

Features

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

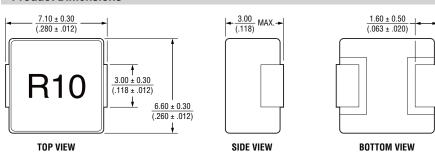
BOURNS

SRP6530A Series – Shielded Power Inductors

Electrical Specifications @ 25 °C

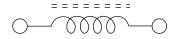
	Inductance @ 500 kHz / 0.25 V		Q	Q Test	SRF	DCR	DCR	Irms	Isat
Bourns Part No.	L (μH)	Tol. %	(MHz) Typ.	Freq. (MHz)	(MHz) Typ.	(mΩ) Typ.	(mΩ) Max.	(A) Typ.	(A) Typ.
SRP6530A-R10M	0.10	20	14	25.2	200	1.5	1.7	34.0	70.0
SRP6530A-R22M	0.22	20	12	25.2	145	2.5	2.8	25.5	50.0
SRP6530A-R33M	0.33	20	12	25.2	140	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



MM DIMENSIONS:

Schematic



How to Order

SRP6530A - 100M Model Value Code (see table)

Additional Information

Click these links for more information:









PRODUCT TECHNICAL INVENTORY SAMPLES

CONTACT

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

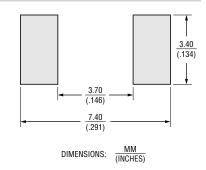
.....Inductance drops 30 % at Isat Rated Voltage 50 V MSL1 ESD Classification (HBM).....N/A

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 FinishNi/Sn Packaging..... 1000 pcs. per 13-inch reel

Recommended Layout



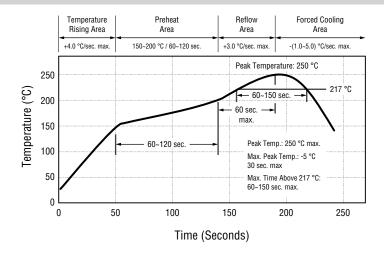
Users should verify actual device performance in their specific applications.

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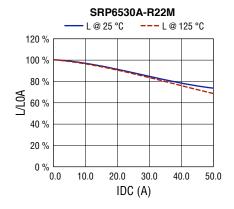
RoHS Directive 2015/863, Mar 31, 2015 and Annex.

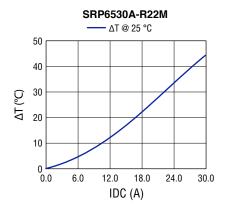
^{**} Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) content is 1500 ppm or less. Specifications are subject to change without notice.

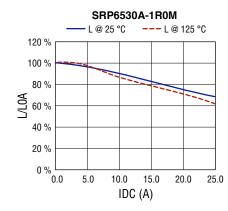
Soldering Profile

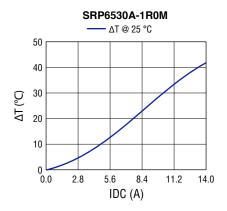


Inductance vs. IDC

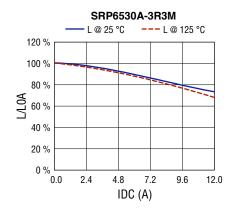


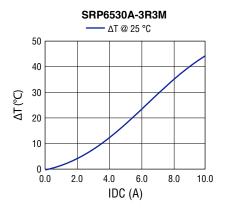


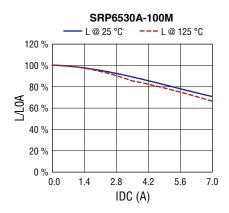


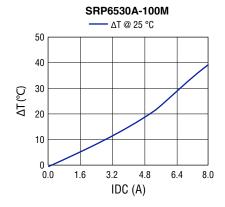


Inductance vs. IDC (continued)





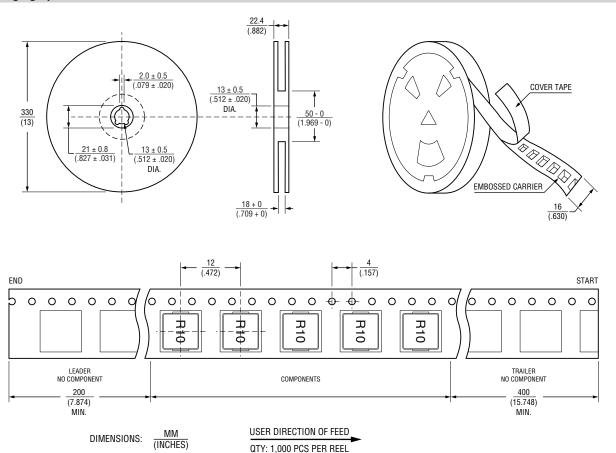




SRP6530A Series - Shielded Power Inductors

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Packaging Specifications



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