



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Inductance range 0.15 to 10 μ H
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

Applications

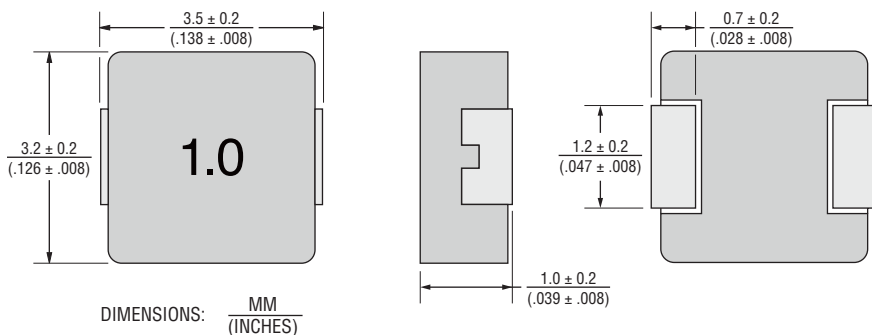
- Selected automotive applications:
 - Driver assistant
 - Infotainment
 - Lighting
- DC/DC converters
- Power supplies

SRP3012TA Series – Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 1 V		SRF (MHz) Typ.	DCR (m Ω) Typ.	DCR (m Ω) Max.	I rms (A) Typ.	I sat (A) Typ.
	L (μ H)	Tol. %					
SRP3012TA-R15Y	0.15	± 30 %	195	9.6	11	10	14
SRP3012TA-R22M	0.22	± 20 %	170	14	17	6.5	10
SRP3012TA-R33M	0.33	± 20 %	150	16	20	6.2	9.2
SRP3012TA-R36M	0.36	± 20 %	125	18.5	23	6.0	8.5
SRP3012TA-R47M	0.47	± 20 %	107	25	30	5.0	7.2
SRP3012TA-R56M	0.56	± 20 %	90	31	36	4.5	6.6
SRP3012TA-R68M	0.68	± 20 %	85	34	40	4.0	6.1
SRP3012TA-R82M	0.82	± 20 %	71	41	48	3.5	5.8
SRP3012TA-1R0M	1.0	± 20 %	65	50	60	3.3	5.5
SRP3012TA-1R5M	1.5	± 20 %	55	71	85	3.0	4.0
SRP3012TA-2R2M	2.2	± 20 %	45	98	115	2.7	3.4
SRP3012TA-3R3M	3.3	± 20 %	40	191	210	2.0	3.1
SRP3012TA-4R7M	4.7	± 20 %	35	266	293	1.6	2.8
SRP3012TA-5R6M	5.6	± 20 %	32	310	360	1.5	2.2
SRP3012TA-6R8M	6.8	± 20 %	29	360	400	1.4	2.0
SRP3012TA-8R2M	8.2	± 20 %	26	420	463	1.2	1.7
SRP3012TA-100M	10	± 20 %	23	498	550	1.0	1.4

Product Dimensions



General Specifications

Operating Temperature -40 °C to +150 °C
(Temperature rise included)

Storage Temperature (Component) -40 °C to +150 °C

Rated Current Inductance drops 30 % at Isat
Temperature Rise ... 40 °C at rated Irms
MSL 1
ESD Classification (HBM) N/A

Note 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

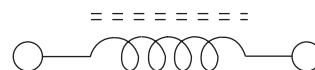
Core Metal alloy powder
Wire Enameled copper
Terminal Finish Sn/Ni
Packaging 4000 pcs. per 13-inch reel

How to Order

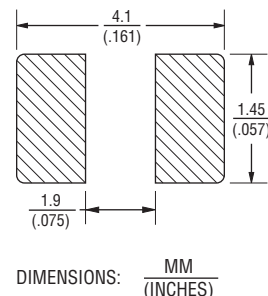
Model SRP3012TA - 1R0M

Value Code (see table) _____

Schematic



Recommended Layout



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* 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.

Specifications are subject to change without notice.

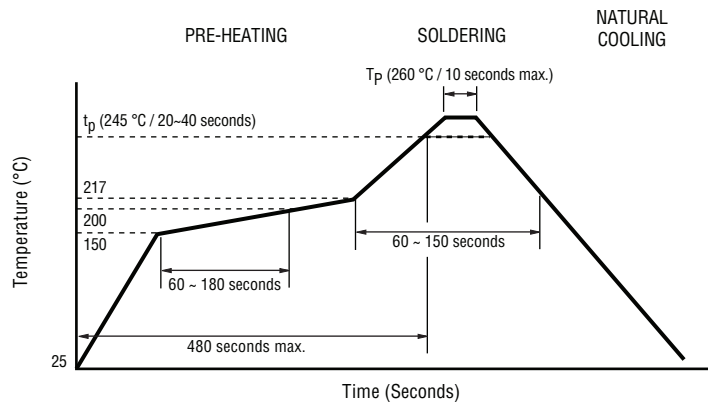
Users should verify actual device performance in their specific applications.

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SRP3012TA Series – Shielded Power Inductors

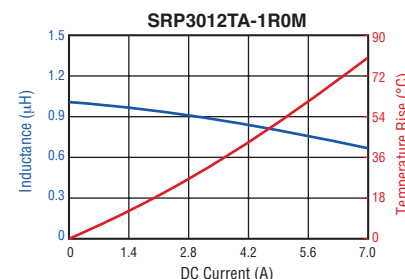
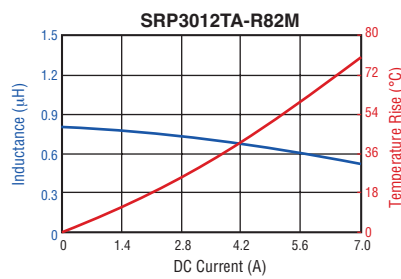
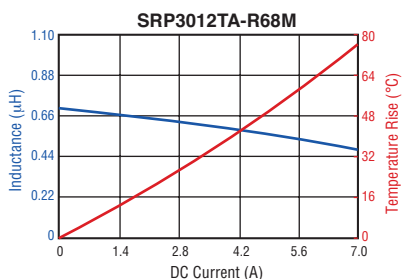
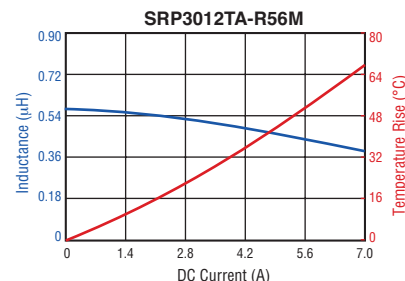
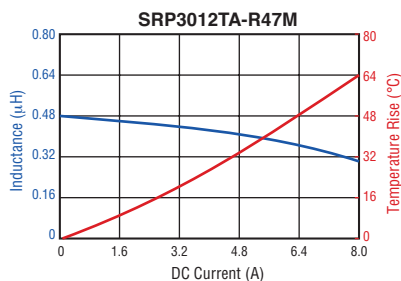
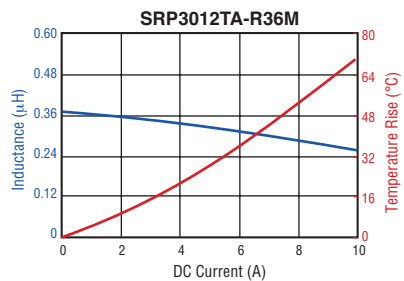
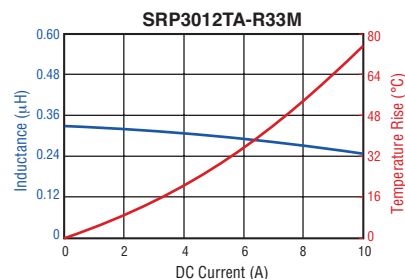
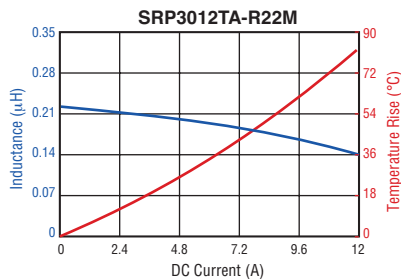
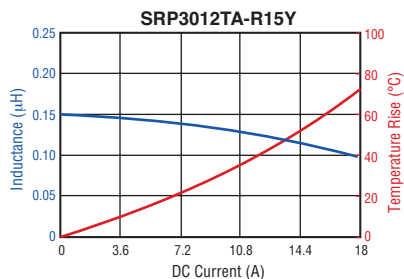


Soldering Profile



REFLOW TIMES: 3 MAX.

L vs. I Charts



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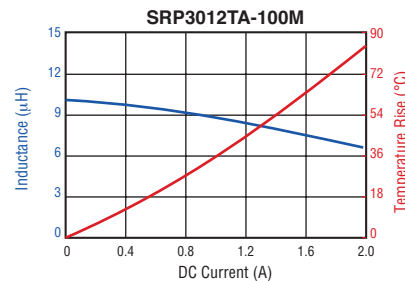
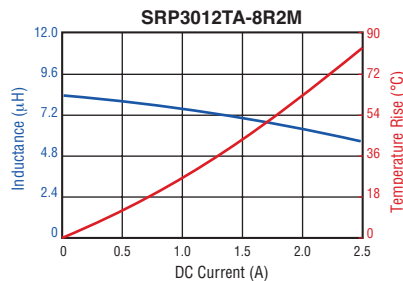
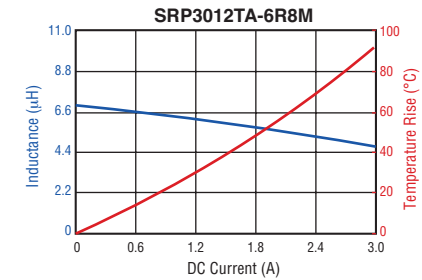
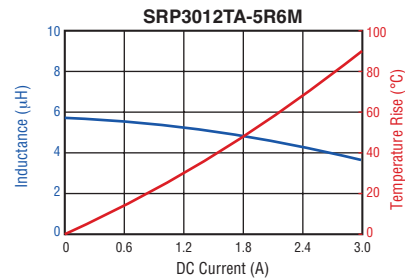
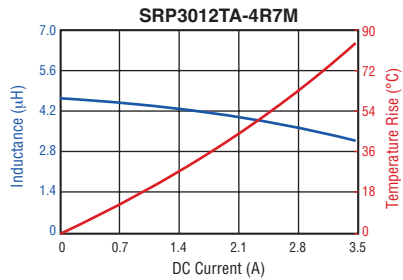
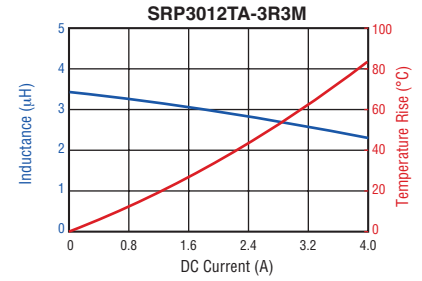
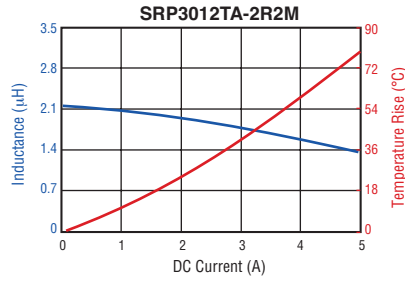
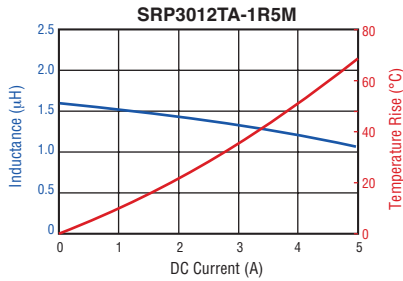
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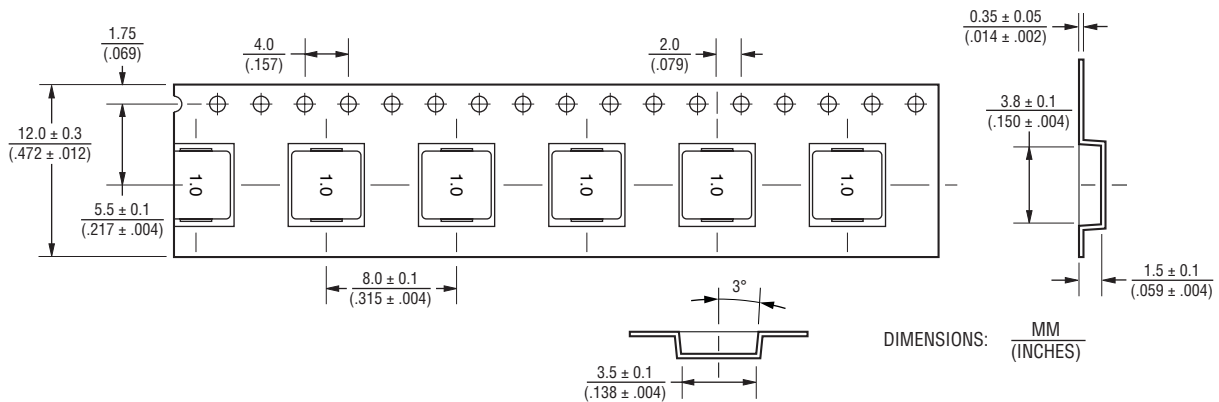
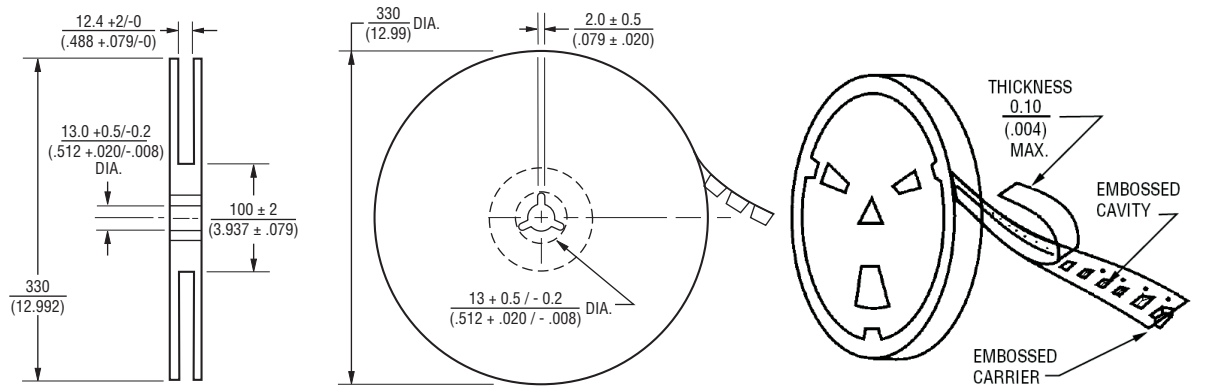
L vs. I Charts (Continued)



SRP3012TA Series – Shielded Power Inductors

BOURNS®

Packaging Specifications



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

USER DIRECTION OF FEED

QTY: 4,000 PCS PER REEL

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