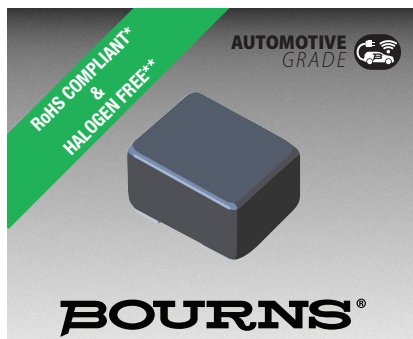




Features

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

Applications

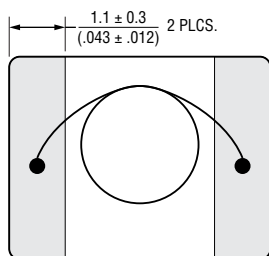
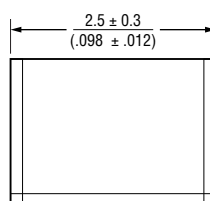
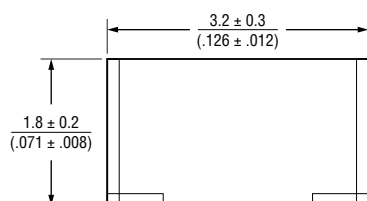
- Automotive systems
- Power supplies
- Consumer electronics

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



DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

Additional Information

Click these links for more information:



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[SAMPLES](#)

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General Specifications

Operating Temperature

..... -55 °C to +150 °C

Storage Temperature

..... -55 °C to +150 °C

Temperature Rise 40 °C at rated I_{rms}

Inductance Drop 30 % typ. at I_{sat}

Moisture Sensitivity Level..... 1

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

Materials

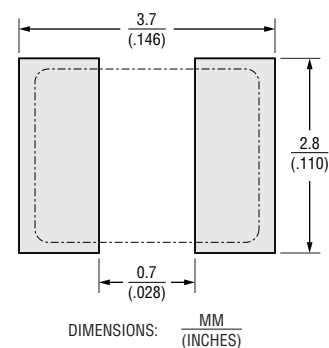
Core..... Metal alloy powder

Wire..... Enameled copper

Terminal..... Ag/Cu/Ni/Sn

Packaging..... 2,000 pcs. per 7-inch reel

Recommended Layout



How to Order

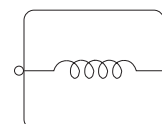
SRP3220A - R33 M

Model _____

Value Code _____
(see table)

Tolerance _____
M = ±20 %

Electrical Schematic



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

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

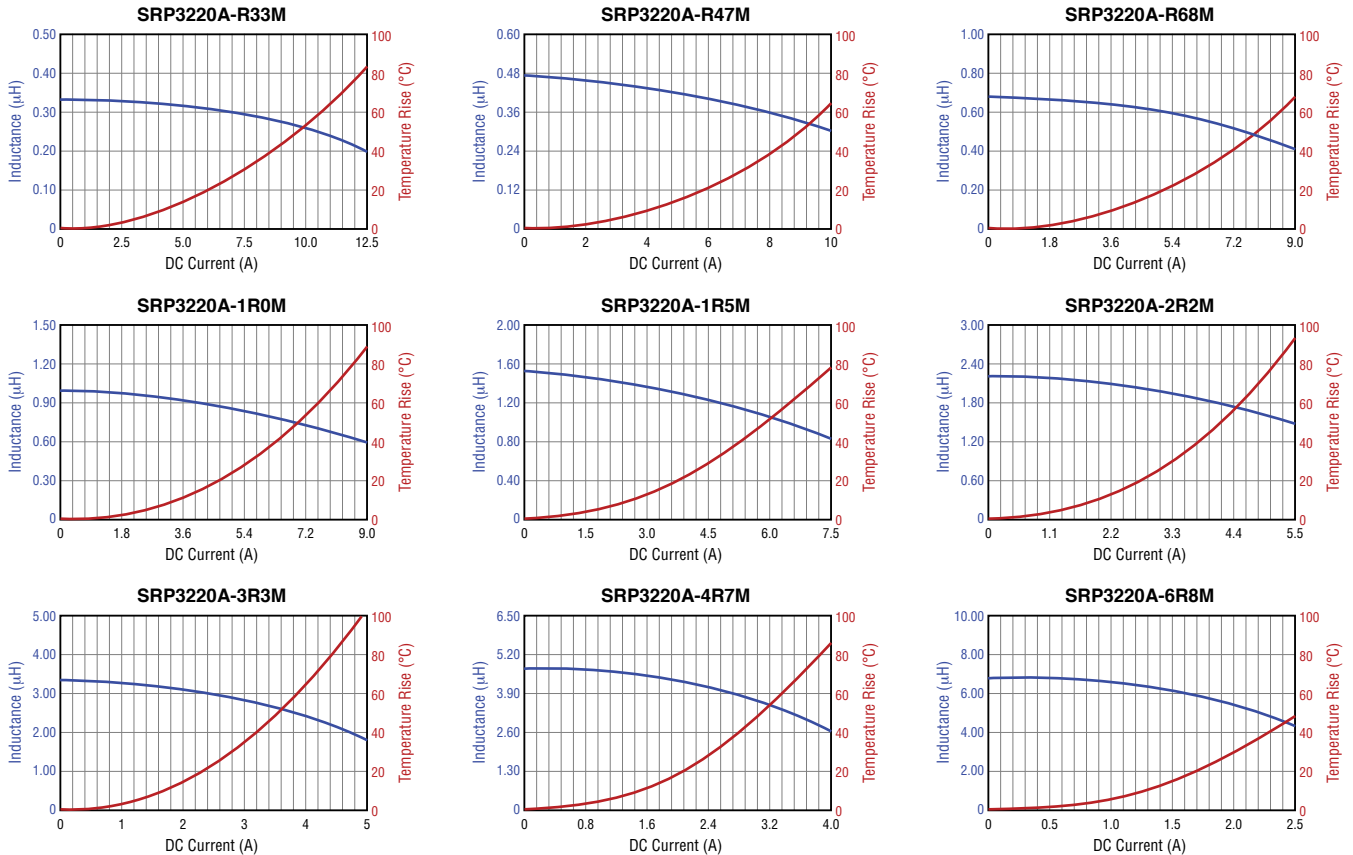
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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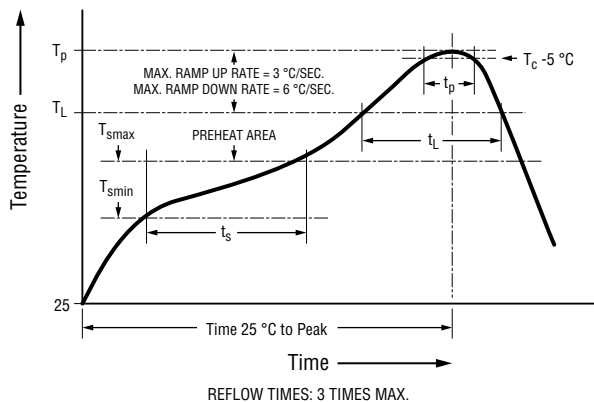
SRP3220A Series – Shielded Power Inductors

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 100-pin microflex connector, showing top, side, and detailed views with dimensions in mm and inches.

Top View Dimensions:

- Overall Diameter: 178 ± 2.0 mm ($7.008 \pm .079$ inches)
- Pin Pitch (Horizontal): $8.4 \pm 1.5/0$ mm ($.331 \pm .059/0$ inches)
- Pin Pitch (Vertical): $13.0 \pm 0.5/0.2$ mm ($.512 \pm .020/-0.008$ inches)

Side View Dimensions:

- Height: 60 ± 1 mm ($2.362 \pm .039$ inches)

Detailed View Dimensions:

- Leader Length: 200 mm (7.874 inches) MIN.
- Components Length: 400 mm (15.75 inches) MIN.
- Trailer Length: 400 mm (15.75 inches) MIN.
- Pin Pitch (Horizontal): 8.0 ± 0.1 mm ($.315 \pm .004$ inches)
- Pin Pitch (Vertical): 3.5 ± 0.1 mm ($.138 \pm .004$ inches)
- Pin Pitch (Horizontal): 4.0 ± 0.1 mm ($.157 \pm .004$ inches)
- Pin Pitch (Vertical): 4.0 ± 0.1 mm ($.157 \pm .004$ inches)
- Pin Pitch (Horizontal): 2.0 ± 0.1 mm ($.079 \pm .004$ inches)
- Pin Pitch (Vertical): $1.5 \pm 0.1/0$ mm ($.059 \pm .004/0$ inches) DIA.
- Pin Pitch (Horizontal): 0.22 ± 0.05 mm ($.009 \pm .002$ inches)
- Pin Pitch (Vertical): $1.5 \pm 0.1/0$ mm ($.059 \pm .004/0$ inches) DIA.
- Pin Pitch (Horizontal): 3.6 ± 0.1 mm ($.142 \pm .004$ inches)
- Pin Pitch (Vertical): 2.2 ± 0.1 mm ($.087 \pm .004$ inches)

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

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