

Features

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

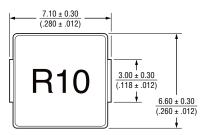
BOURNS

SRP6530A Series – Shielded Power Inductors

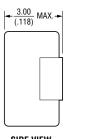
Electrical Specifications @ 25 °C

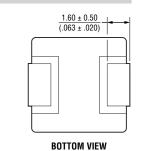
	Inductance @ 500 kHz / 0.25 V		Q	Q Test	SRF	DCR	DCR	Irms	Isat
Bourns Part No.	L (μH)	Tol. %	(MHz) Typ.	Freq. (MHz)	(MHz) Typ.	(mΩ) Typ.	(mΩ) Max.	(А) Тур.	(А) Тур.
SRP6530A-R10M	0.10	20	14	25.2	200	1.5	1.7	34.0	70.0
SRP6530A-R22M	0.22	20	12	25.2	145	2.5	2.8	25.5	50.0
SRP6530A-R33M	0.33	20	12	25.2	140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



TOP VIEW





SIDE VIEW

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MM
DIMENSIONS:
             (INCHES)
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Additional Information

Click these links for more information:



General Specifications

Operating Temperature

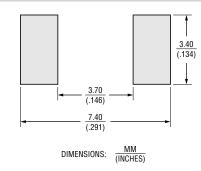
operating remperatione
(Temperature rise included)
Storage Temperature (Component)
Temperature Rise 40 °C at rated Irms ¹
Rated Current
Inductance drops 30 % at Isat
Rated Voltage 50 V
MSL1
ESD Classification (HBM)N/A
Note 1: Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all can

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

Recommended Layout



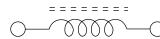
RoHS Directive 2015/863, Mar 31, 2015 and Annex.

** 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.

Users should verify actual device performance in their specific applications.

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Schematic

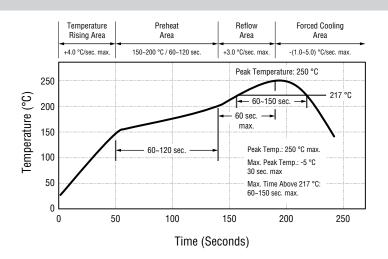




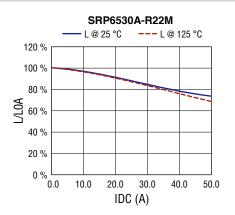
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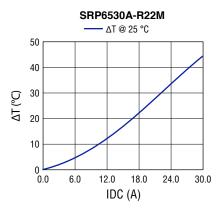
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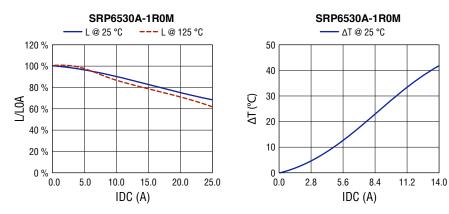
Soldering Profile



Inductance vs. IDC







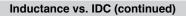
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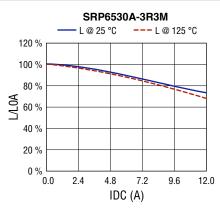
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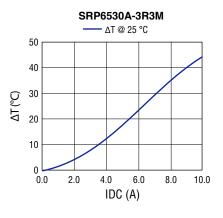
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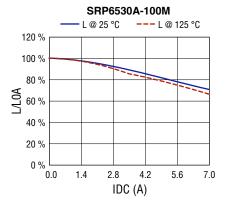
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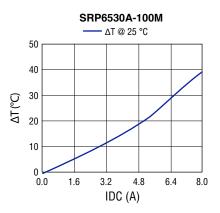
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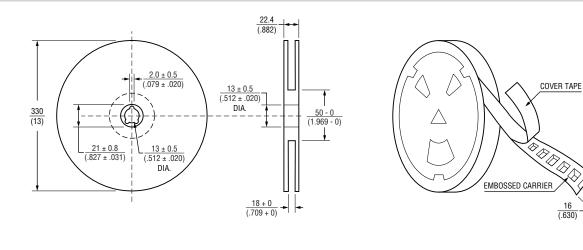
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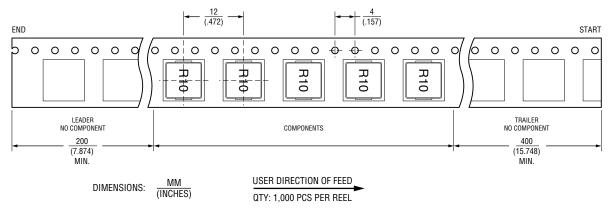
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SRP6530A Series - Shielded Power Inductors

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Packaging Specifications





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