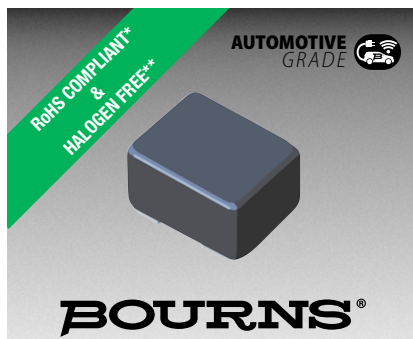




Features

- Shielded construction – low radiation
- Low buzz noise
- High current
- Low DCR
- Wide operating temperature range
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

Applications

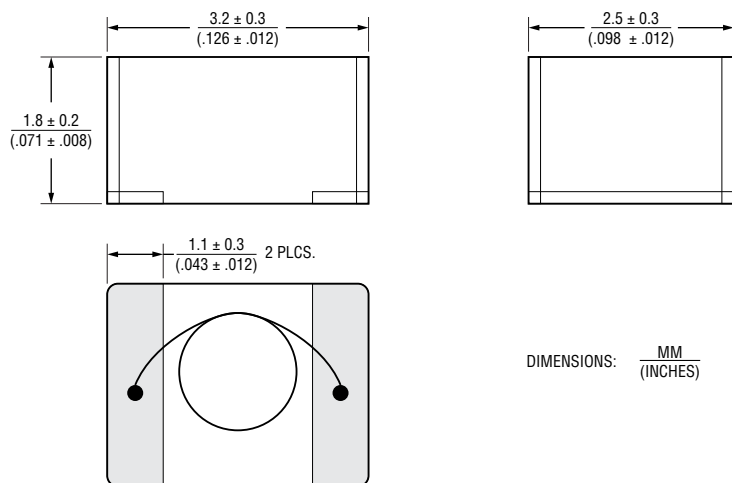
- Automotive systems
- Power supplies
- Consumer electronics

SRP3220A Series – Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V		DCR (mΩ)		I _{rms} (A)	I _{sat} (A)
	L (μH)	Tol. (%)	Typ.	Max	Typ.	Typ.
SRP3220A-R33M	0.33	±20	8	9.6	8.5	11
SRP3220A-R47M	0.47		9.3	11.2	8	9
SRP3220A-R68M	0.68		13.3	16	7	8
SRP3220A-1R0M	1.0		18.3	22	6.2	7.5
SRP3220A-1R5M	1.5		25.8	31	5.3	6
SRP3220A-2R2M	2.2		38	46	3.7	5
SRP3220A-3R3M	3.3		56	65	3.2	4.2
SRP3220A-4R7M	4.7		90	98	2.8	3.4
SRP3220A-6R8M	6.8		105	126	2.3	2.3

Product Dimensions



Additional Information

Click these links for more information:



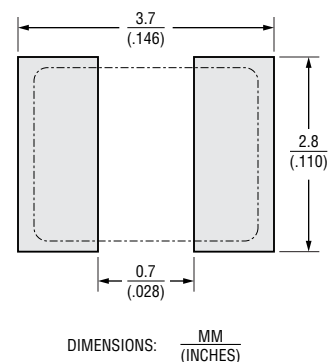
General Specifications

Operating Temperature -55 °C to +150 °C
 Storage Temperature -55 °C to +150 °C
 Temperature Rise 40 °C at rated I_{rms}
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

Materials

Core Metal alloy powder
 Wire Enameled copper
 Terminal Finish Ag/Ni/Sn
 Packaging 2,000 pcs. per 7-inch reel

Recommended Layout

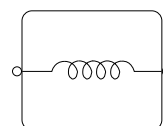


How to Order

SRP3220A - R33 M

Model _____
 Value Code _____
 (see table)
 Tolerance _____
 M = ±20 %

Electrical Schematic



WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

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

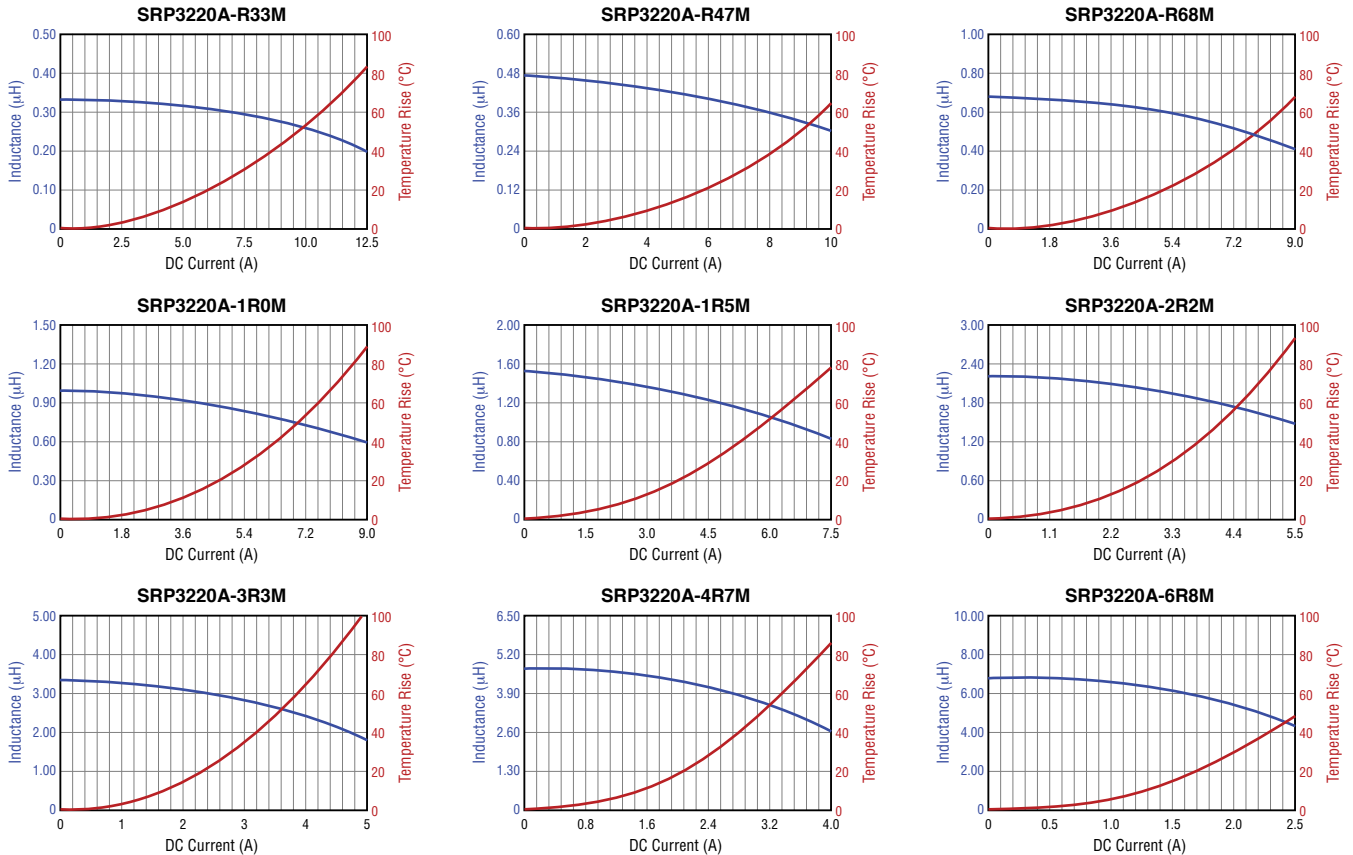
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. 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.

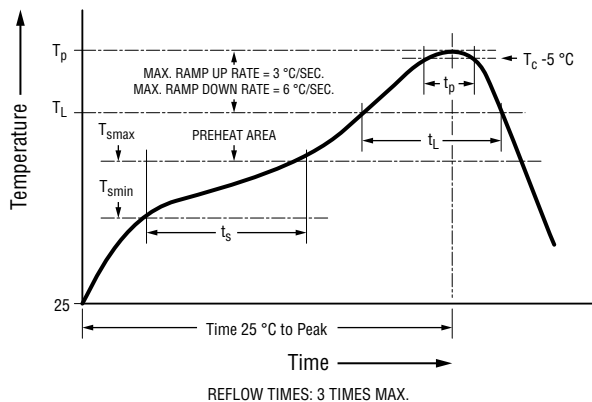
SRP3220A Series – Shielded Power Inductors

BOURNS®

L vs. I Charts



Soldering Profile



Profile Feature	Pb Free Assembly
Preheat - Temperature Min. (T_{smin}) - Temperature Max. (T_{smax}) - Time (t_s) from T_{smin} to T_{smax}	150 °C 200 °C 60-120 seconds
Ramp-up Rate (T_L to T_p)	3 °C/second max.
Liquidous temperature (T_L)	217 °C
Time (t_L) maintained above T_L	60-150 seconds
Peak package body temperature (T_p)	260 °C
Time (t_p) at $T_C - 5$ °C (T_p should be equal to or less than T_C)	< 30 seconds
Ramp-Down Rate (T_p to T_L)	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

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BOURNS®

Technical drawing of a 16-pin D-subminiature connector. The drawing includes three views: a top view, a side view, and a front view.

Top View Dimensions:

- Overall width: 178 ± 2.0 (7.008 $\pm$.079)
- Pin pitch (center-to-center): $13.0 \pm 0.5/-0.2$ (.512 $\pm$.020/-0.008)
- Pin diameter: $8.4 \pm 1.5/-0$ (.331 $\pm$.059/-0)
- Pin height: 60 ± 1 (2.362 $\pm$.039)

Side View Dimensions:

- Overall height: 1.75 ± 0.1 (.069 $\pm$.004)
- Pin height: 8.0 ± 0.1 (.315 $\pm$.004)
- Pin diameter: 3.5 ± 0.1 (.138 $\pm$.004)

Front View Dimensions:

- Overall length: 400 (15.75) MIN.
- Pin pitch (center-to-center): 4.0 ± 0.1 (.157 $\pm$.004)
- Pin diameter: 2.0 ± 0.1 (.079 $\pm$.004)
- Pin height: $1.5 \pm 0.1/-0$ (.059 $\pm$.004/-0) DIA.
- Pin diameter: 0.22 ± 0.05 (.009 $\pm$.002)
- Pin height: 3.6 ± 0.1 (.142 $\pm$.004)
- Pin diameter: 2.2 ± 0.1 (.087 $\pm$.004)

Labels:

- COVER TAPE
- EMBOSSED CARRIER
- LEADER NO COMPONENT
- COMPONENTS
- TRAILER NO COMPONENT

Dimensions: MM (INCHES)

USER DIRECTION OF FEED

QTY: 2,000 PCS PER REEL

www.bourns.com

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