Features

- Shielded construction
- Carbonyl powder core
- High saturation current
- Inductance range: 1 to 100 µH
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

Applications

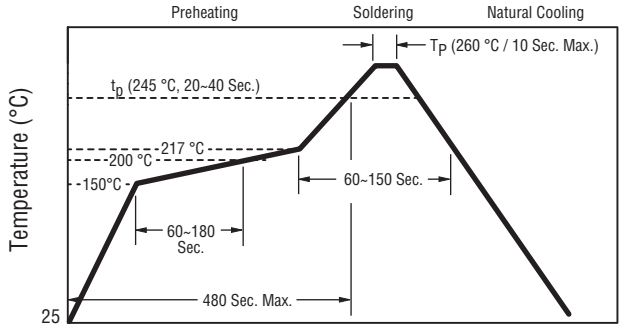
- Automotive systems:
  - Driver assistant
  - Information
  - Entertainment
  - Lighting
- DC/DC converters
- Power supplies

SRP1770TA Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V L (µH)	Tol. (%)	Q (Min.) @100 KHz / 1 V	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A)	Isat1 (A)	Isat2 (A)	Terminal Type
SRP1770TA-1R0M	1	± 20	20	35	1.6	2	52	60	70	Lead Frame
SRP1770TA-1R5M	1.5	± 20	20	30	2	2.5	47	52	65	
SRP1770TA-2R2M	2.2	± 20	20	22	2.4	2.7	43.5	47	62	
SRP1770TA-3R3M	3.3	± 20	20	17	3.5	3.9	28	45	54	
SRP1770TA-4R7M	4.7	± 20	20	15	4.8	5.5	25	41	50	
SRP1770TA-5R6M	5.6	± 20	20	12	5.8	7.05	21	40	45	
SRP1770TA-6R8M	6.8	± 20	20	11	8.4	9.2	19	32	39	
SRP1770TA-8R2M	8.2	± 20	20	10	9.6	10.8	18	25	31	
SRP1770TA-100M	10	± 20	20	8	11.8	13	16.5	24	29	
SRP1770TA-150M	15	± 20	20	7	17.8	20.5	12.5	23	27	
SRP1770TA-220M	22	± 20	20	5	25.1	26.5	12	18	23	
SRP1770TA-330M	33	± 20	20	4	38	44	10.7	15	20	
SRP1770TA-390M	39	± 20	20	4	40	48	9.2	11	18	
SRP1770TA-470M	47	± 20	20	3	48	55	8.7	9.5	16	
SRP1770TA-560M	56	± 20	20	3	54	62	7.8	9	15	
SRP1770TA-680M	68	± 20	20	2	68	80	7	8	13	
SRP1770TA-101M	100	± 20	20	2	102	118	5.3	6.5	12	

Soldering Profile



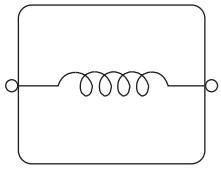
Reflow Times: 3 Times Max.

How to Order

SRP1770TA - 220 M

Model
Value Code (see table)
Tolerance Code

Schematic



General Specifications

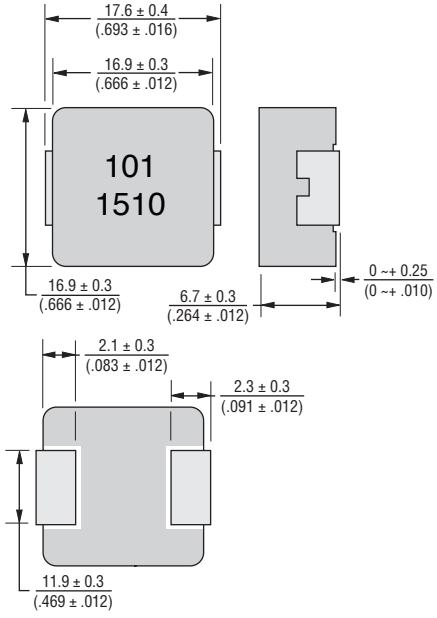
Operating Temperature
.....-40 °C to +150 °C
(Temperature rise included)
Storage Temperature
.....-40 °C to +125 °C
Rated Current
..... Inductance drops 20 % at Isat1, 30 % at Isat2
Temperature Rise .....40 °C at rated Irms

Materials

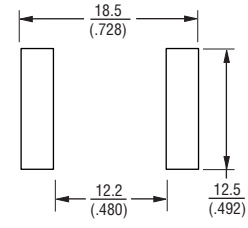
Core.....Carbonyl powder
Wire .....Enameled copper
Terminal Finish .....Sn
Packaging..... 300 pcs. per 13-inch reel

Product Dimensions

Lead Frame Terminal



Recommended Layout



DIMENSIONS: MM (INCHES)

* 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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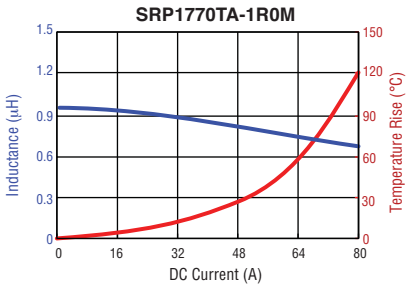
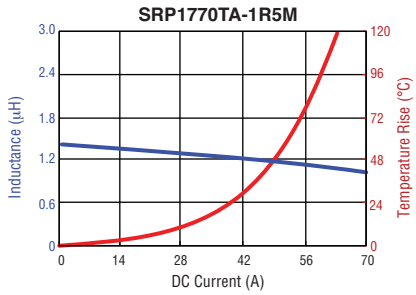
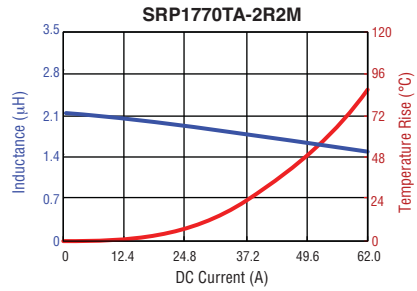
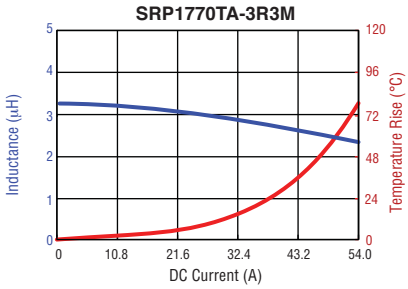
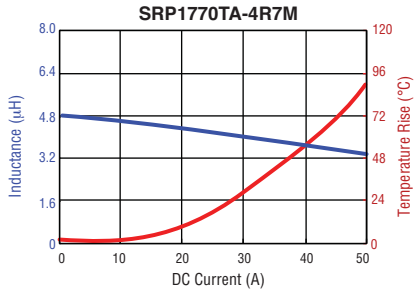
L vs. I Charts

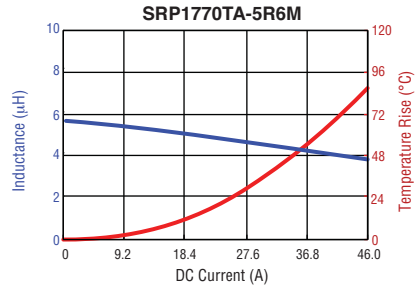


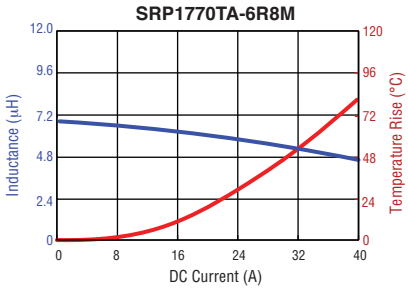


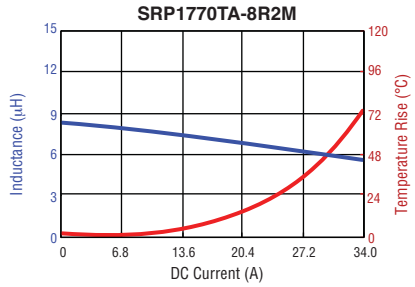


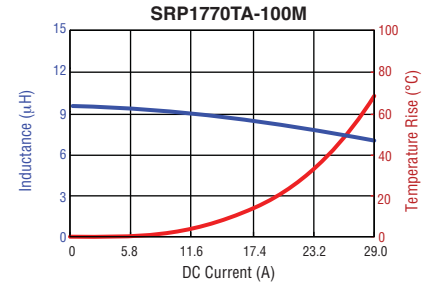


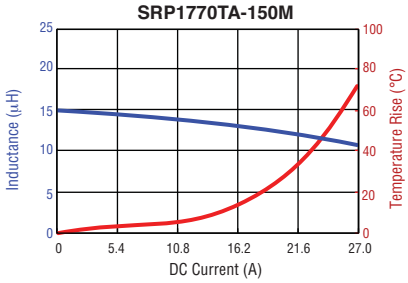


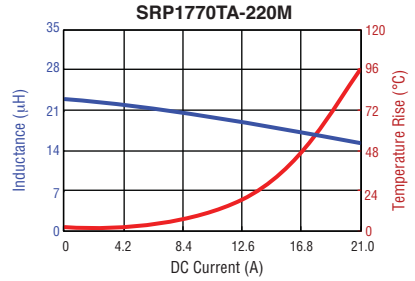


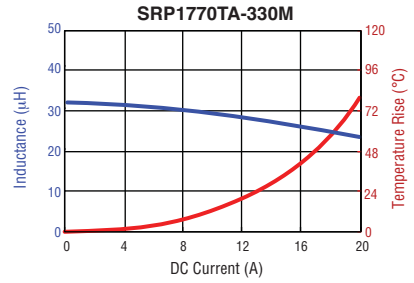


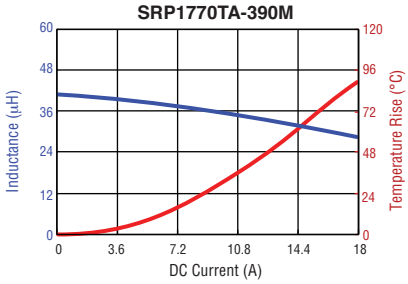


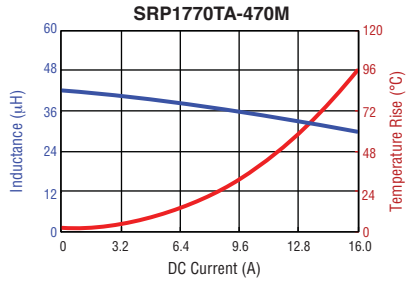


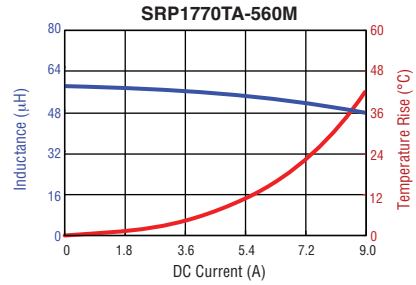












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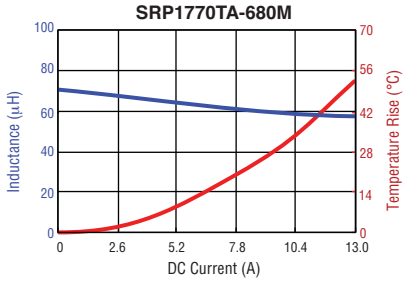
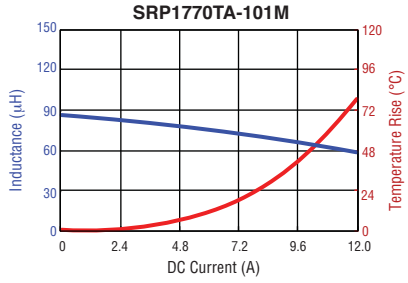
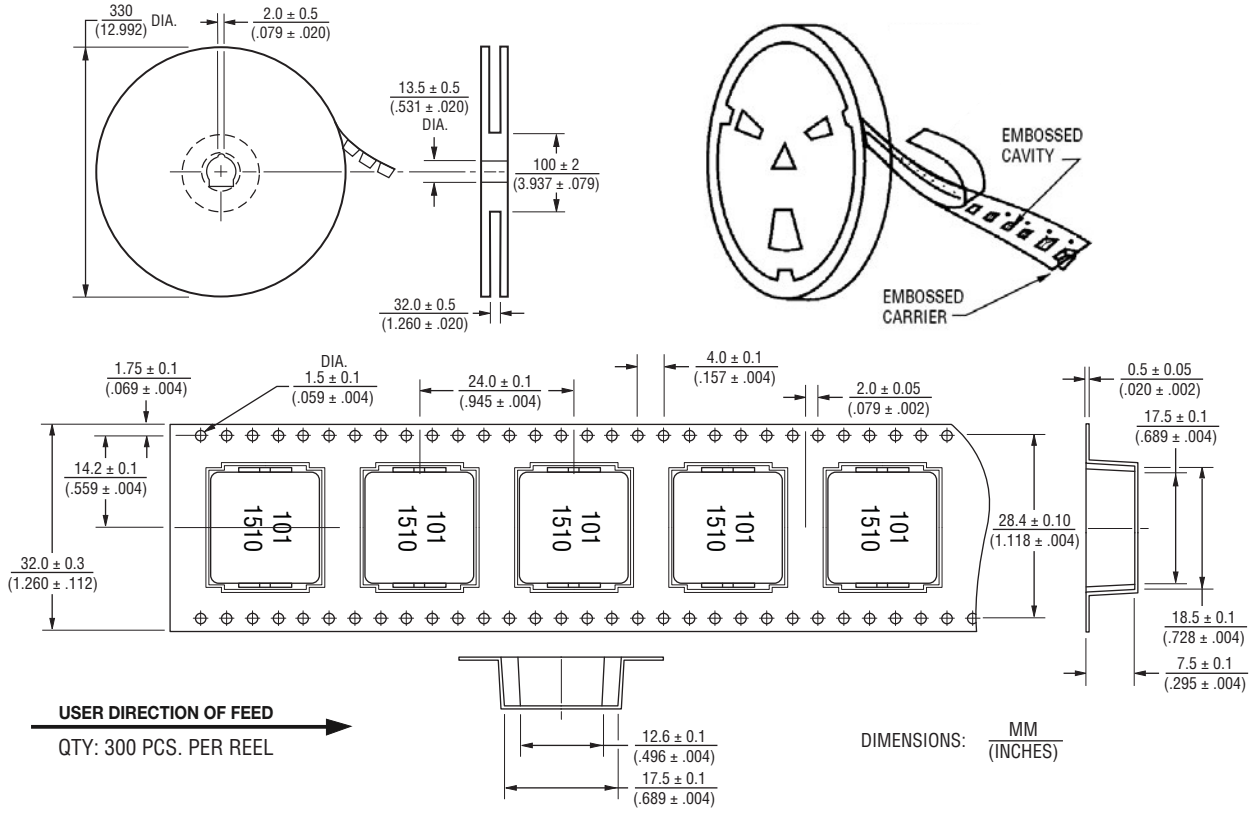
L vs. I Charts (Continued)





Packaging Specifications



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Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bourns:
SRP1770TA-100M SRP1770TA-101M SRP1770TA-150M SRP1770TA-220M SRP1770TA-2R2M SRP1770TA-330M SRP1770TA-3R3M SRP1770TA-470M SRP1770TA-4R7M SRP1770TA-5R6M SRP1770TA-6R8M SRP1770TA-8R2M SRP1770TA-1R0M SRP1770TA-1R5M SRP1770TA-390M SRP1770TA-560M SRP1770TA-680M