



Features

- Shielded construction
- Carbonyl powder core
- High saturation current
- Inductance range: 1 to 100 μ H
- 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		Q (Min.) @100 KHz / 1 V	SRF (MHz) Typ.	DCR (m Ω) Typ.	DCR (m Ω) Max.	I _{rms} (A)	I _{sat1} (A)	I _{sat2} (A)
	L (μ H)	Tol. (%)							
SRP1770TA-1R0M	1	± 20	20	35	1.6	2	52	60	70
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

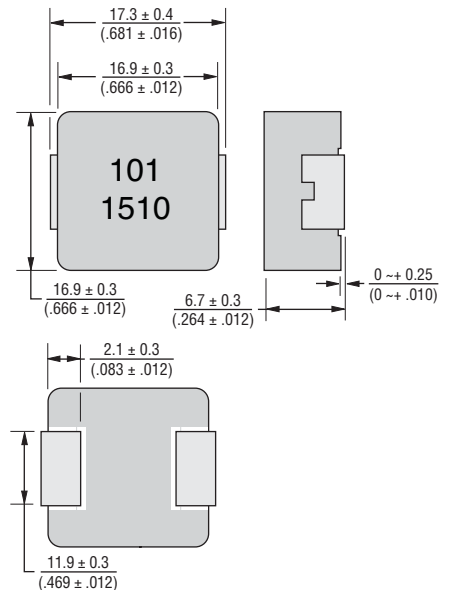
General Specifications

Operating Temperature-40 °C to +150 °C
 (Temperature rise included)
 Storage Temperature-40 °C to +125 °C
 Rated Current Inductance drops 20 % at I_{sat1},
 30 % at I_{sat2}
 Temperature Rise40 °C at rated I_{rms}

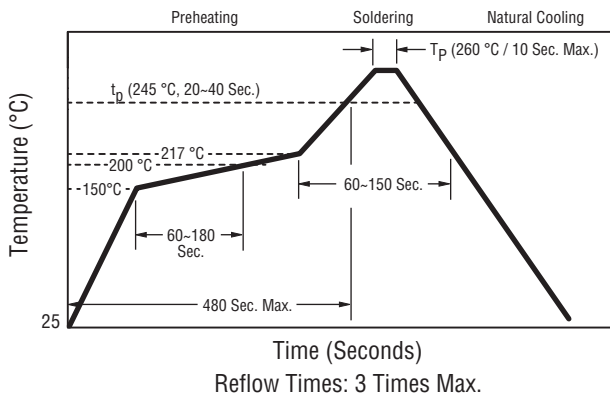
Materials

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

Product Dimensions



Soldering Profile

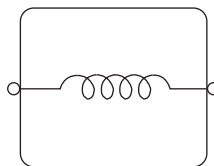


How to Order

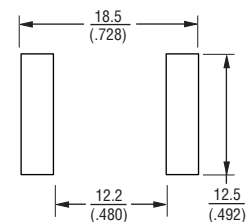
SRP1770TA - 220 M

Model _____
 Value Code (see table) _____
 Tolerance Code _____

Schematic



Recommended Layout



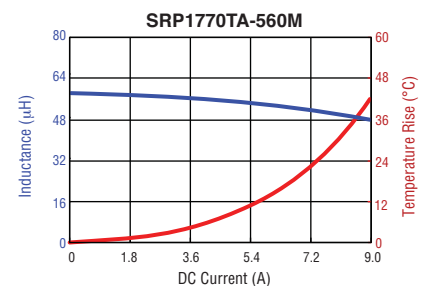
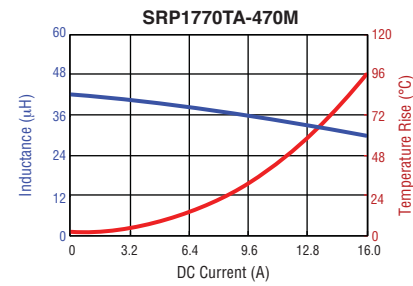
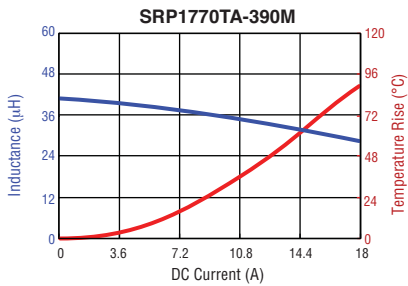
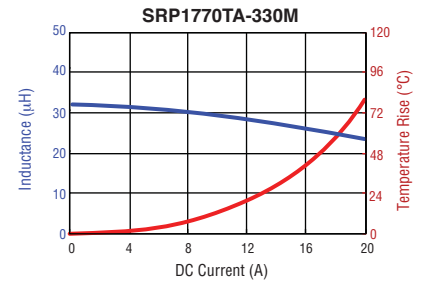
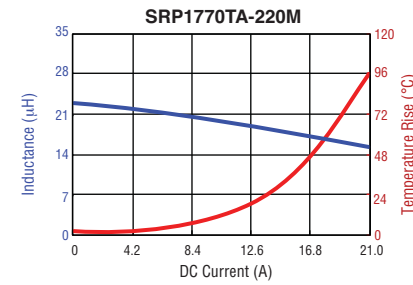
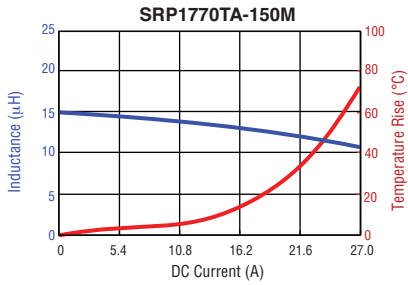
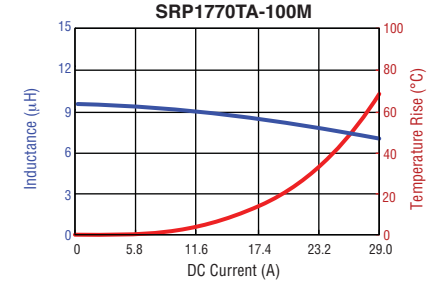
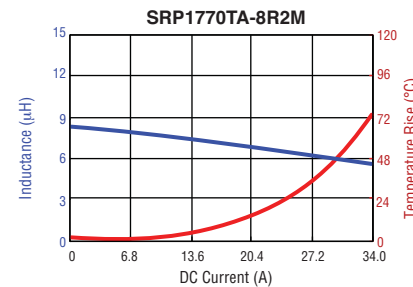
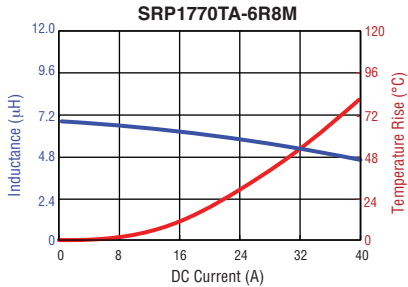
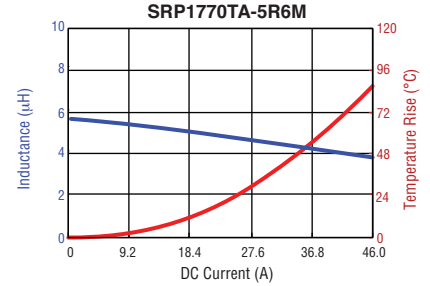
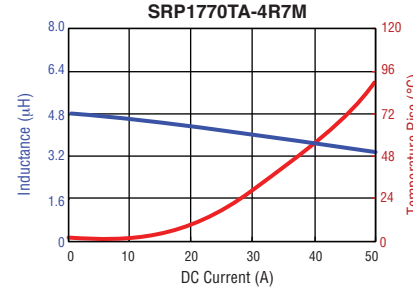
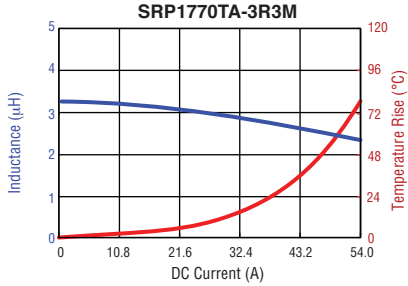
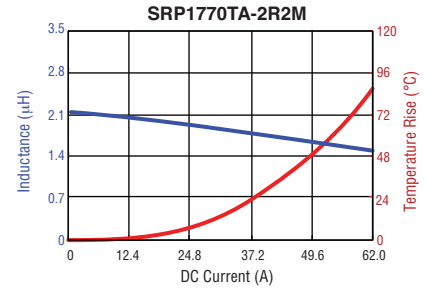
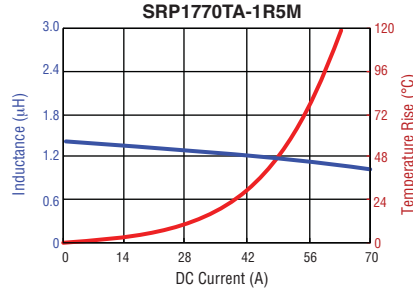
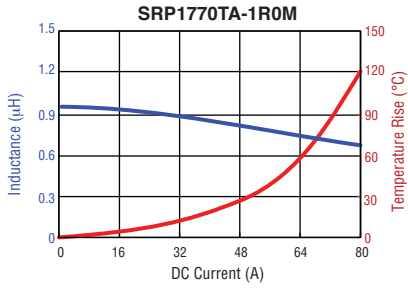
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

* 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.
 Specifications are subject to change without notice.
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
 Users should verify actual device performance in their specific applications.

SRP1770TA Series - Shielded Power Inductors

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L vs. I Charts

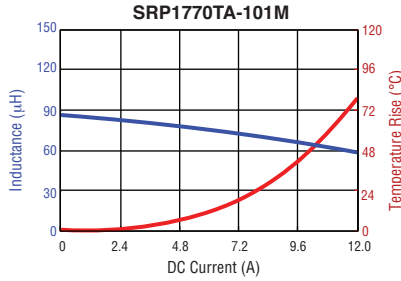
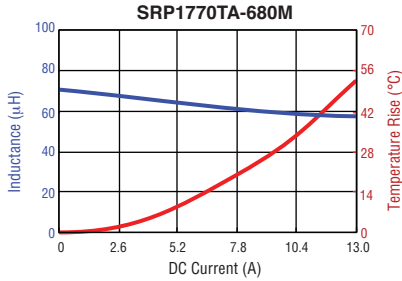


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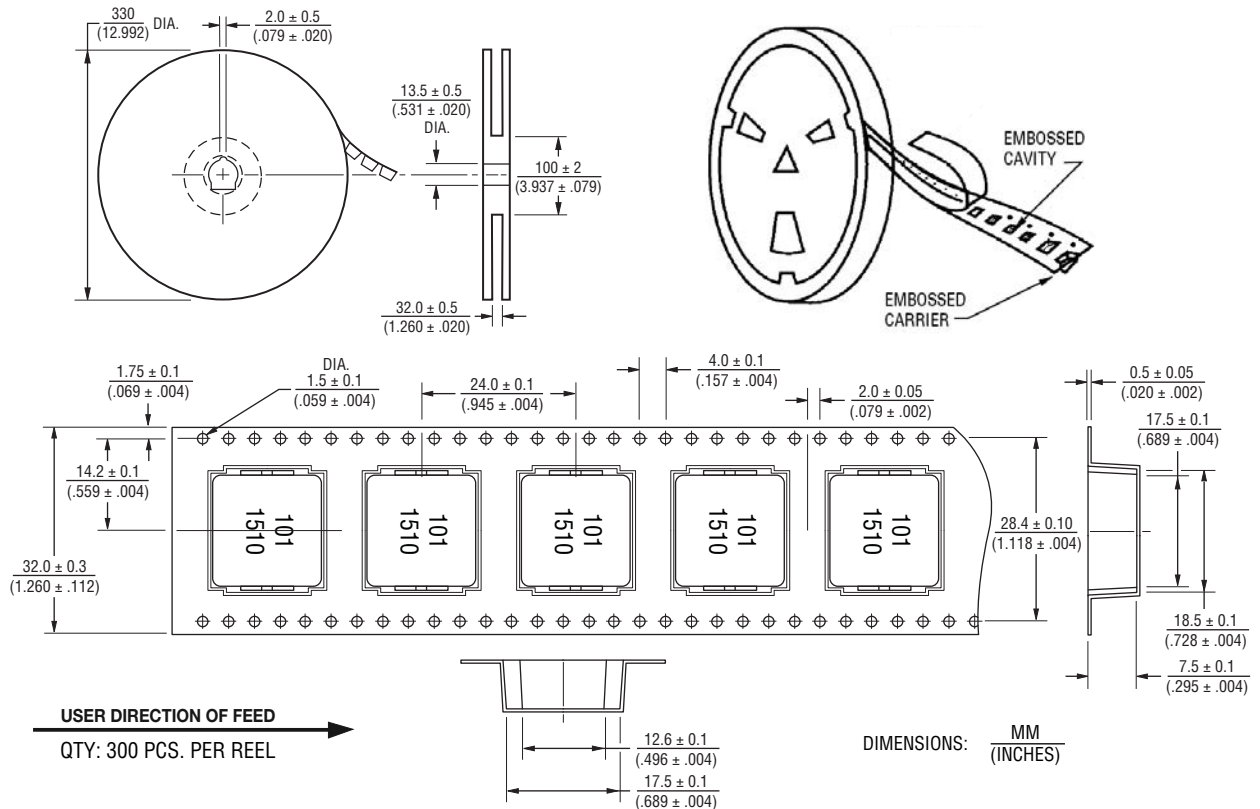
SRP1770TA Series - Shielded Power Inductors

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L vs. I Charts (Continued)



Packaging Specifications



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