



## Features

- Shielded construction
- Iron powder core
- High saturation current
- Inductance range: 0.56 to 47  $\mu$ H
- Rated current up to 18 A
- RoHS compliant\* and halogen free\*\*

## Applications

- DC/DC converters
- Power supplies for:
  - Portable communications equipment
  - Laptop computers
  - Camcorders, HDTV
  - Video game consoles

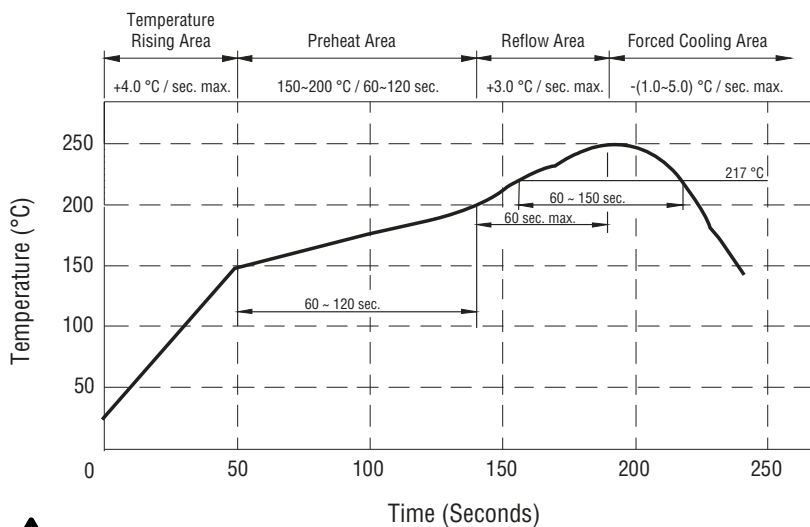
# SRP6540 Series - Shielded Power Inductors

## Electrical Specifications

Bourns Part No.	Inductance L ( $\mu$ H) $\pm 20\%$	DCR (m $\Omega$ ) Max.	I rms (A)	I sat (A)
SRP6540-R56M	0.56	4.4	18	18
SRP6540-R68M	0.68	5.0	16.5	17
SRP6540-R82M	0.82	5.5	15	15
SRP6540-1R0M	1.0	7.2	12	13.5
SRP6540-1R5M	1.5	10.0	11	11
SRP6540-2R2M	2.2	15.5	9	9
SRP6540-3R3M	3.3	23.0	6.5	7
SRP6540-4R7M	4.7	33.5	6	6.5
SRP6540-5R6M	5.6	38.0	5.5	6
SRP6540-6R8M	6.8	49.5	5	5.5
SRP6540-8R2M	8.2	50.5	4.5	5
SRP6540-100M	10	78.5	4	4
SRP6540-150M	15	121	2.9	2.9
SRP6540-220M	22	133	2.5	2.5
SRP6540-270M	27	290	2	2
SRP6540-390M	39	322	1.8	1.8
SRP6540-470M	47	366	1.6	1.6

## Soldering Profile

Peak Temperature: 250 °C max.  
 Time Above 245 °C: 30 sec. max.  
 Time Above 217 °C: 60 ~ 150 sec. max.



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

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
 \*\*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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## General Specifications

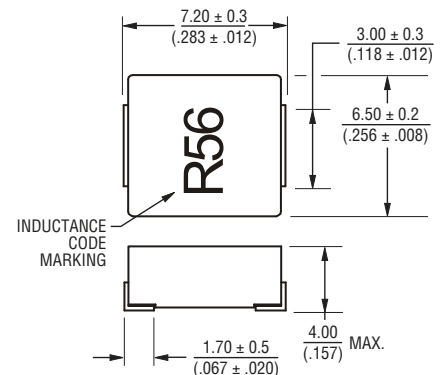
Test Voltage ..... 0.25 V  
 Test Frequency ..... 100 KHz  
 Operating Temperature ..... -55 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature ..... -55 °C to +125 °C  
 Resistance to Soldering Heat ..... +250 °C for 10 sec.  
 Moisture Sensitivity Level ..... 3  
 ESD Classification (HBM) ..... N/A

1 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.

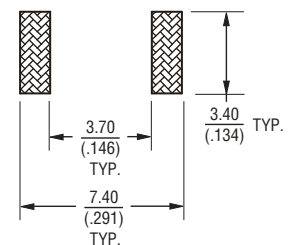
## Materials

Core ..... Iron powder  
 Wire ..... Enameled copper  
 Terminal ..... Cu/Ni/Sn  
 Rated Current ..... Ind. drops 20 % typ.  
 at Isat  
 Temperature Rise ..... 40 °C typ.  
 at rated Irms  
 Packaging ..... 1200 pcs. per 13-inch reel

## Product Dimensions



## Recommended Layout

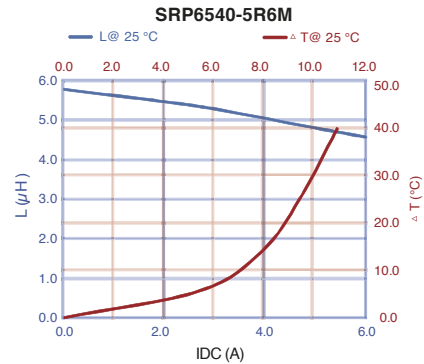
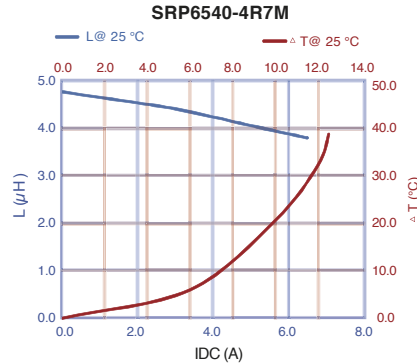
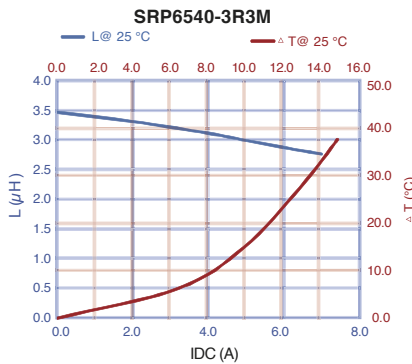
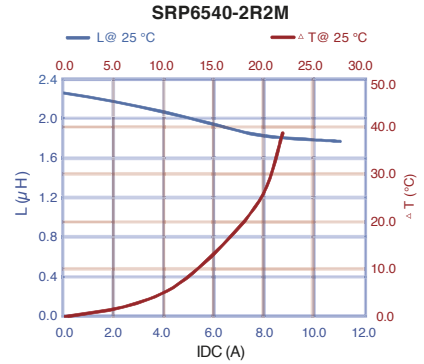
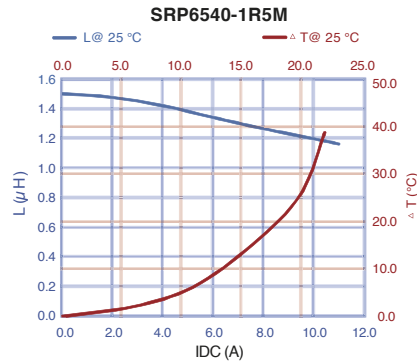
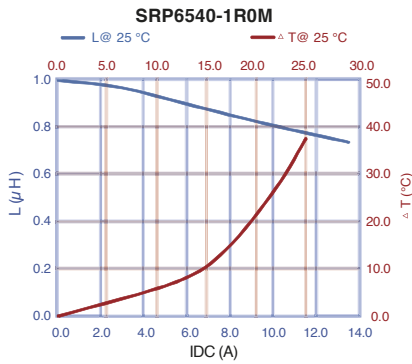
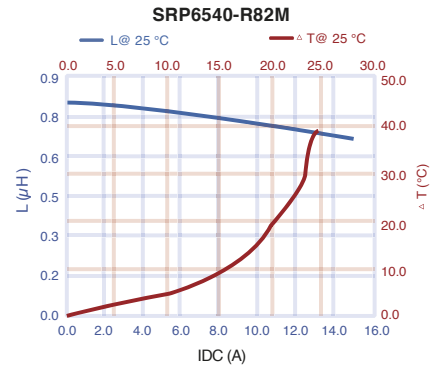
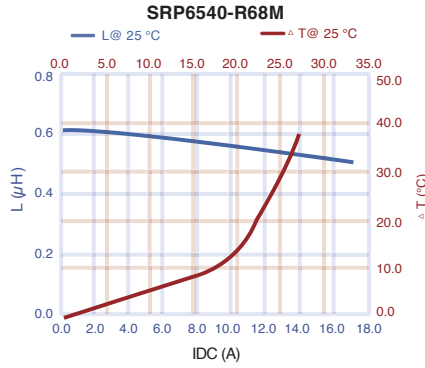
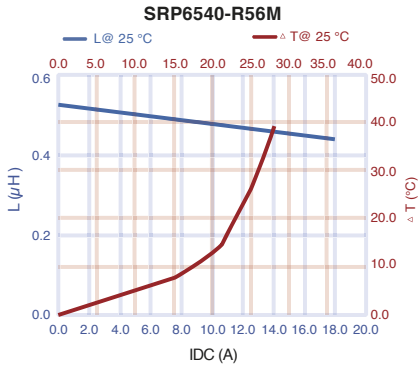


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

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## L vs. I Charts

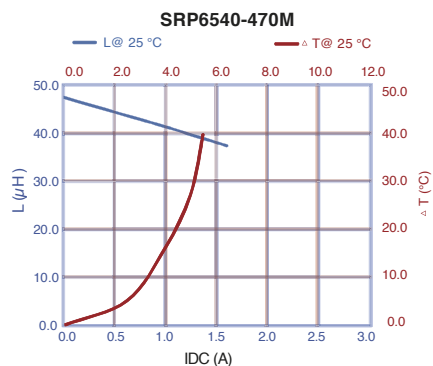
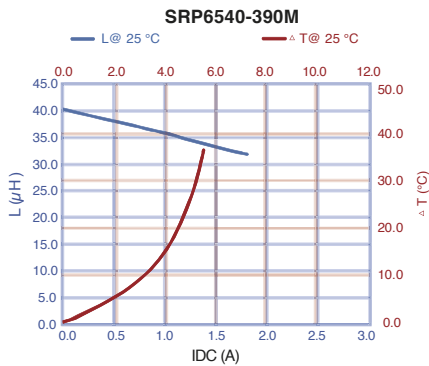
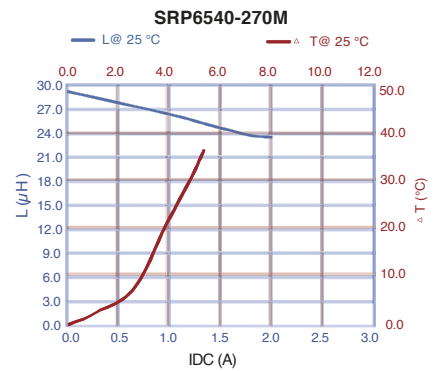
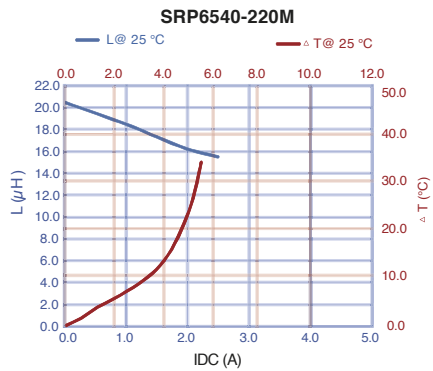
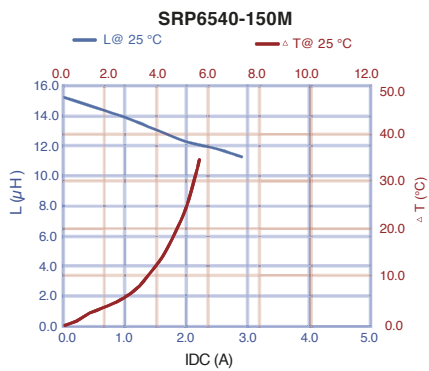
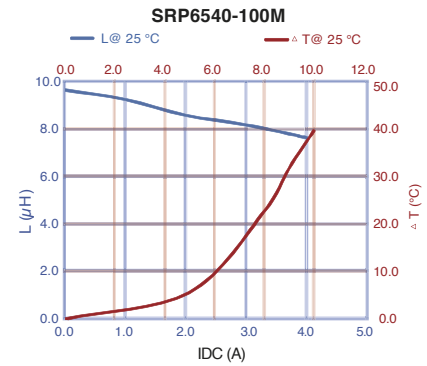
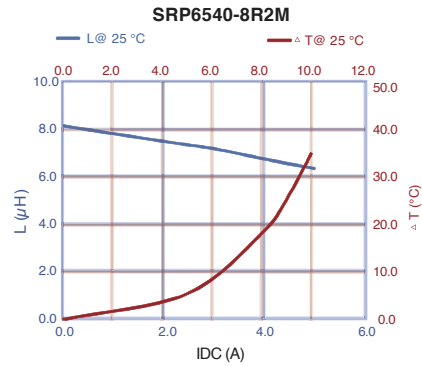
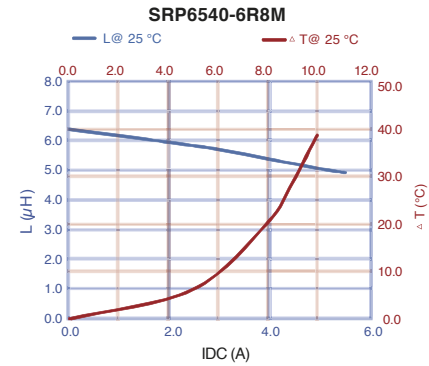


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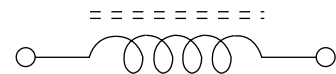
# SRP6540 Series - Shielded Power Inductors

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## L vs. I Charts



## Electrical Schematic

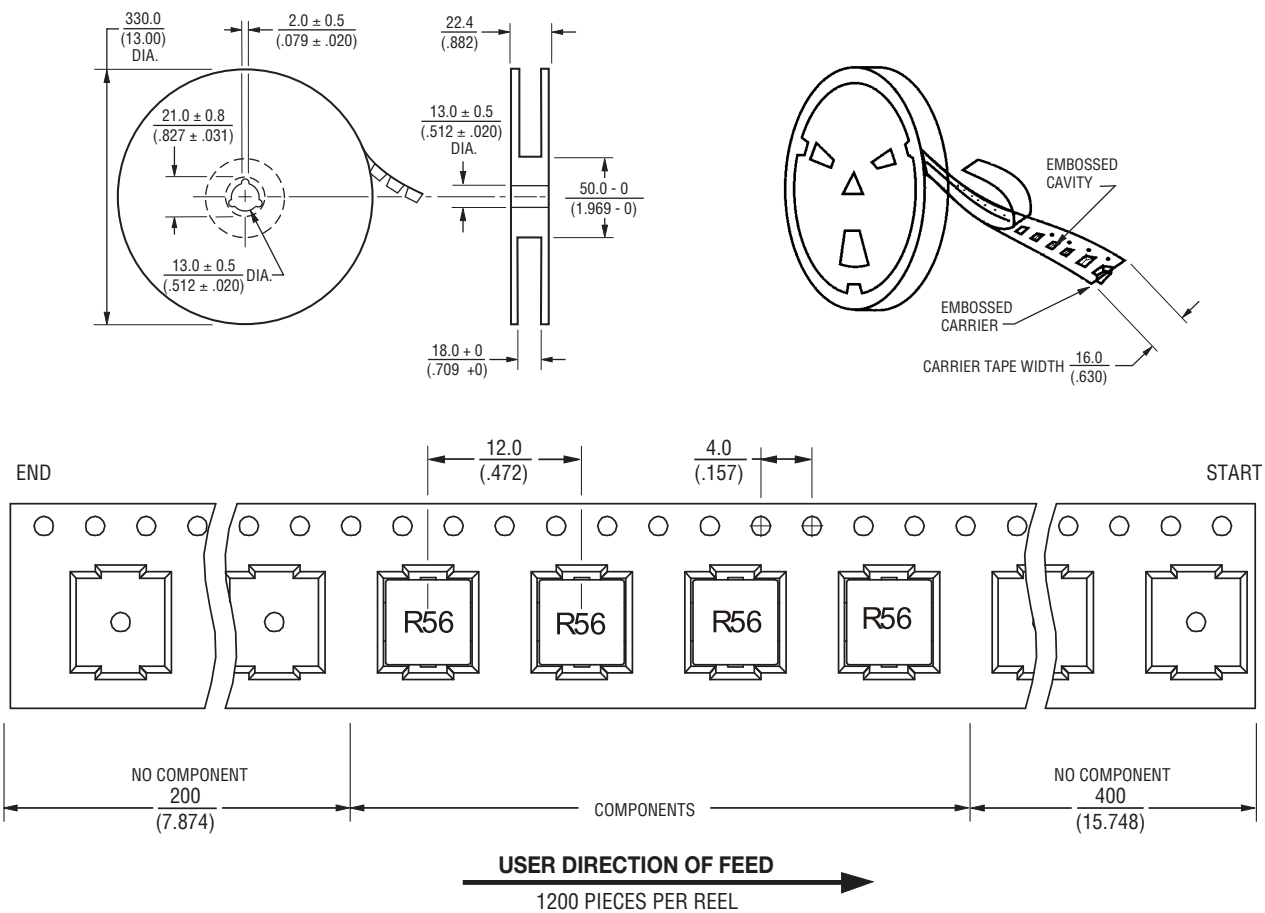


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# SRP6540 Series - Shielded Power Inductors

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## Packaging Specifications



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

REV. 03/18

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