

Features

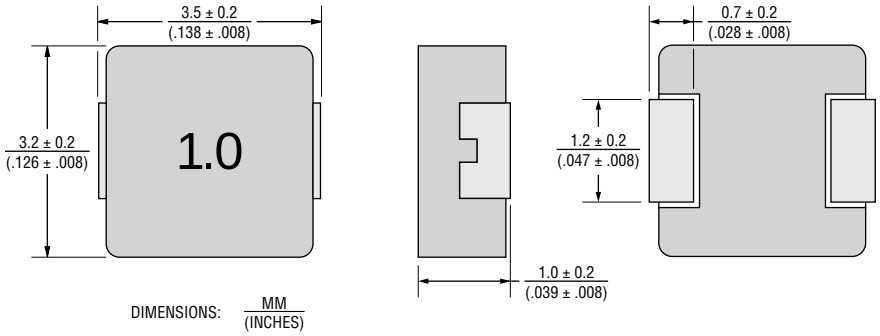
- Shielded construction
- Metal alloy powder core
- High saturation current
- Inductance range 0.15 to 10 µH
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP3012TA Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 1 V		SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	I rms (A) Typ.	I sat (A) Typ.
	L (µH)	Tol. %					
SRP3012TA-R15Y	0.15	± 20 %	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



Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

General Specifications

Operating Temperature
..... -55 °C to +150 °C
(Temperature rise included)
Storage Temperature (Component)
..... -55 °C to +150 °C
Rated Current
..... Inductance drops 30 % at Isat
Temperature Rise .... 40 °C at rated Irms[1]
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

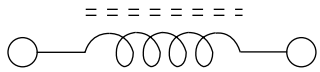
Core.....Metal alloy powder
Wire .....Enameled copper
Terminal Finish .....Sn/Ni
Packaging..... 4000 pcs. per 13-inch reel

How to Order

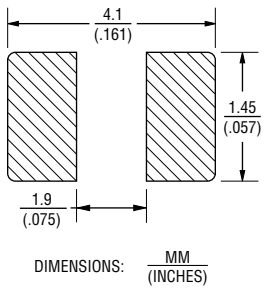
SRP3012TA - 1R0M

Model
Value Code (see table)

Schematic



Recommended Layout



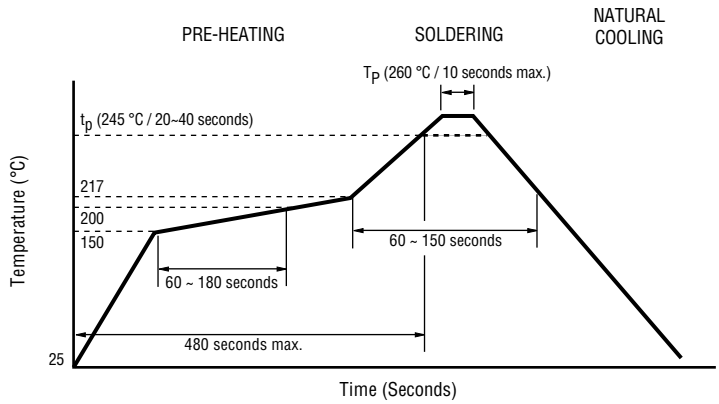
WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

* 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.

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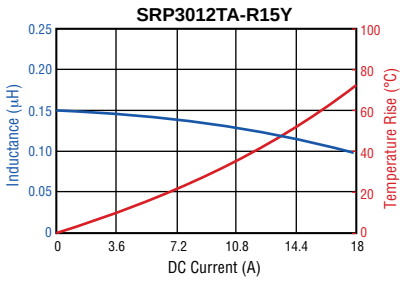
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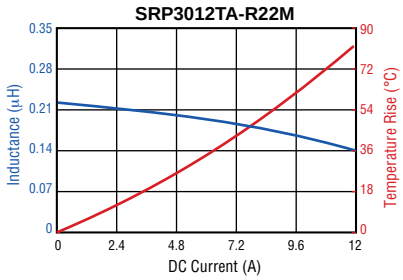
Soldering Profile

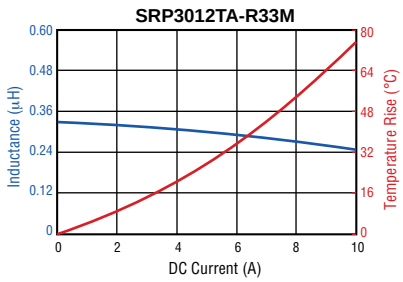


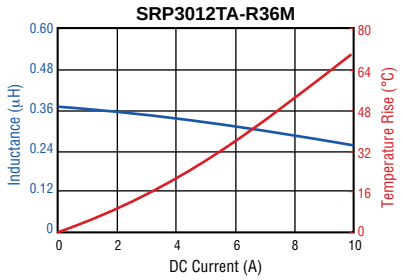
REFLOW TIMES: 3 MAX.

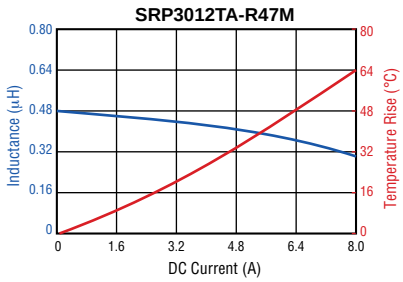
L vs. I Charts

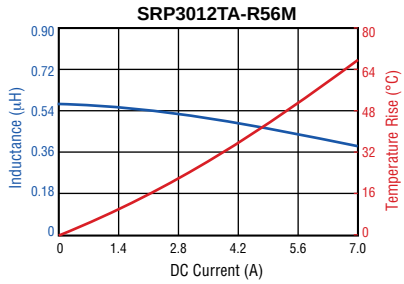


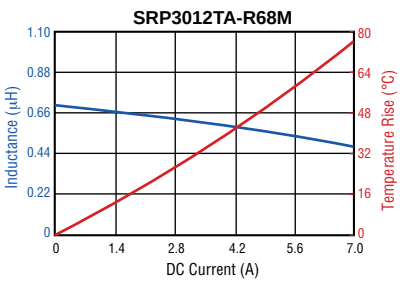


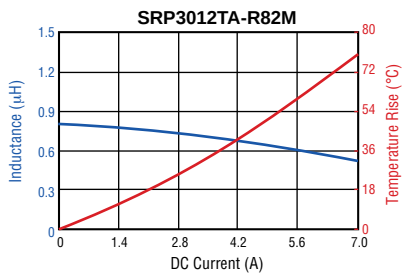


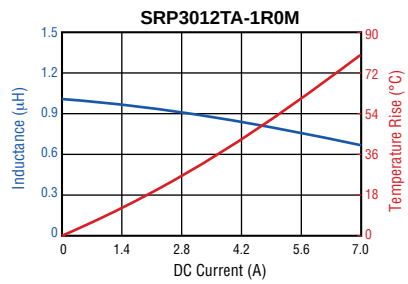










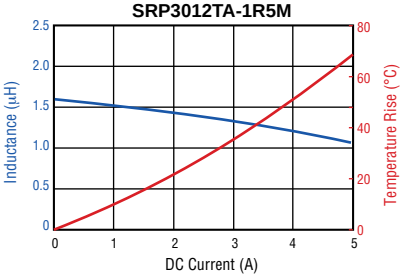


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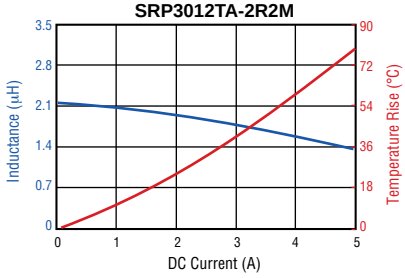
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L vs. I Charts (Continued)

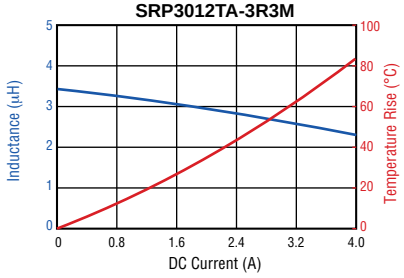
SRP3012TA-1R5M



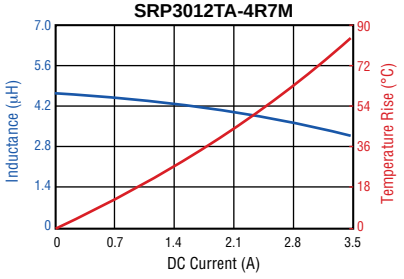
SRP3012TA-2R2M



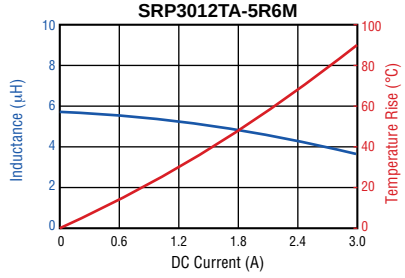
SRP3012TA-3R3M



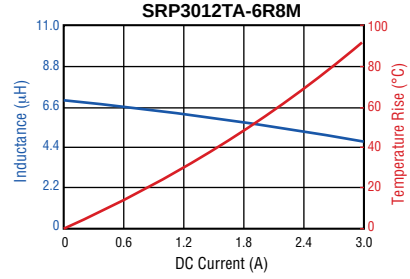
SRP3012TA-4R7M



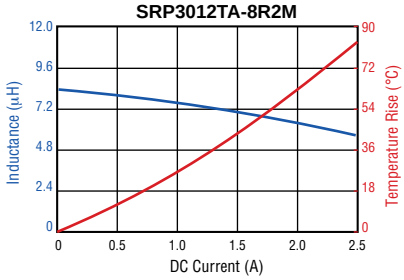
SRP3012TA-5R6M



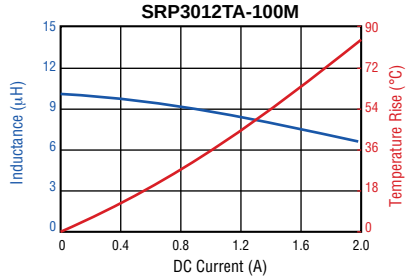
SRP3012TA-6R8M



SRP3012TA-8R2M



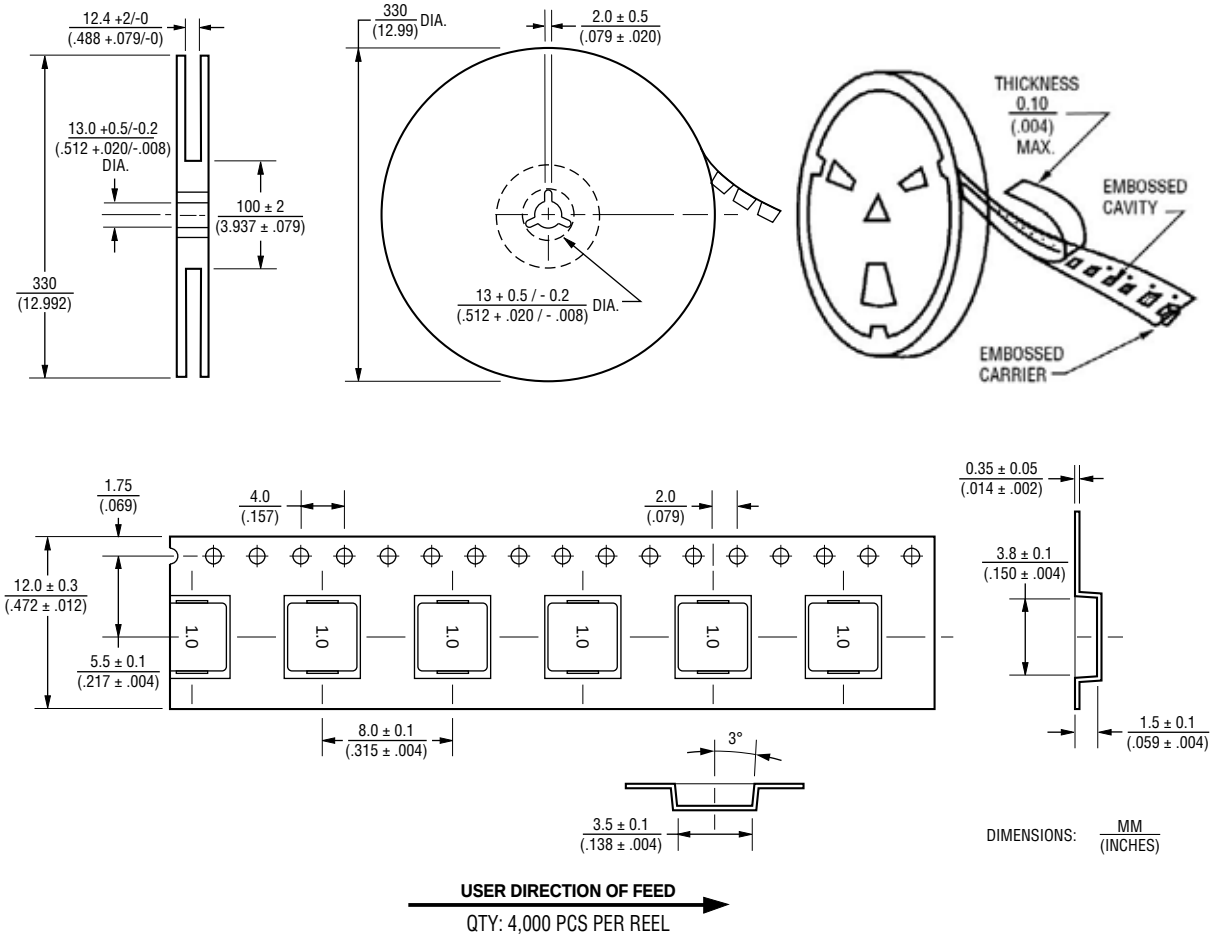
SRP3012TA-100M



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Packaging Specifications



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