



Features

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



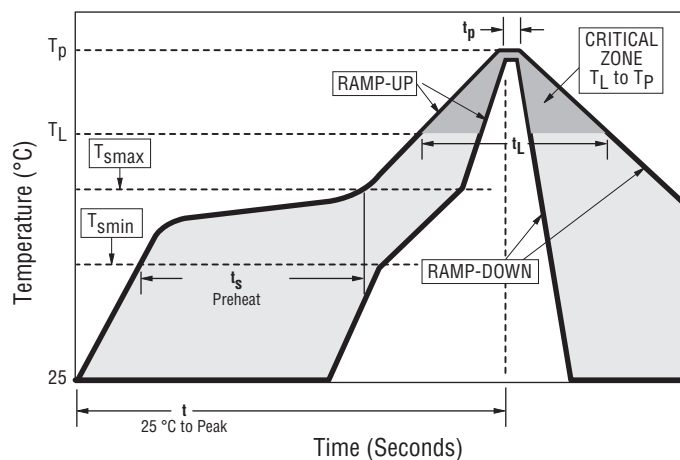
This series is currently available but not recommended for new designs. The [SRP2510PA Series](#) is the recommended replacement.

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 (T _{Smax} to T _P)	3 °C/second max.
Preheat - Temperature Min. (T_{Smin}) - Temperature Max. (T_{Smax}) - Time (t_{Smin} to t_{Smax})	150 °C 200 °C 60-180 seconds
Time Maintained Above - Temperature (T_L) - Time (t_L)	217 °C 60-150 seconds
Peak Temperature (T _P)	260 °C +0/-5 °C
Time within 5 °C of Actual Peak Temperature (T _P)	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.

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Additional Information

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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

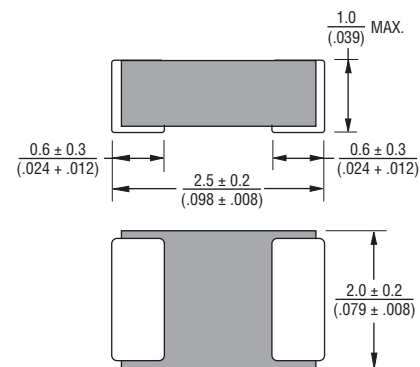
Moisture Sensitivity Level (MSL) 1

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

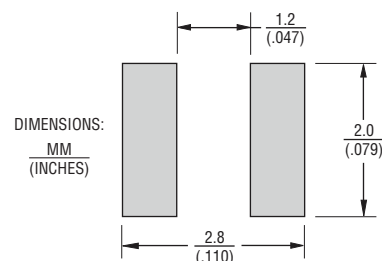
Materials

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

Product Dimensions



Recommended Layout



CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant. See www.P65Warnings.ca.gov

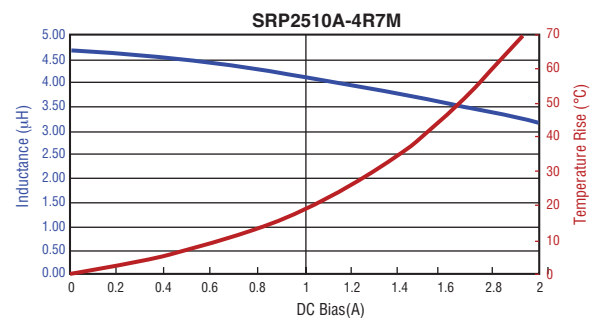
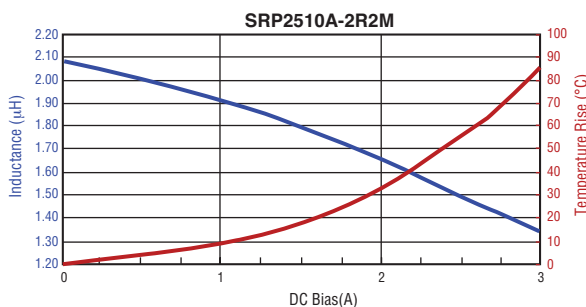
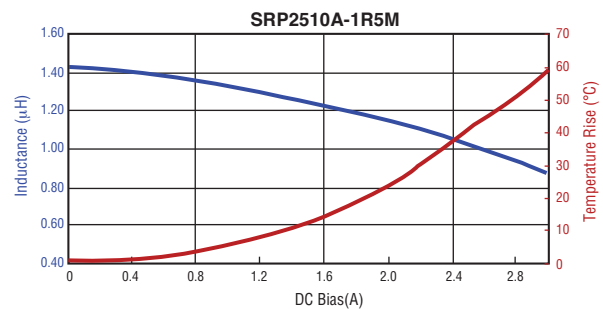
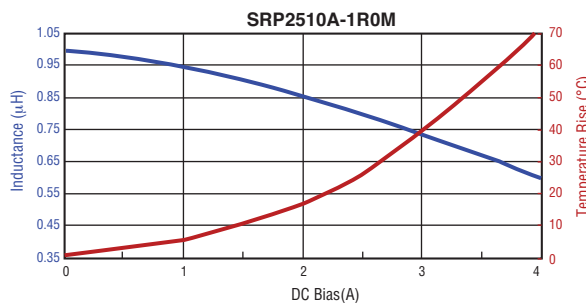
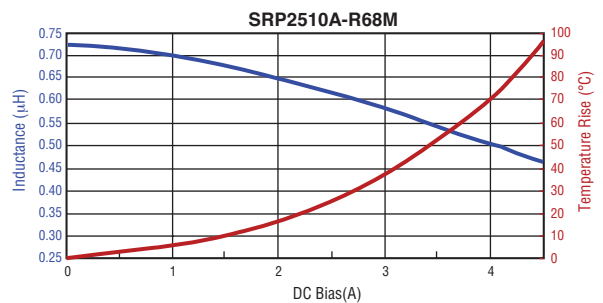
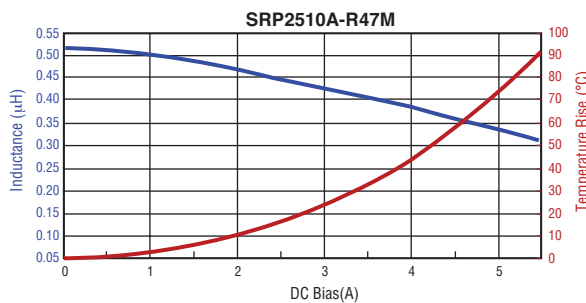
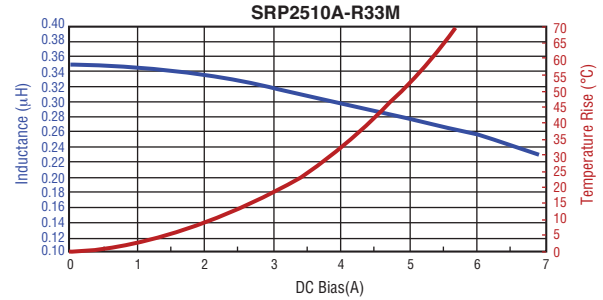
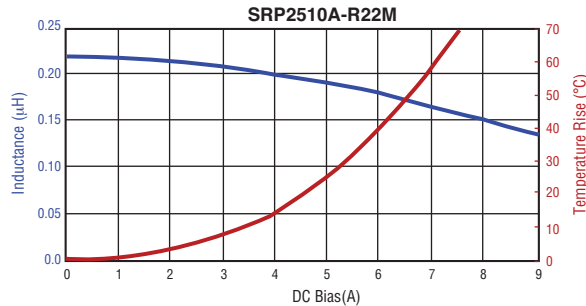
Applications

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

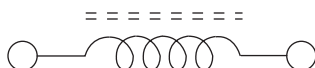
SRP2510A Series - Shielded Power Inductors

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L vs. I Charts



Electrical Schematic



How to Order

SRP2510A - R22M

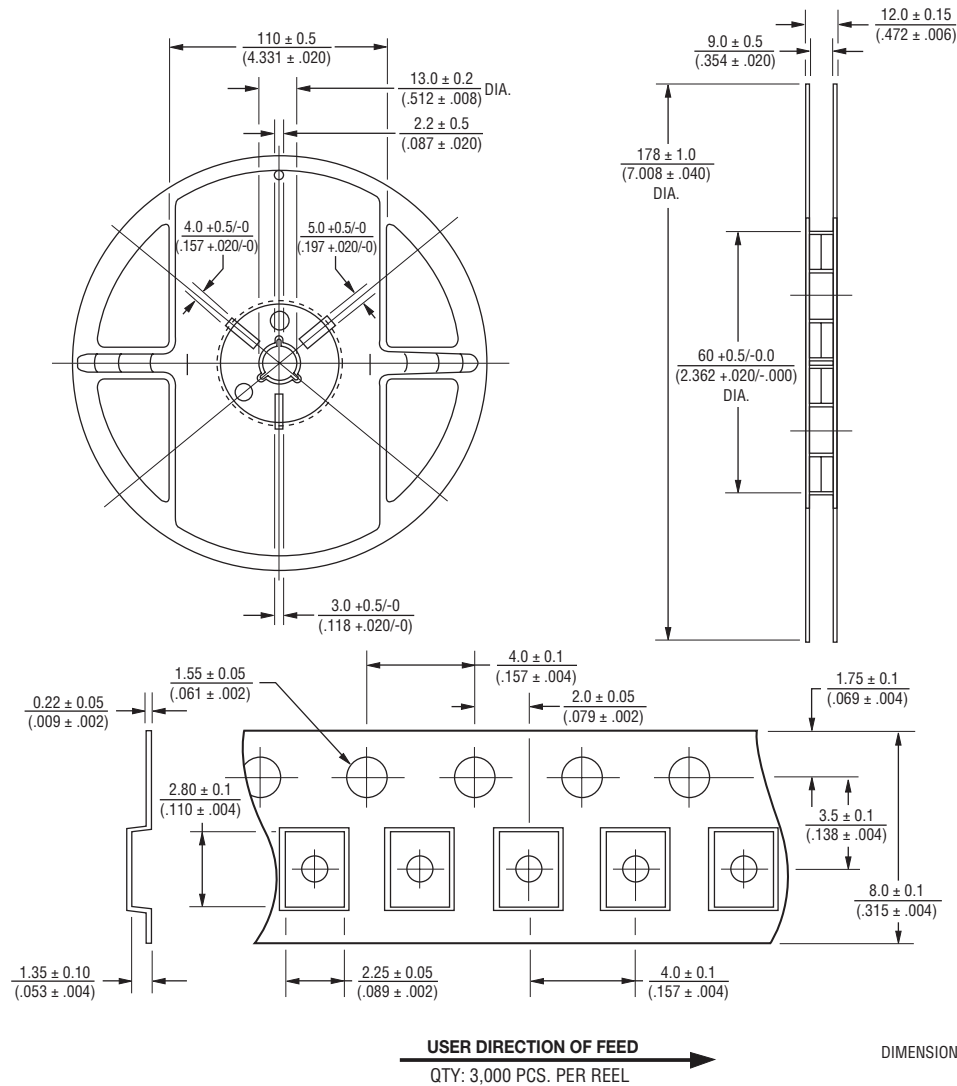
Model _____
Value Code (see table) _____

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SRP2510A Series - Shielded Power Inductors

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Packaging Specifications



BOURNS®

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