BOURNS®

Features

- Shielded construction
- Iron powder core
- High saturation current
- Inductance range: 0.56 to 47 µH
- 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, car audio systems
  - Video game consoles

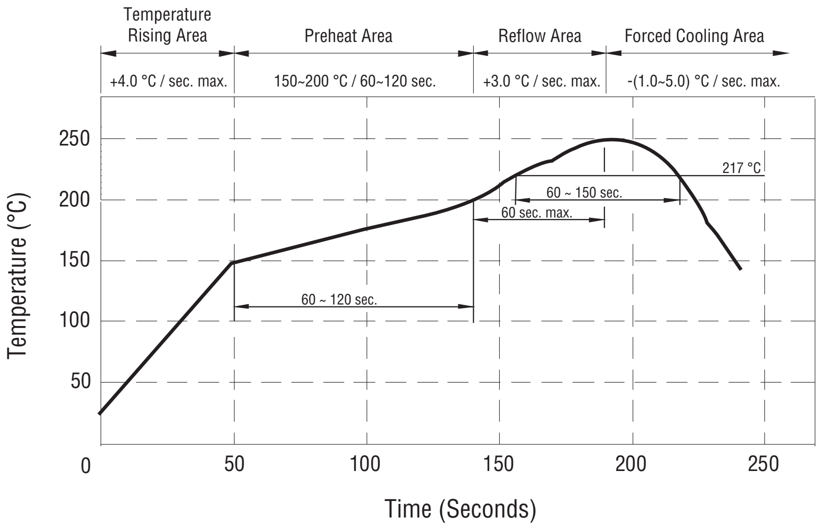
SRP6540 Series - Shielded Power Inductors

Electrical Specifications

Bourns Part No.	Inductance L (µH) ±20 %	DCR (mΩ) 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.



General Specifications

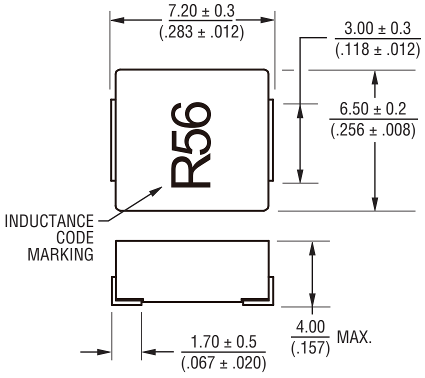
Test Voltage ....0.25 V
Test Frequency .... 100 KHz
Operating Temperature
................................-55 °C to +125 °C
(Temperature rise included)
Storage Temperature
................................-55 °C to +125 °C
Resistance to Soldering Heat
............................+250 °C for 10 sec.
Moisture 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.

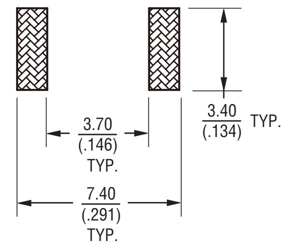
Materials

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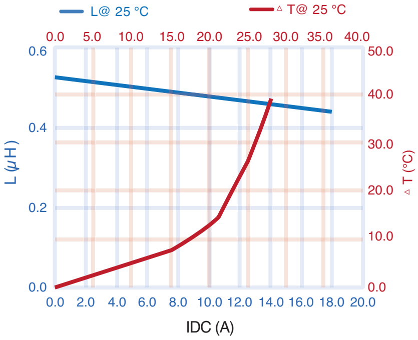
* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

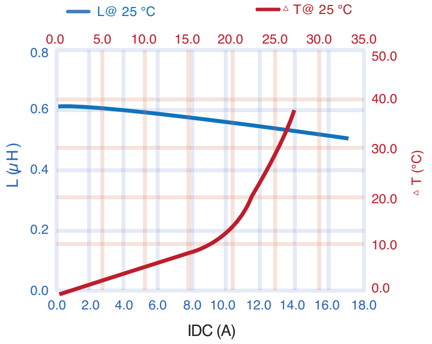
** Bourns follows the prevailing definition of "halogen free" in the industry. Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or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

L vs. I Charts

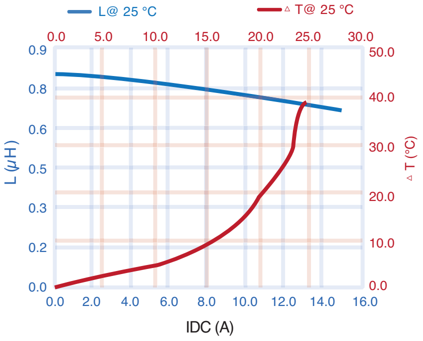
SRP6540-R56M



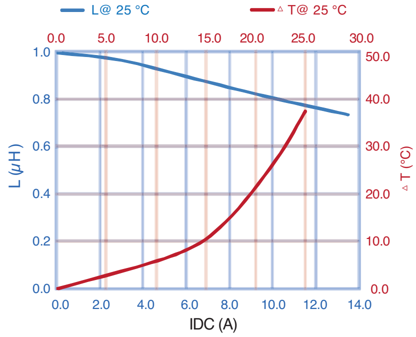
SRP6540-R68M



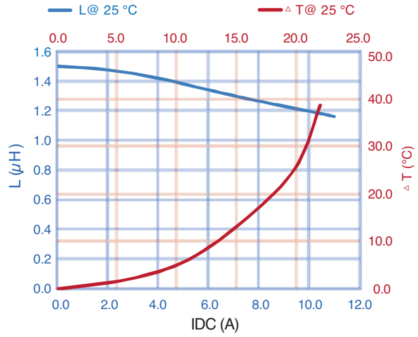
SRP6540-R82M



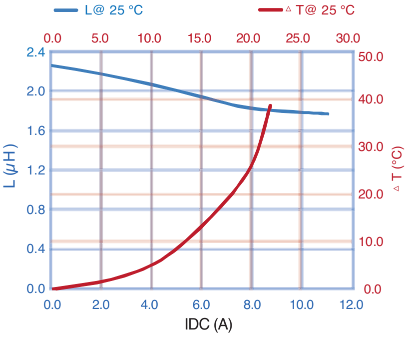
SRP6540-1R0M



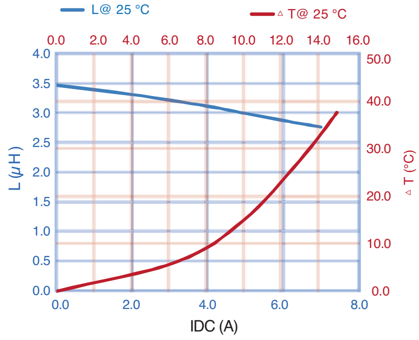
SRP6540-1R5M



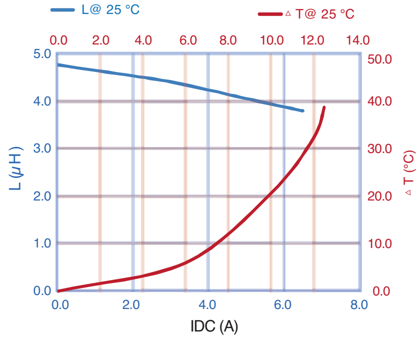
SRP6540-2R2M



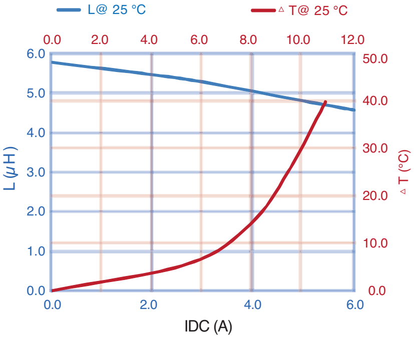
SRP6540-3R3M



SRP6540-4R7M

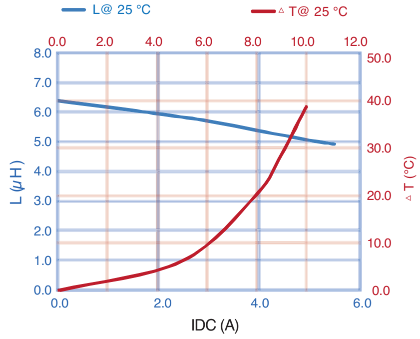


SRP6540-5R6M

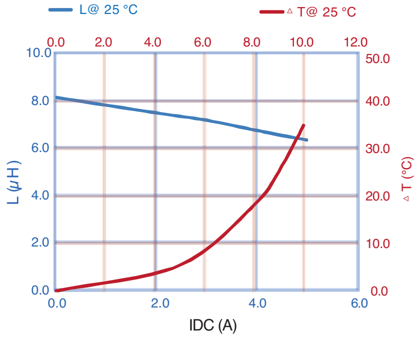


L vs. I Charts

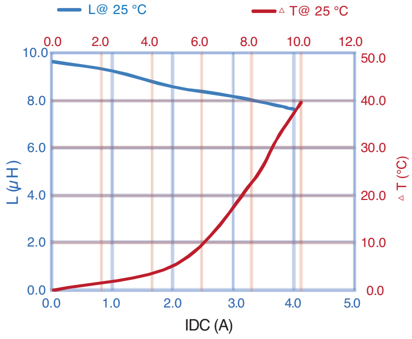
SRP6540-6R8M



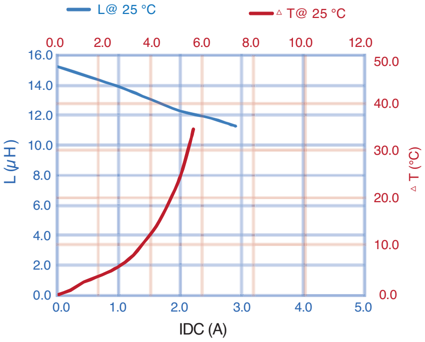
SRP6540-8R2M



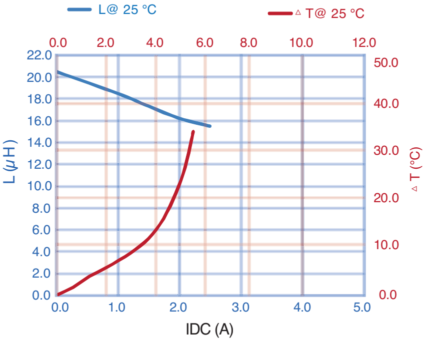
SRP6540-100M



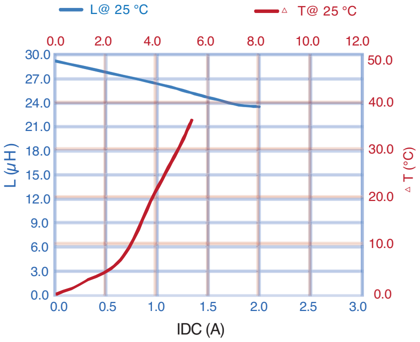
SRP6540-150M



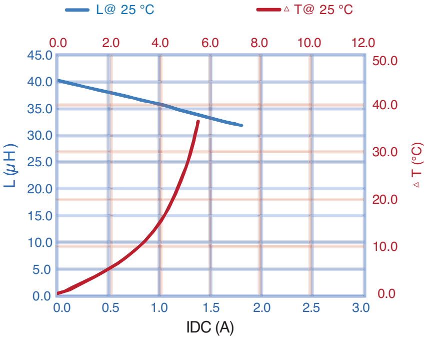
SRP6540-220M



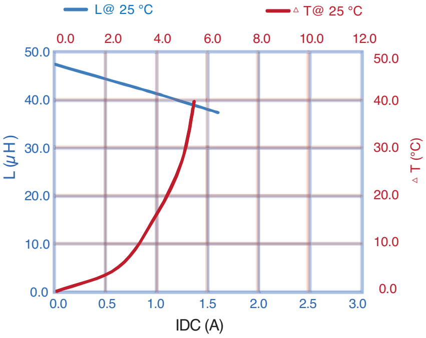
SRP6540-270M



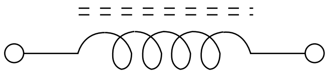
SRP6540-390M



SRP6540-470M



Electrical Schematic



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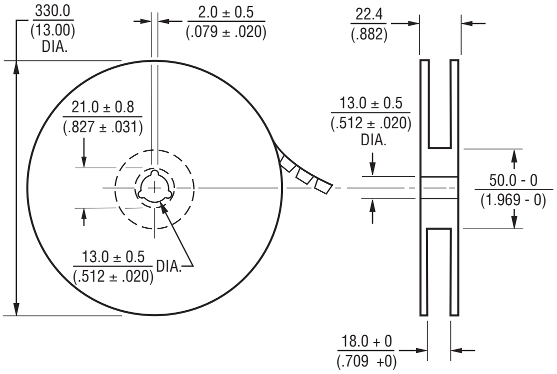
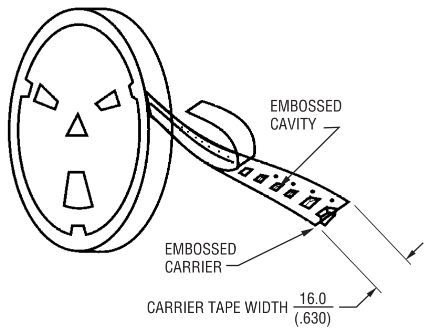
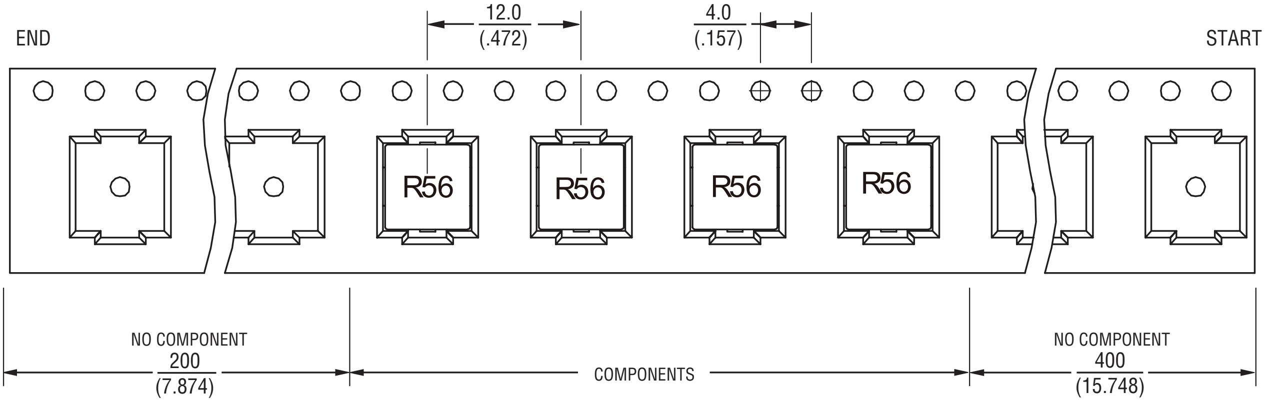
Packaging Specifications







USER DIRECTION OF FEED

1200 PIECES PER REEL

DIMENSIONS: MM / (INCHES)

REV. 01/18