



## Features

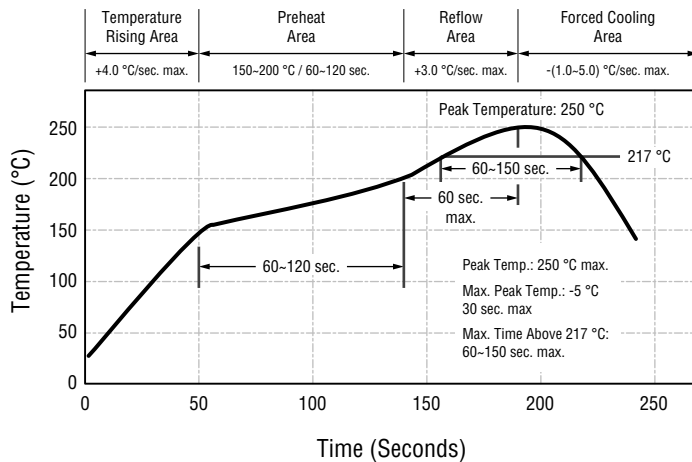
- Semi-shielded construction
- High operating temperature
- Inductance range: 0.55 to 100  $\mu$ H
- Rated current up to 7 A
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## SRN6045HA Series - Semi-shielded Power Inductors

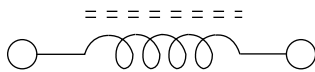
### Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 kHz / 0.1 V		Q Typ.	Q Test Freq. (MHz)	SRF (MHz) Typ.	DCR (m $\Omega$ ) Typ.	DCR (m $\Omega$ ) Max.	Irms (A) Typ.	Isat (A) Typ.
	L ( $\mu$ H)	Tol. %							
SRN6045HA-R55Y	0.55	30	19.0	7.96	135	4.80	6.00	7.00	18.00
SRN6045HA-1R0Y	1.00	30	17.0	7.96	80	7.30	9.00	6.50	14.50
SRN6045HA-1R5Y	1.50	30	17.0	7.96	55	12.90	15.00	5.00	11.00
SRN6045HA-2R2Y	2.20	30	17.0	7.96	50	17.00	23.00	4.40	9.50
SRN6045HA-3R3Y	3.30	30	20.0	7.96	40	23.00	30.00	4.00	8.00
SRN6045HA-4R7Y	4.70	30	20.0	7.96	30	30.00	35.00	3.60	7.00
SRN6045HA-100M	10.00	20	20.0	2.52	20	41.00	50.00	2.60	4.00
SRN6045HA-220M	22.00	20	24.0	2.52	13	121.00	144.00	1.70	2.50
SRN6045HA-330M	33.00	20	24.0	2.52	10	170.00	211.00	1.50	2.20
SRN6045HA-470M	47.00	20	23.0	2.52	8	224.00	305.00	1.00	1.90
SRN6045HA-101M	100.00	20	23.0	0.796	6	484.00	540.00	0.72	1.20

### Soldering Profile



### Electrical Schematic

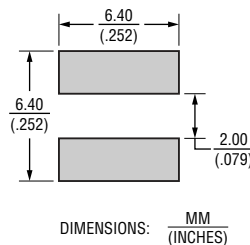


### How to Order

**SRN6045HA - 1R0Y**

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

### Recommended Layout



### Additional Information

Click these links for more information:



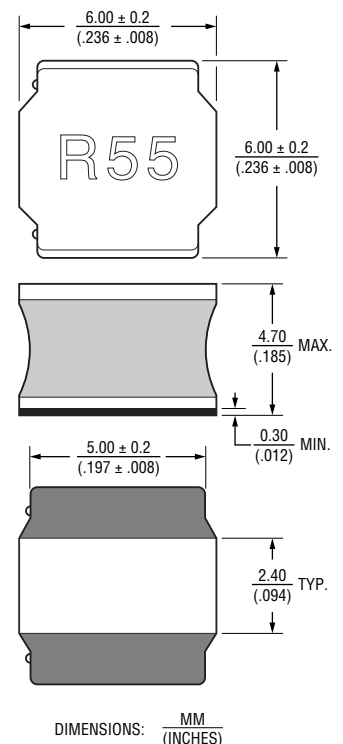
### General Specifications

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  
Rated Current ..... Inductance drops 30 % at Isat  
Moisture Sensitivity Level ..... 1  
ESD Classification (HBM) ..... N/A

### Materials

Core ..... Ferrite  
Wire ..... Enameled copper  
Terminal Finish ..... Sn/Ag/Cu  
Coating ..... Magnetic epoxy resin  
Packaging ..... 1000 pcs. per 13-inch reel

### Product Dimensions

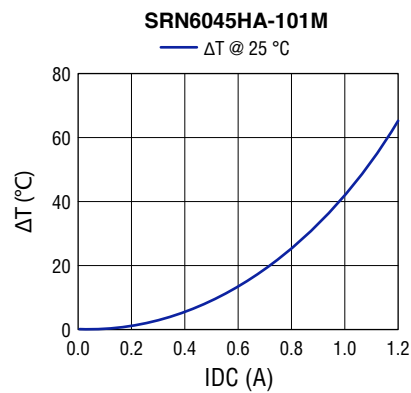
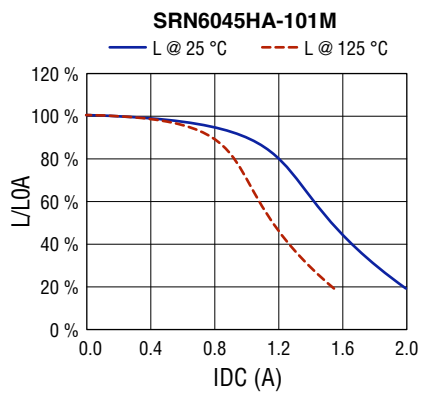
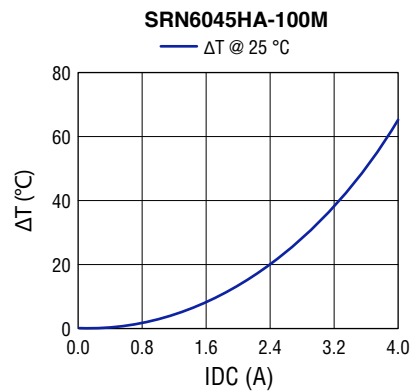
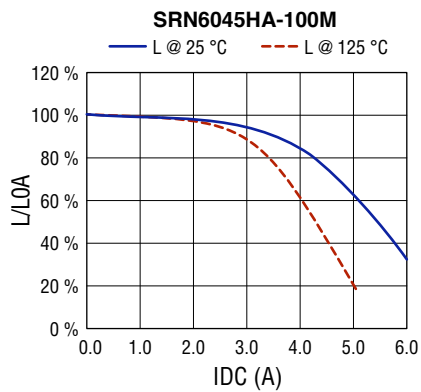
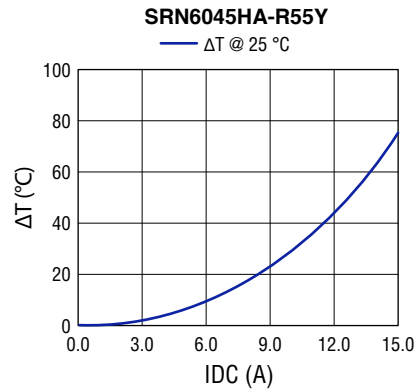
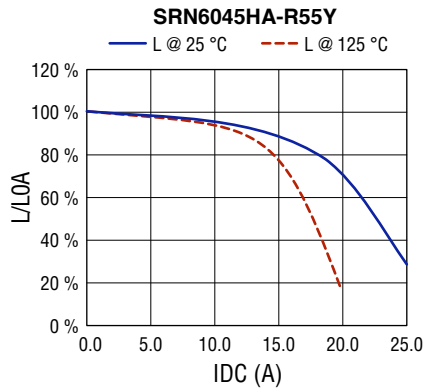


**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* 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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## Inductance vs. IDC





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