



Features

- Wirewound
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low profile
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

Applications

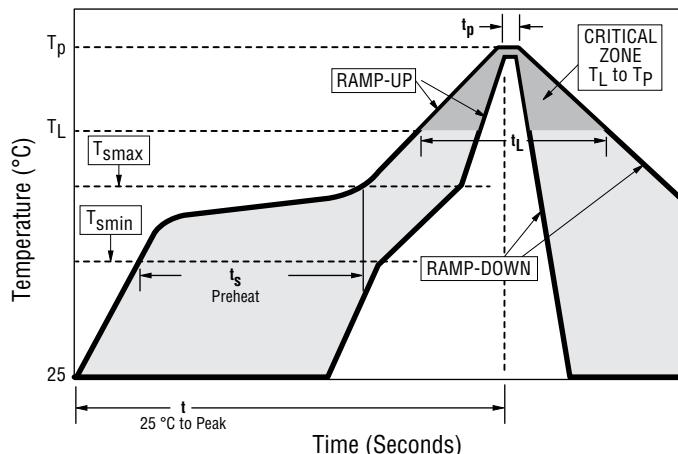
- Automotive systems:
 - Driver assistant
 - Infotainment
- DC/DC converters
- Power supplies
- Smartphones
- HDD/SSD
- Miniature mobile electronic devices

SRP2510A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 1 MHz / 1 V		Q (Typ.) @1 MHz / 1 V	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A) Typ.	Isat (A) Typ.
	L (μH)	Tol. (%)						
SRP2510A-R22M	0.22	±20	35	170	9	12.5	5.9	7.9
SRP2510A-R33M	0.33	±20	35	170	21	26	4.4	6.6
SRP2510A-R47M	0.47	±20	35	138	27	32	3.9	5.0
SRP2510A-R68M	0.68	±20	35	120	37	44	3.4	4.3
SRP2510A-1R0M	1.0	±20	35	94	45	54	3.0	3.5
SRP2510A-1R5M	1.5	±20	35	68	76	91	2.5	2.6
SRP2510A-2R2M	2.2	±20	35	57	99	119	2.3	2.4
SRP2510A-4R7M	4.7	±20	35	40	220	262	1.36	1.8

Soldering Profile



Profile Feature	Pb Free Assembly
Average Ramp Rate (Tsmax to Tp)	3 °C/second max.
Preheat <ul style="list-style-type: none"> - Temperature Min. (Tsmin) - Temperature Max. (Tsmax) - Time (tsmin to tsmax) 	150 °C 200 °C 60-180 seconds
Time Maintained Above <ul style="list-style-type: none"> - Temperature (Tl) - Time (tl) 	217 °C 60-150 seconds
Peak Temperature (Tp)	260 °C +0/-5 °C
Time within 5 °C of Actual Peak Temperature (Tp)	20-40 seconds
Ramp-Down Rate	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

* 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. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

Additional Information

Click these links for more information:



General Specifications

Operating Temperature... -40 °C to +125 °C
(Temperature rise included)

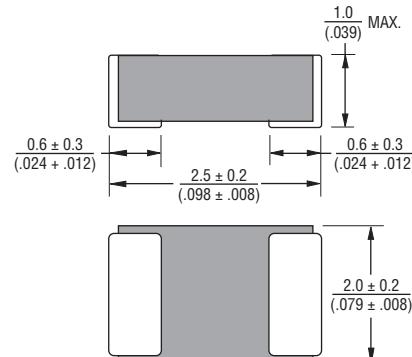
Storage Temperature (Component) -50 °C to +125 °C

Rated Current Inductance drops 30 % at Isat
Temperature Rise 40 °C at rated Irms
Moisture Sensitivity Level (MSL) 1
ESD Classification (HBM) N/A

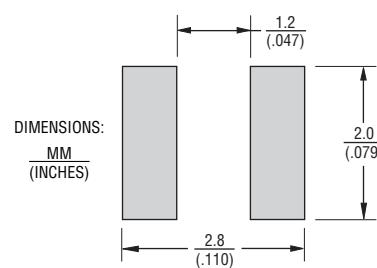
Materials

Core Metal alloy powder
Wire Enamelled copper
Terminal Finish Sn
Packaging 3000 pcs. per 7-inch reel

Product Dimensions



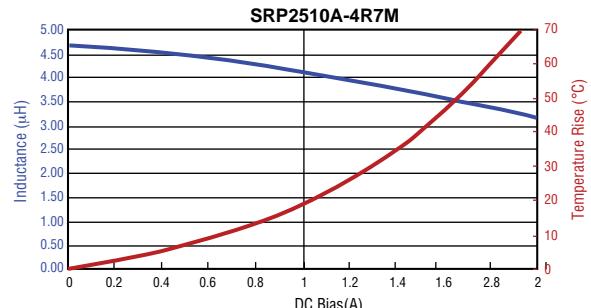
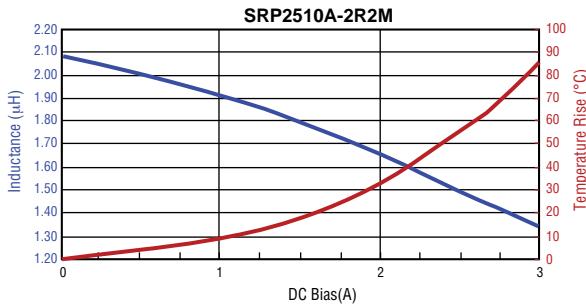
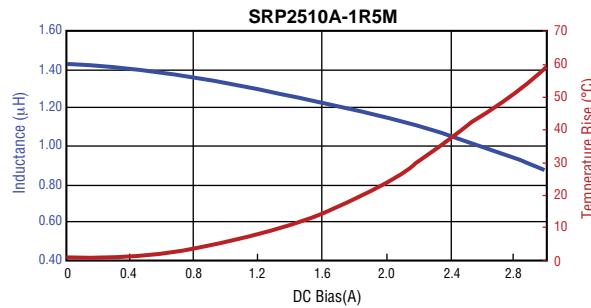
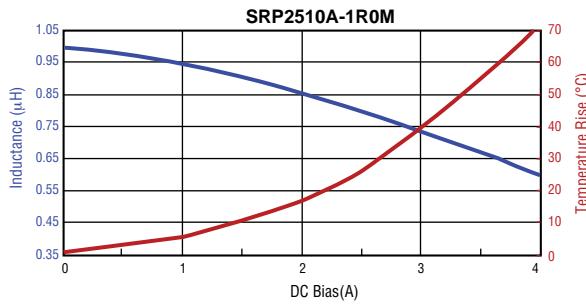
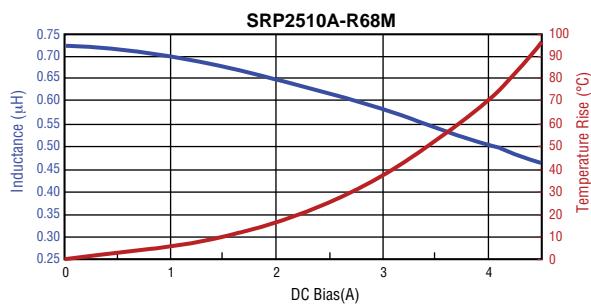
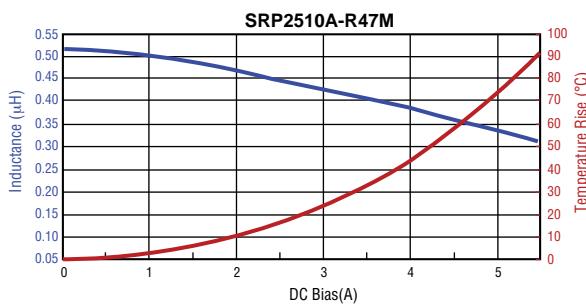
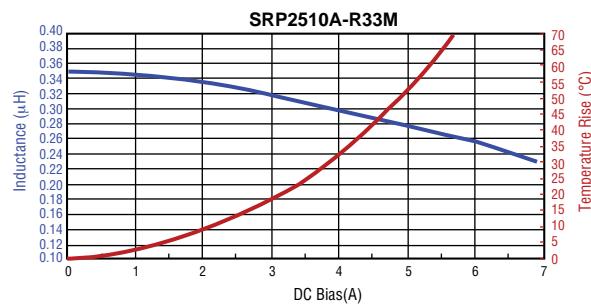
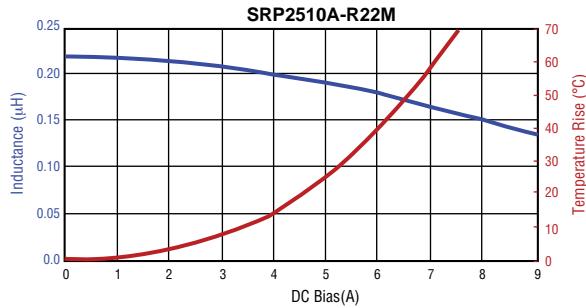
Recommended Layout



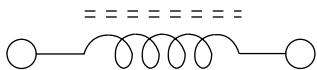
SRP2510A Series - Shielded Power Inductors

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L vs. I Charts



Electrical Schematic



How to Order

SRP2510A - R22M
Model _____
Value Code (see table) _____

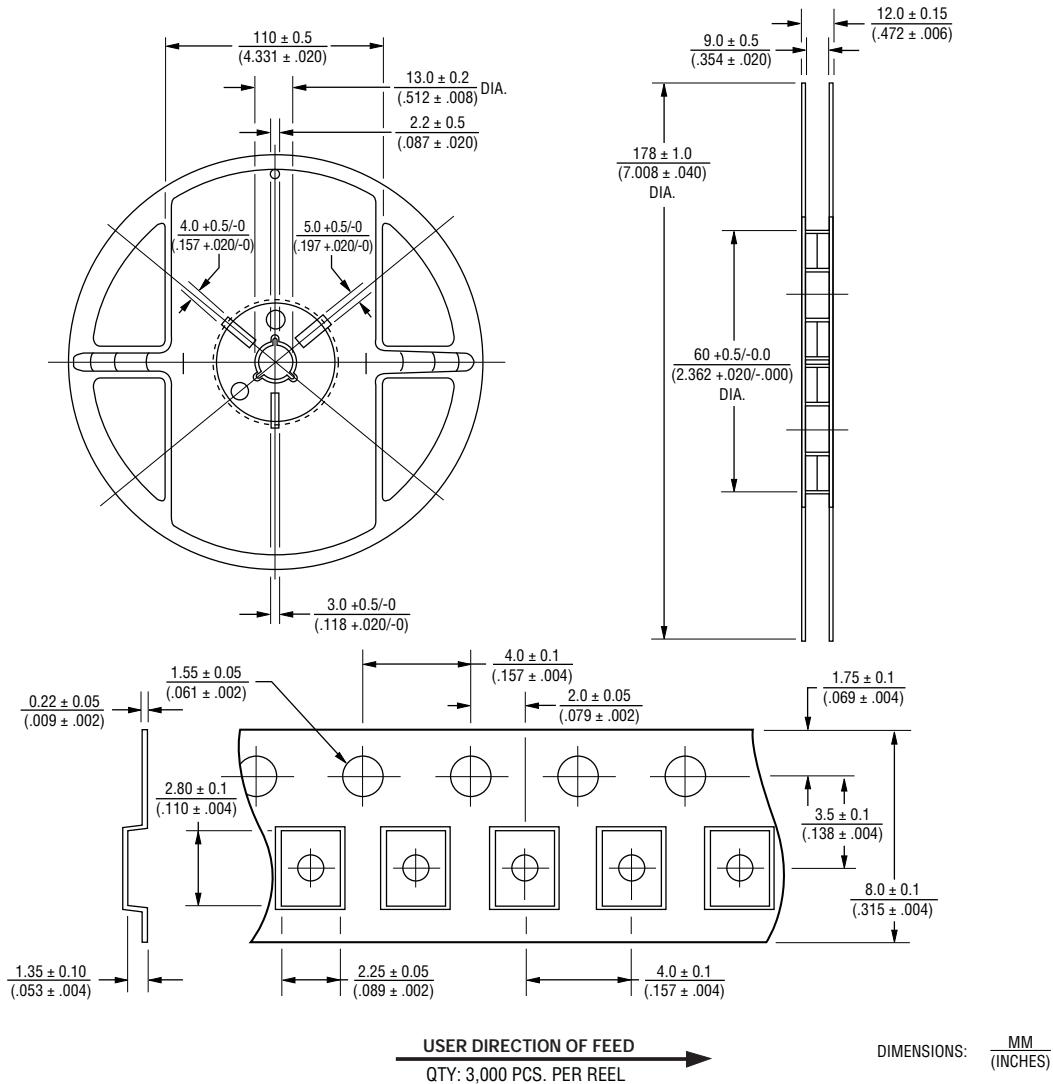
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SRP2510A Series - Shielded Power Inductors

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Packaging Specifications



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