



## Features

- Shielded construction for low radiation
- U-clip terminal for enhanced mounting strength
- Wide operating temperature range
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## SRR1050HA Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 kHz / 0.1 V		SRF (MHz) Typ.	DCR (mΩ)		Irms (A) Typ.	Isat (A) Typ.
	L (μH)	Tol. %		Typ.	Max.		
SRR1050HA-R68Y	0.68	30	110.0	4.5	5.5	9.50	13.5
SRR1050HA-1R2Y	1.2	30	85.0	5.8	7.0	8.30	10.5
SRR1050HA-2R2Y	2.2	30	53.0	7.1	9.0	7.20	8.20
SRR1050HA-3R3Y	3.3	30	40.0	8.6	11.0	6.50	7.80
SRR1050HA-4R2Y	4.2	30	29.0	10.4	14.0	6.10	6.40
SRR1050HA-6R8Y	6.8	30	27.0	15.1	19.0	5.40	5.40
SRR1050HA-8R2Y	8.2	30	21.0	18.1	22.0	5.00	4.85
SRR1050HA-100Y	10.0	30	16.5	23.0	31.0	4.50	4.45
SRR1050HA-120Y	12.0	30	15.0	26.0	35.0	3.80	4.00
SRR1050HA-150Y	15.0	30	14.0	35.0	47.0	3.40	3.60
SRR1050HA-180Y	18.0	30	11.0	38.0	51.0	3.10	3.20
SRR1050HA-220Y	22.0	30	10.5	46.0	62.0	2.90	2.95
SRR1050HA-270Y	27.0	30	10.0	57.0	77.0	2.60	2.70
SRR1050HA-330Y	33.0	30	9.0	69.0	93.0	2.50	2.40
SRR1050HA-390Y	39.0	30	6.8	79.0	106.0	2.25	2.30
SRR1050HA-470Y	47.0	30	5.9	94.0	127.0	2.00	2.00
SRR1050HA-560Y	56.0	30	5.5	124.0	160.0	1.90	1.90
SRR1050HA-680Y	68.0	30	5.0	138.0	208.0	1.60	1.65
SRR1050HA-820Y	82.0	30	4.5	150.0	230.0	1.45	1.50
SRR1050HA-101Y	100.0	30	4.2	179.0	255.0	1.35	1.35
SRR1050HA-121Y	120.0	30	3.8	213.0	305.0	1.18	1.28
SRR1050HA-151Y	150.0	30	3.6	253.0	370.0	1.10	1.12
SRR1050HA-181Y	180.0	30	3.4	307.0	420.0	1.00	1.04
SRR1050HA-221Y	220.0	30	3.0	373.0	500.0	0.94	0.94
SRR1050HA-271Y	270.0	30	2.4	491.0	675.0	0.80	0.84
SRR1050HA-331Y	330.0	30	2.0	613.0	815.0	0.73	0.75
SRR1050HA-471Y	470.0	30	1.8	990.0	1200.0	0.60	0.70

### Additional Information

Click these links for more information:



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### General Specifications

#### Operating Temperature

..... -55 °C to +150 °C  
(Temperature rise included)

#### Storage Temperature (Component)

..... -55 °C to +150 °C

#### Temperature Rise ... 40 °C at rated Irms<sup>1</sup>

#### Rated Current

..... Inductance drops 35 % at Isat

#### Moisture Sensitivity Level..... 1

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

<sup>1</sup> Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

### Materials

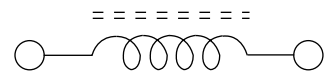
Core..... Ferrite

Wire..... Enameled copper

Terminal Finish..... Ni/Sn

Packaging..... 700 pcs. per 13-inch reel

### Electrical Schematic



### How to Order

**SRR1050HA - 100Y**

Model \_\_\_\_\_

Value Code (see table) \_\_\_\_\_



**WARNING**  
**Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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

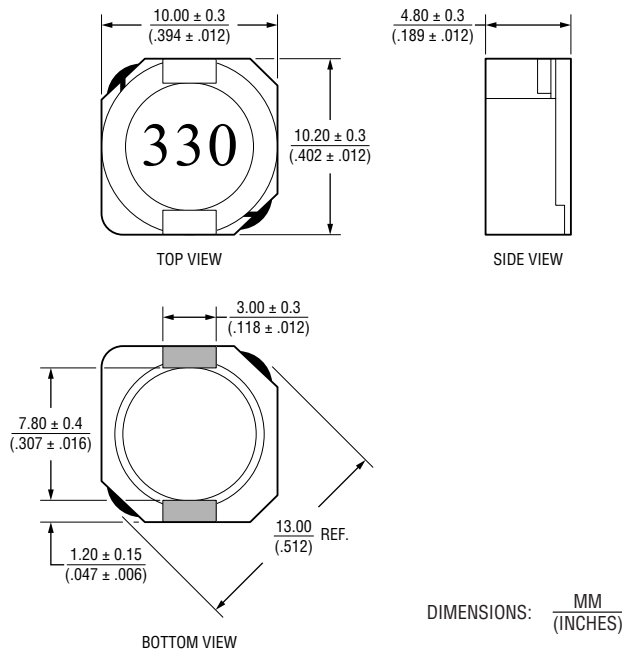
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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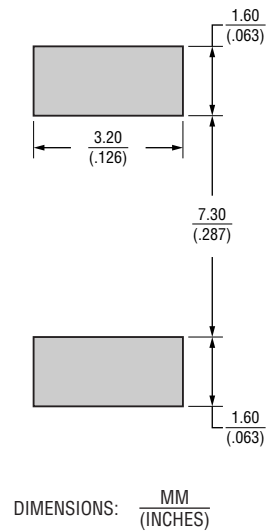
# SRR1050HA Series - Shielded Power Inductors



## Product Dimensions

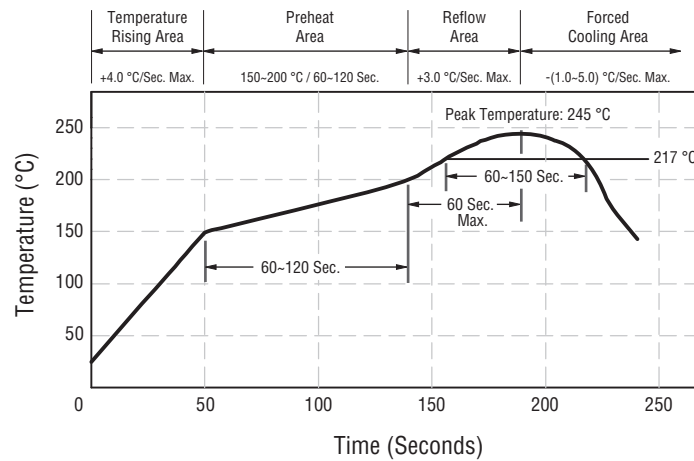


## Recommended Layout



## Soldering Profile

Peak Temperature: 245 °C max.  
 Max. Peak Temperature -5 °C: 30 sec. max.  
 Max. Time Above 217 °C: 60-150 sec. max.



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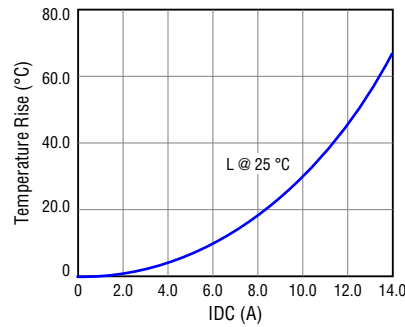
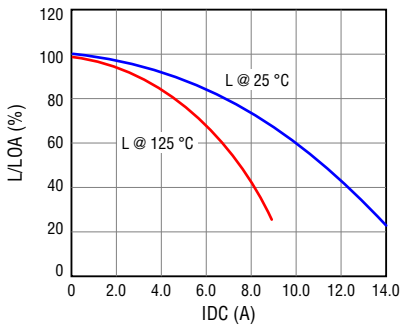
# SRR1050HA Series - Shielded Power Inductors

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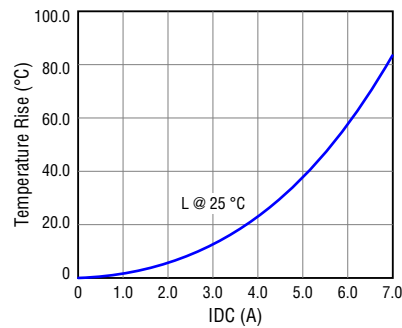
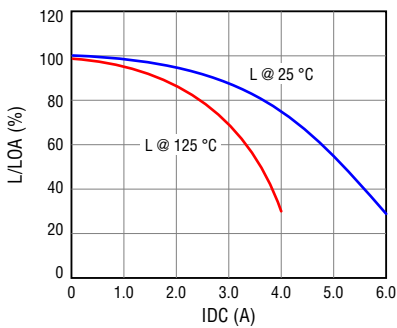
## Inductance vs. IDC

## Temperature vs. IDC

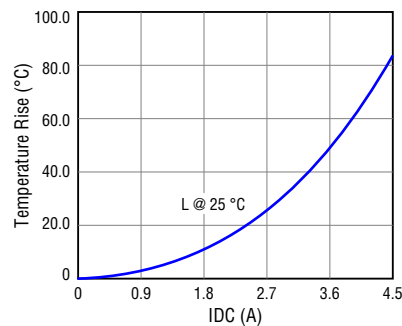
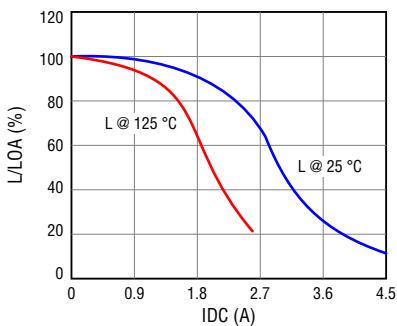
### SRR1050HA-2R2Y



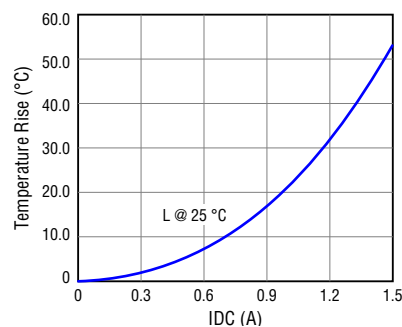
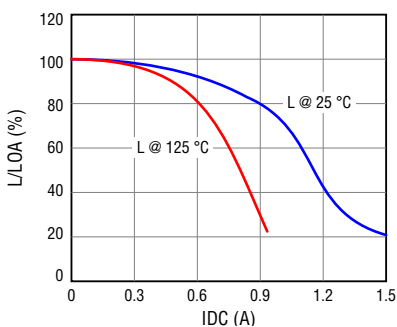
### SRR1050HA-100Y



### SRR1050HA-270Y



### SRR1050HA-221Y

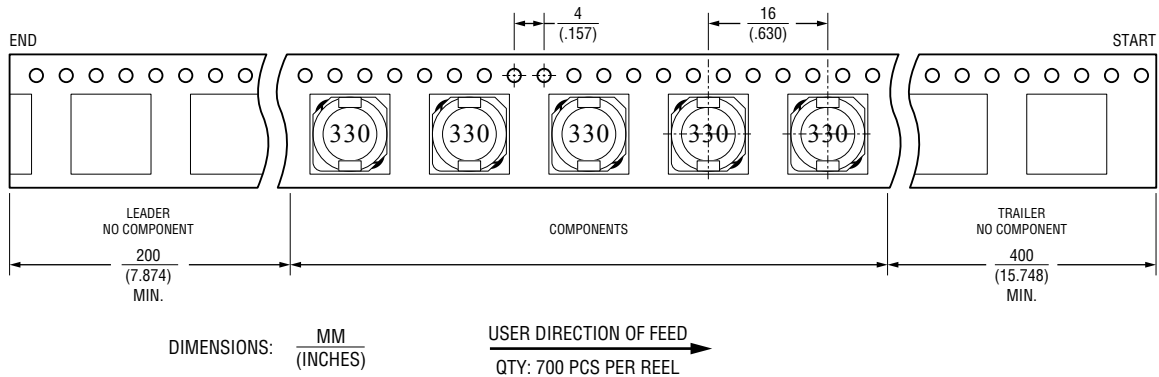
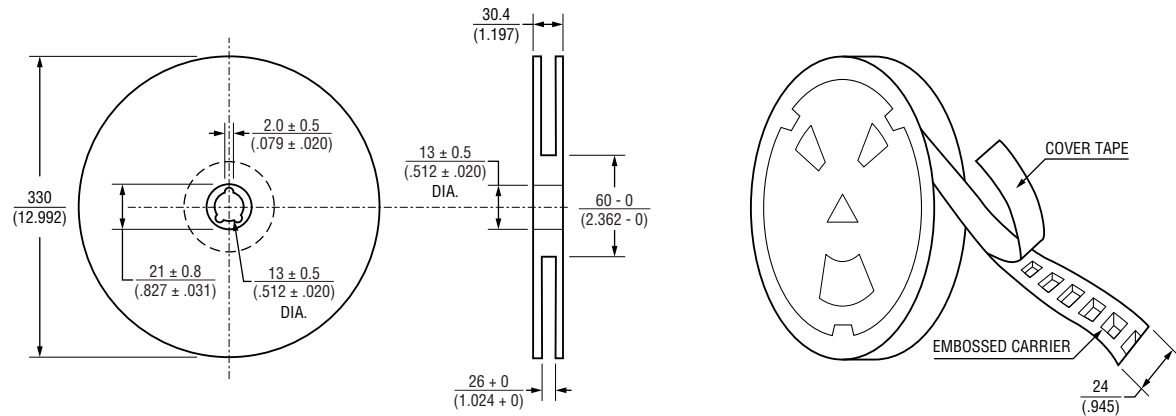


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# SRR1050HA Series - Shielded Power Inductors

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## Packaging Specifications



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