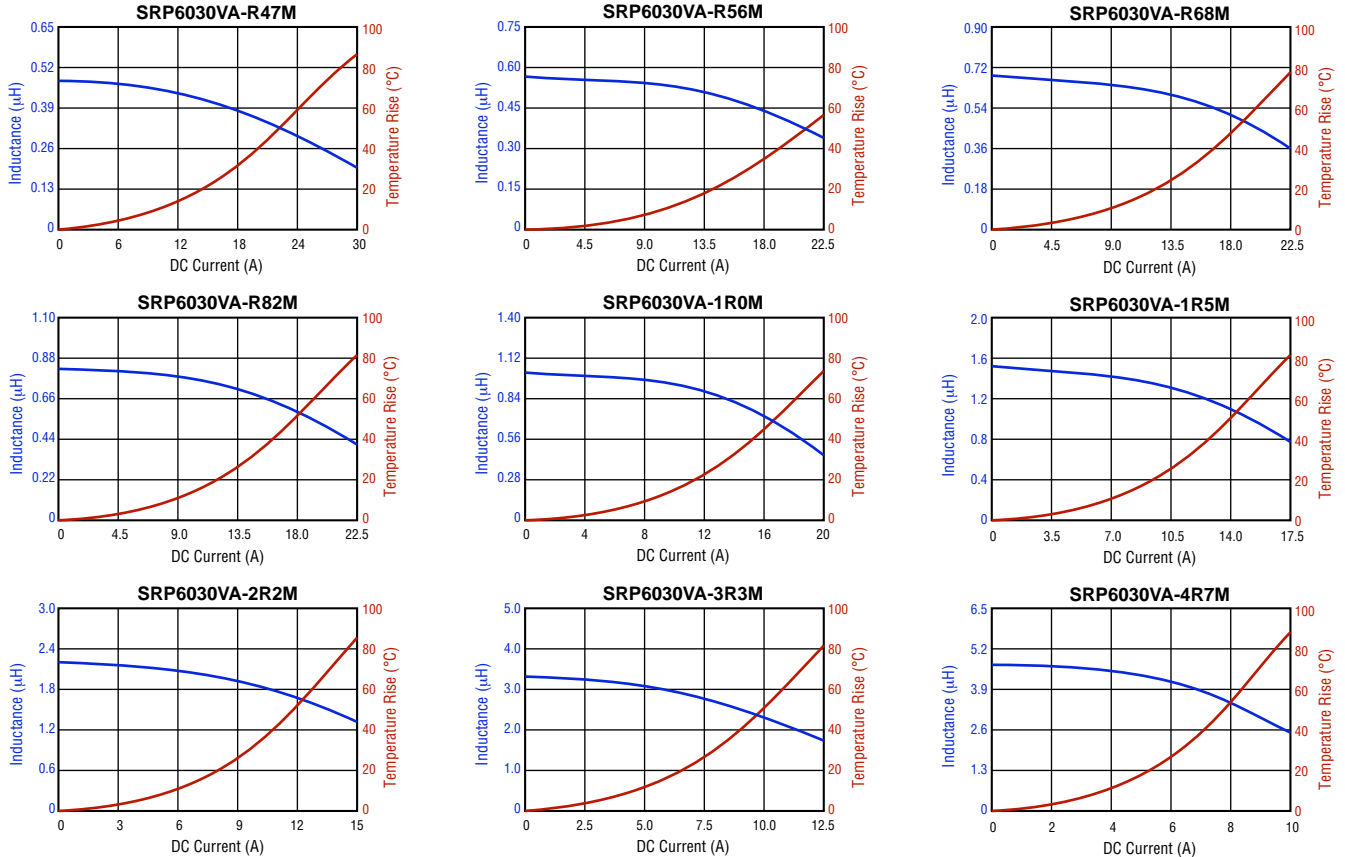
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
 ** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
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Soldering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



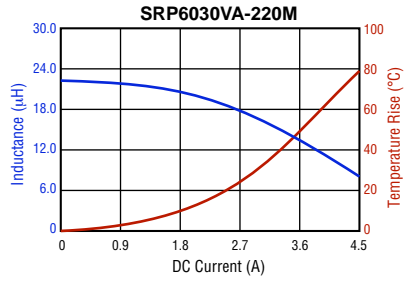
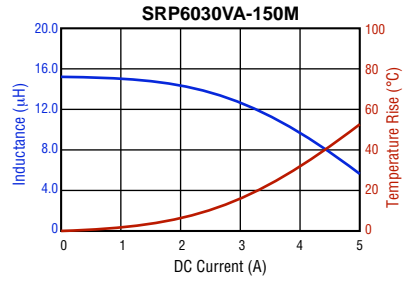
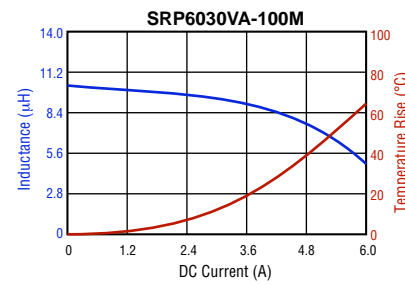
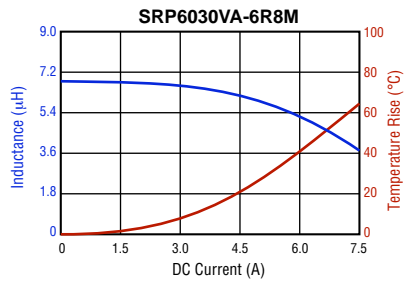
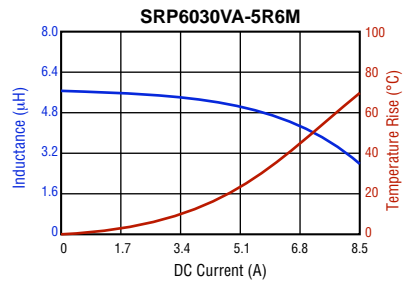
L vs. I Charts



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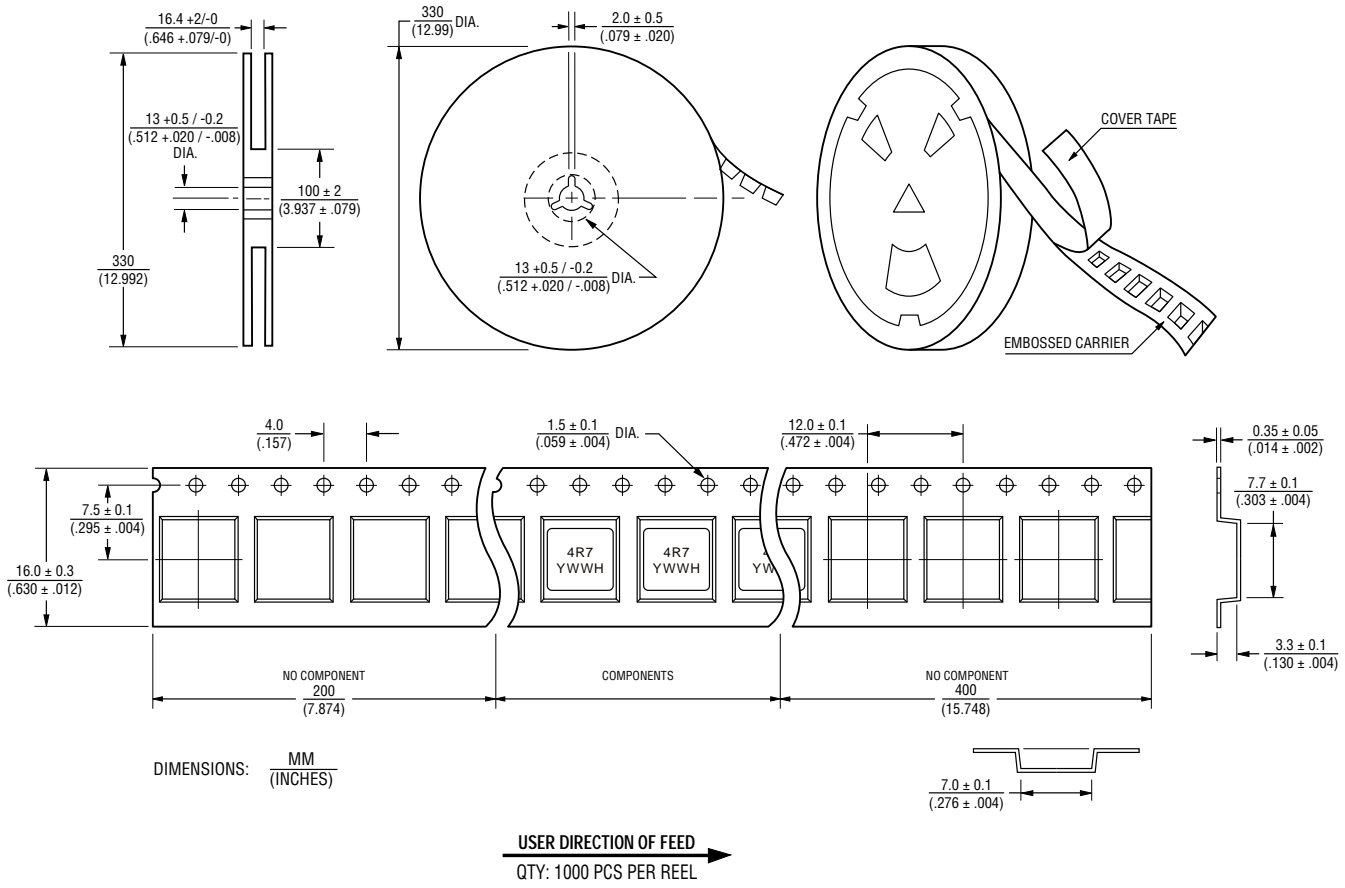
L vs. I Charts (Continued)



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Packaging Specifications



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