

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

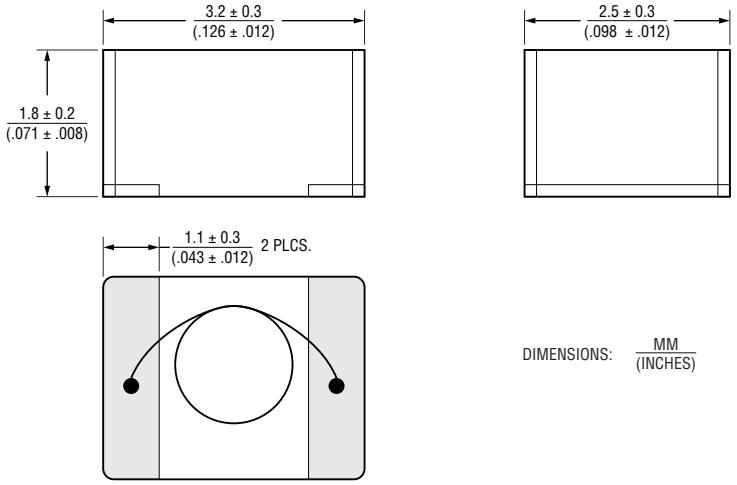
BOURNS®

SRP3220A Series – Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V		DCR (mΩ)		Irms (A)	Isat (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:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

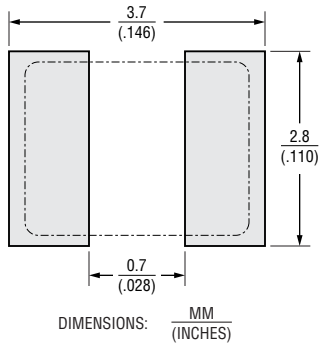
General Specifications

Operating Temperature ..... -55 °C to +150 °C
Storage Temperature ..... -55 °C to +150 °C
Temperature Rise .....40 °C at rated Irms
Inductance Drop .....30 % typ. at Isat
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

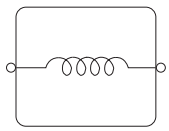


How to Order

SRP3220A - R33 M

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

Electrical Schematic



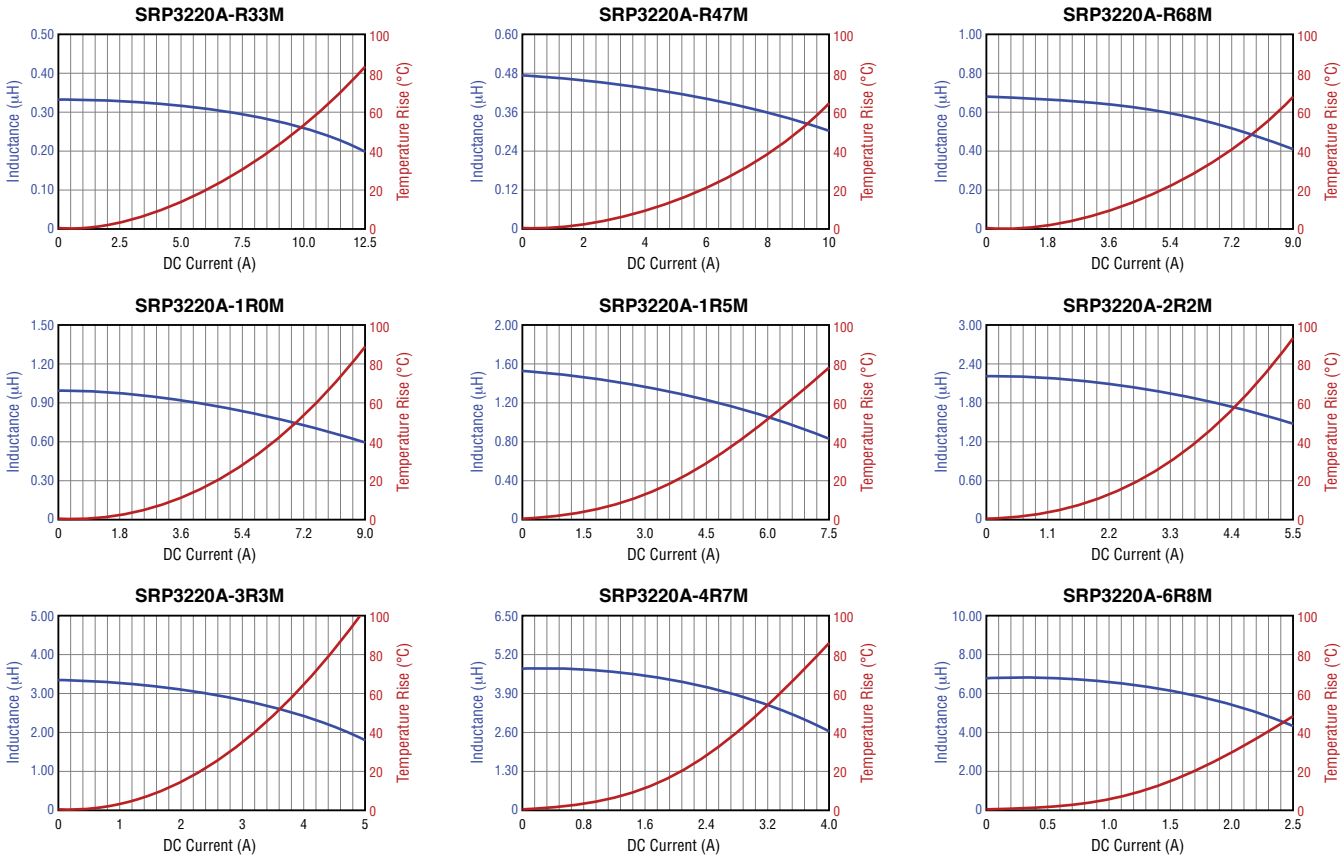
CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant. See www.P65Warnings.ca.gov

* 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.

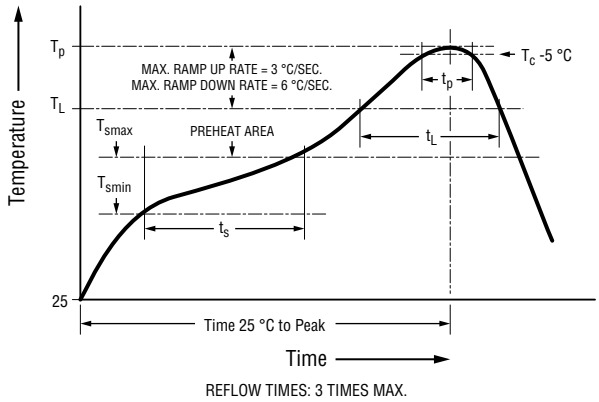
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L vs. I Charts



Soldering Profile



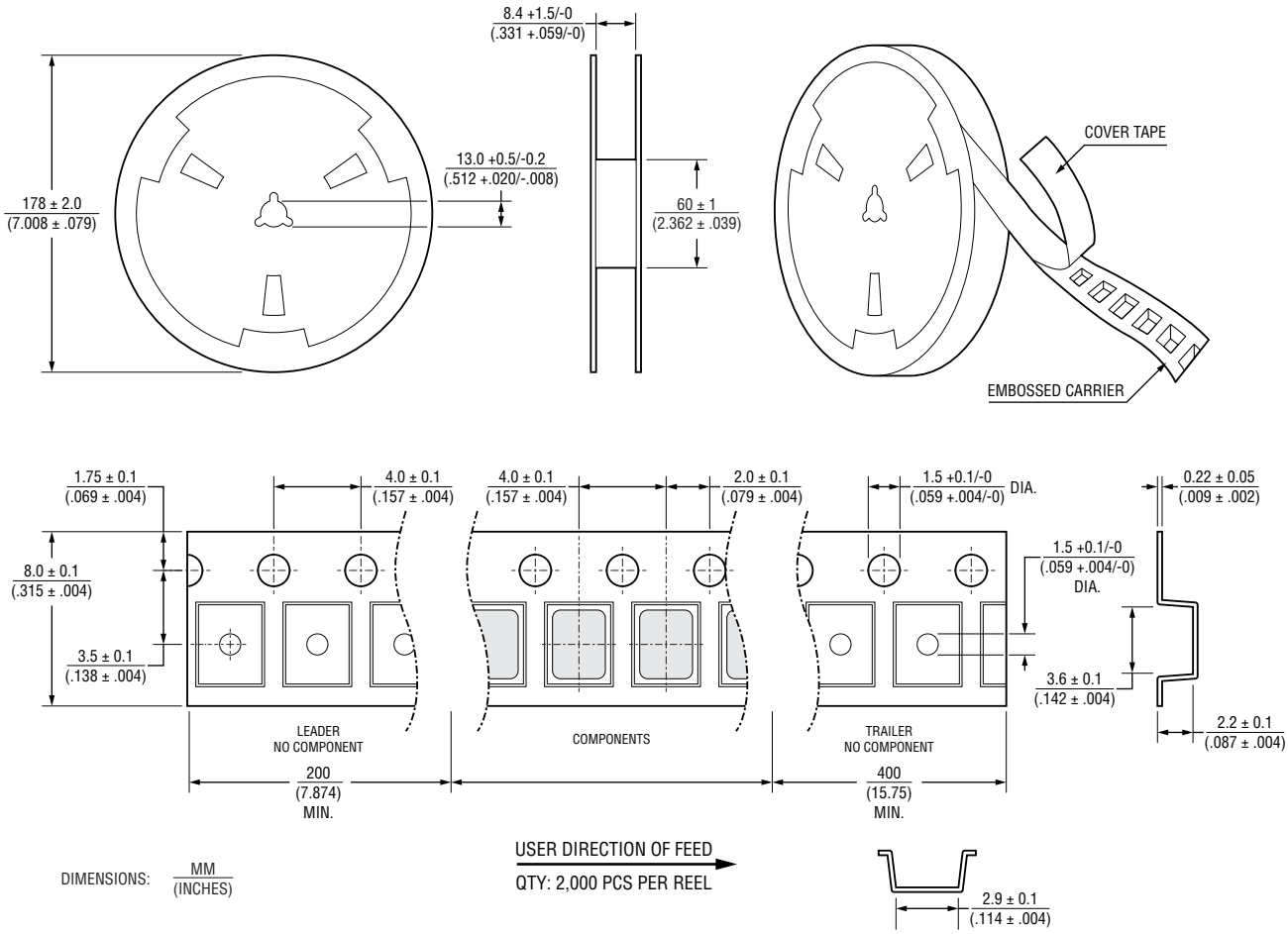
REFLOW TIMES: 3 TIMES MAX.

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) Time (t_L) maintained above T_L	217 °C 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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Packaging Specifications



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