

Features

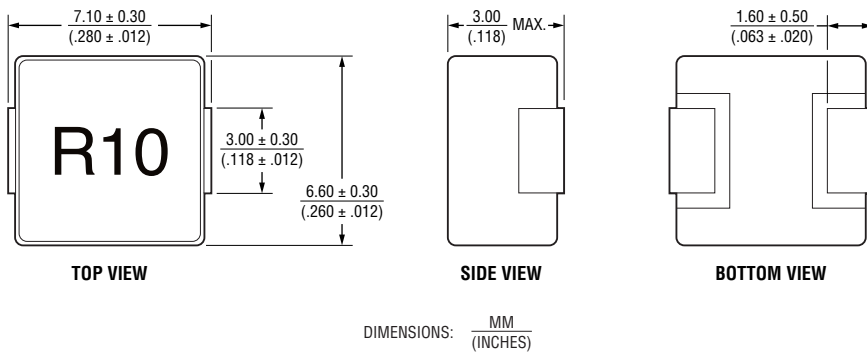
- Shielded construction for low radiation
- Metal alloy powder core
- High saturation current
- Low buzz noise
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP6530A Series – Shielded Power Inductors

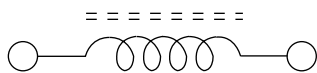
Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 500 kHz / 0.25 V		Q (MHz) Typ.	Q Test Freq. (MHz)	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A) Typ.	Isat (A) Typ.
	L (μH)	Tol. %							
SRP6530A-R10M	0.10	20	14	25.2	200	1.5	1.7	34.0	70.0
SRP6530A-R22M	0.22	20	12	25.2	145	2.5	2.8	25.5	50.0
SRP6530A-R33M	0.33	20	12	25.2	140	3.5	3.9	21.5	35.0
SRP6530A-R47M	0.47	20	10	25.2	80	4.0	4.2	21.0	30.0
SRP6530A-R56M	0.56	20	12	25.2	78	5.0	5.5	18.0	28.0
SRP6530A-R68M	0.68	20	8	25.2	75	5.1	5.5	17.5	28.0
SRP6530A-R82M	0.82	20	8	25.2	68	6.7	7.8	14.0	26.0
SRP6530A-1R0M	1.00	20	30	7.96	58	9.0	10.0	12.0	25.0
SRP6530A-1R5M	1.50	20	30	7.96	45	14.0	15.0	10.0	18.0
SRP6530A-2R2M	2.20	20	30	7.96	30	18.0	20.0	10.0	14.0
SRP6530A-3R3M	3.30	20	24	7.96	25	28.0	30.0	8.0	13.5
SRP6530A-4R7M	4.70	20	21	7.96	22	37.0	40.0	6.0	11.0
SRP6530A-5R6M	5.60	20	21	7.96	20	52.0	60.0	5.8	10.5
SRP6530A-6R8M	6.80	20	26	2.52	17	54.0	60.0	5.5	9.0
SRP6530A-8R2M	8.20	20	26	2.52	12	64.0	68.0	5.0	7.5
SRP6530A-100M	10.0	20	26	2.52	10	102.0	105.0	4.0	7.0

Product Dimensions



Schematic



How to Order

SRP6530A - 100M

Model _____
Value Code (see table) _____

Additional Information

Click these links for more information:



General Specifications

Operating Temperature

..... -55 °C to +155 °C
(Temperature rise included)

Storage Temperature (Component)

..... -55 °C to +155 °C

Temperature Rise 40 °C at rated Irms¹ Rated Current

..... Inductance drops 30 % at Isat

Rated Voltage..... 50 V

MSL 1

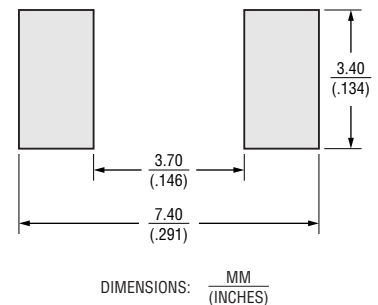
ESD Classification (HBM)..... N/A

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.

Material

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

Recommended Layout



CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant.
See 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.

Specifications are subject to change without notice.

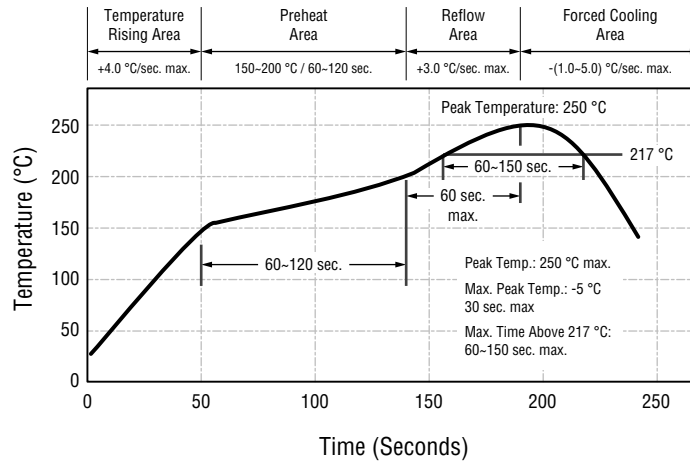
Users should verify actual device performance in their specific applications.

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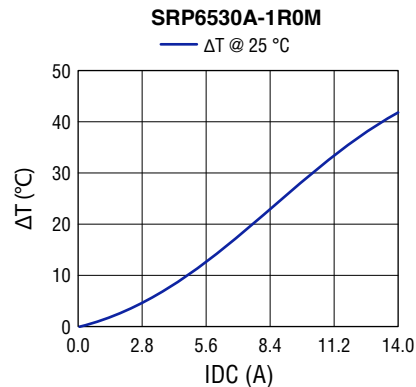
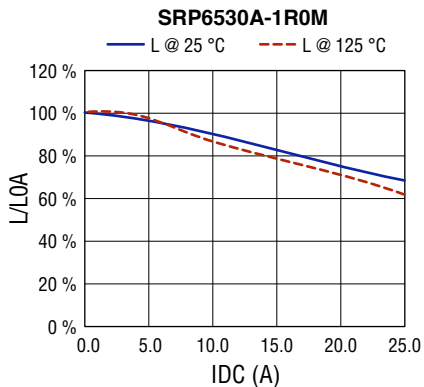
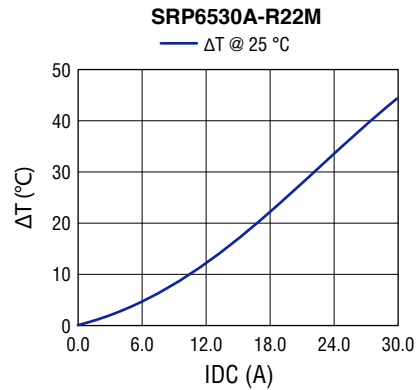
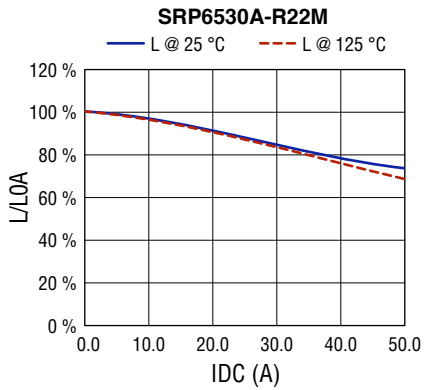
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Soldering Profile



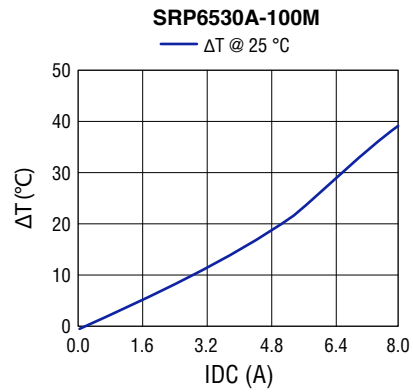
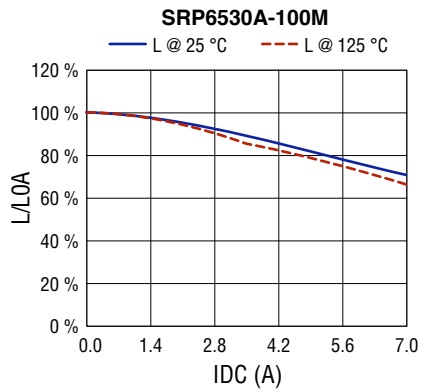
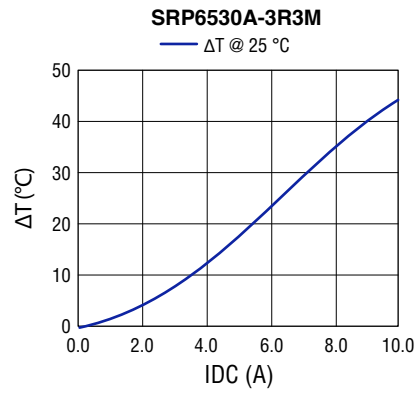
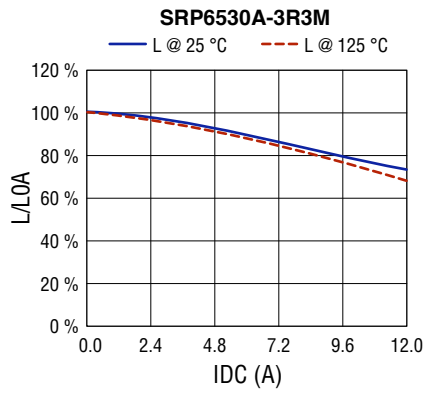
Inductance vs. IDC



SRP6530A Series - Shielded Power Inductors



Inductance vs. IDC (continued)



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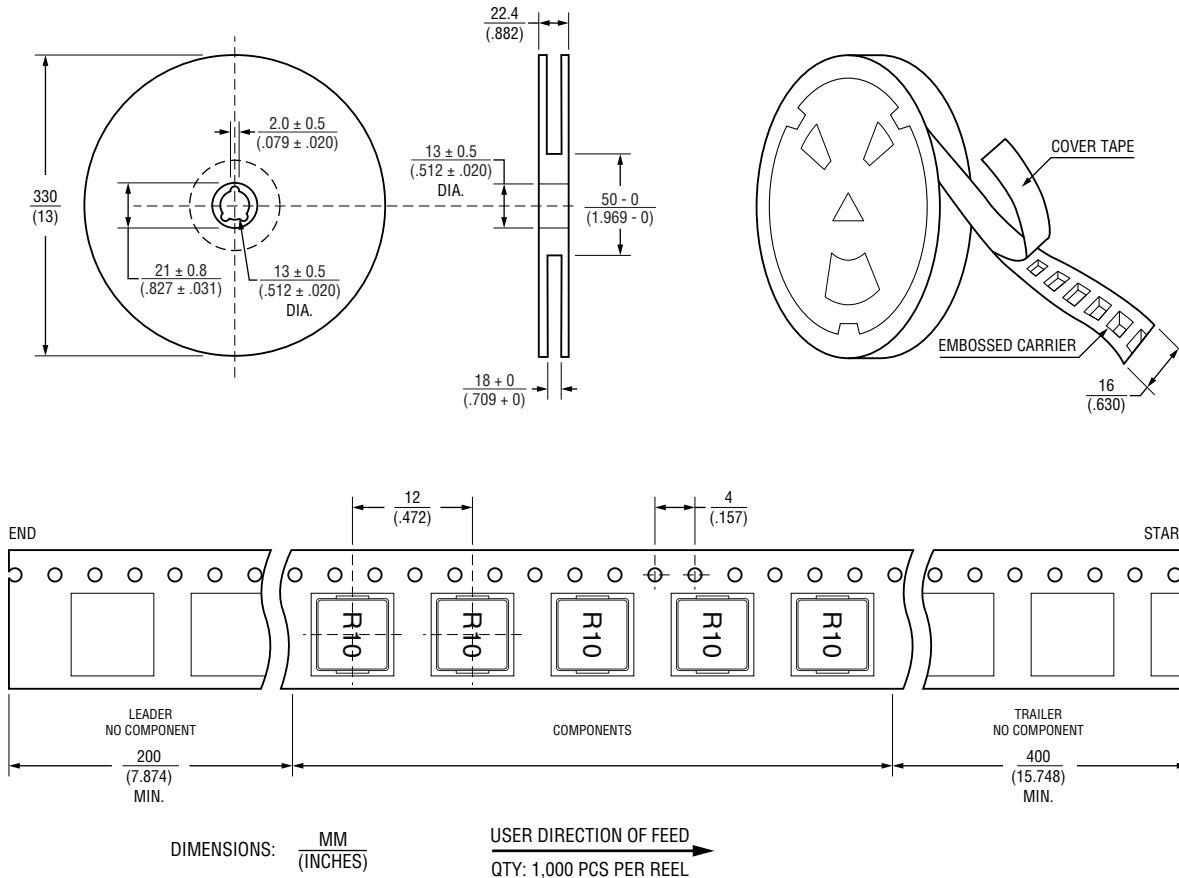
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Packaging Specifications



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