

Features

- Shielded construction
- Carbonyl powder core
- High saturation current
- Low profile - 1.0 mm

- Inductance range: 0.10 to 10 μ H
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

SRP4012TA Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

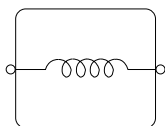
Bourns Part Number	Inductance @ 100 KHz / 1 V		Q (Min.) @100 KHz / 1 V	SRF (MHz) Typ.	DCR (m Ω) Typ.	DCR (m Ω) Max.	I _{rms} (A)	Isat (A)	Terminal Type
	L (μ H)	Tol. (%)							
SRP4012TA-R10Y	0.10	±30	5	400	4.3	5.5	11.5	25	Lead Frame
SRP4012TA-R22M	0.22	±20	5	200	6.6	8	8.5	20	
SRP4012TA-R36M	0.36	±20	10	143	15.5	18	6.5	8.5	
SRP4012TA-R47M	0.47	±20	10	120	18	20	6.0	6.5	
SRP4012TA-R60M	0.60	±20	10	117	22.5	26	5.3	6	
SRP4012TA-1R0M	1.0	±20	10	80	41	47	4.0	6	
SRP4012TA-1R2M	1.2	±20	10	70	48	56	3.5	5	
SRP4012TA-1R5M	1.5	±20	10	62	55	63.3	3.0	4	
SRP4012TA-2R2M	2.2	±20	10	58	69.2	80	2.8	3.5	
SRP4012TA-3R3M	3.3	±20	10	41	84	97	2.3	3	
SRP4012TA-4R7M	4.7	±20	10	35	128	145	2.0	2.5	
SRP4012TA-5R6M	5.6	±20	10	30	180	208	1.7	2.3	
SRP4012TA-6R8M	6.8	±20	10	28	300	360	1.5	1.7	
SRP4012TA-8R2M	8.2	±20	10	25	313	376	1.4	1.6	
SRP4012TA-100M	10.0	±20	10	23	410	463	1.3	1.4	

How to Order

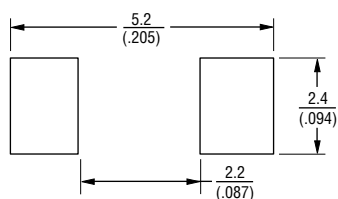
SRP4012TA - 100M

Model _____
Value Code (see table) _____

Electrical Schematic



Recommended Layout



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

Additional Information

Click these links for more information:



General Specifications

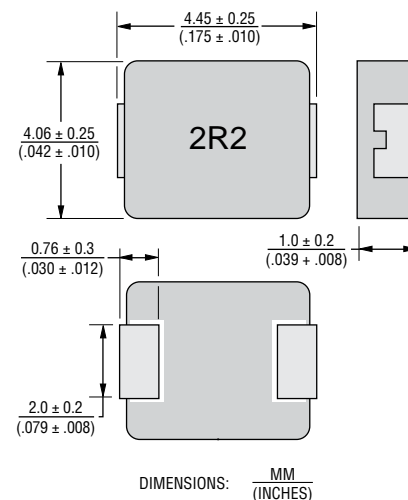
Test Voltage 1.0 V
Test Frequency 100 KHz
Operating Temperature
..... -55 °C to +150 °C
(Temperature rise included)
Storage Temperature
..... -55 °C to +150 °C
Rated Current
..... Inductance drops 20 % at Isat
Temperature Rise 40 °C at rated I_{rms}
Moisture Sensitivity Level 1
ESD Classification (HBM) 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 Carbonyl powder
Wire Enameled copper
Terminal Finish Sn
Packaging 4000 pcs. per 13-inch reel

Product Dimensions

Lead Frame Terminal



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

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

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

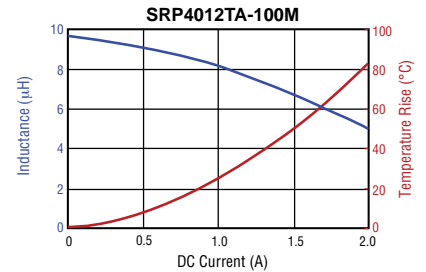
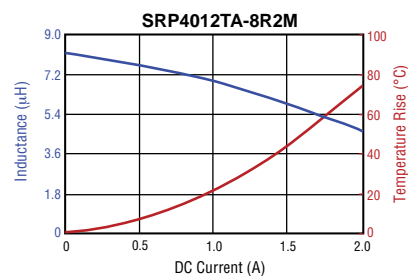
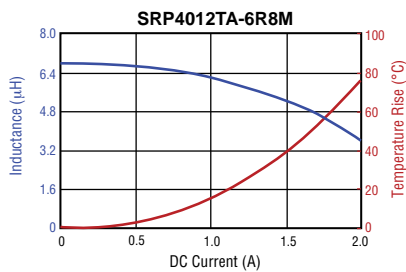
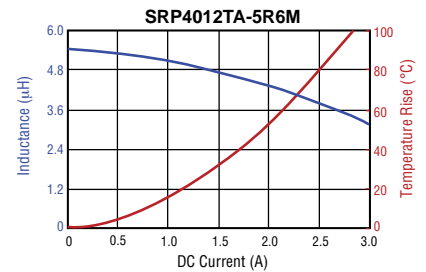
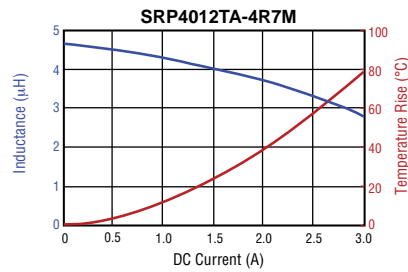
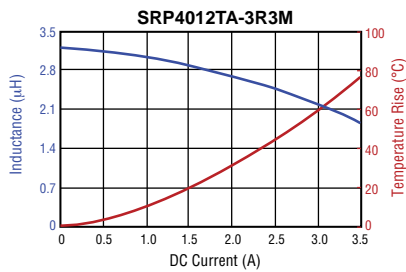
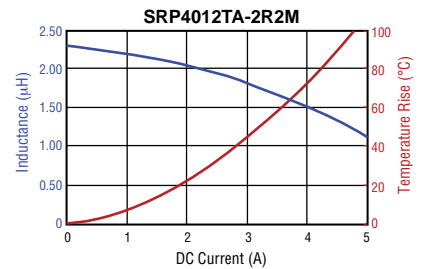
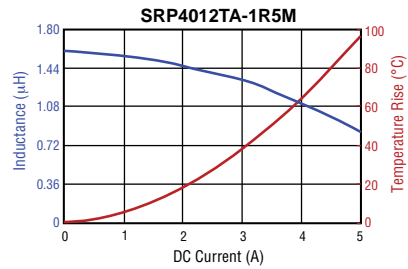
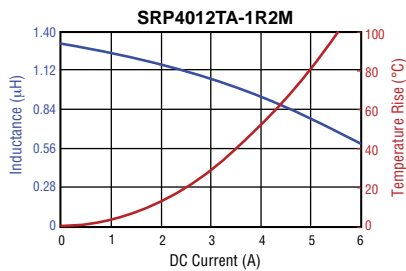
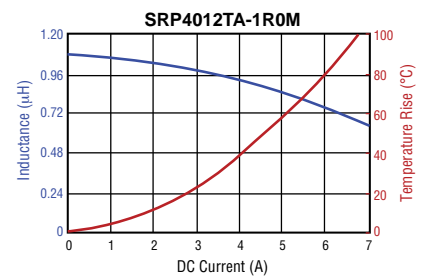
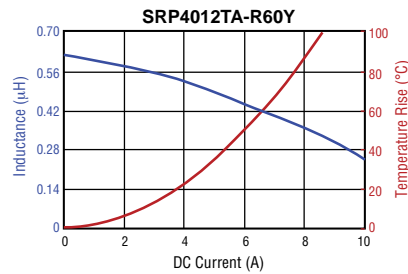
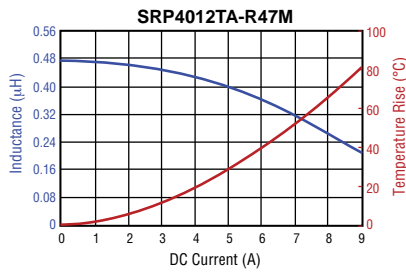
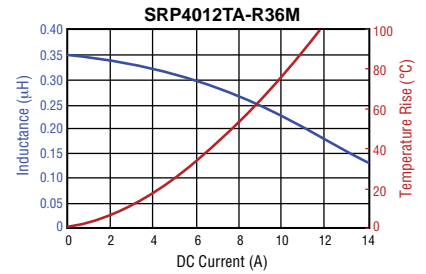
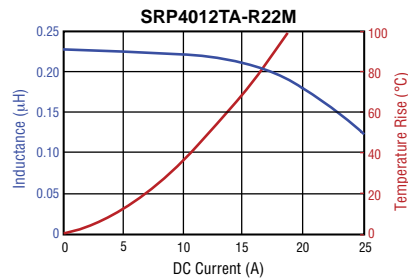
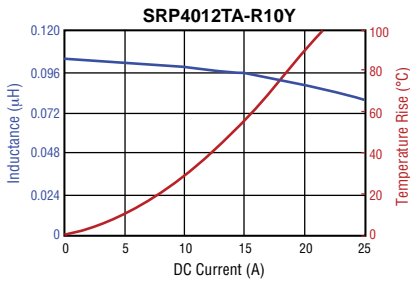
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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SRP4012TA Series – Shielded Power Inductors

BOURNS®

L vs. I Charts



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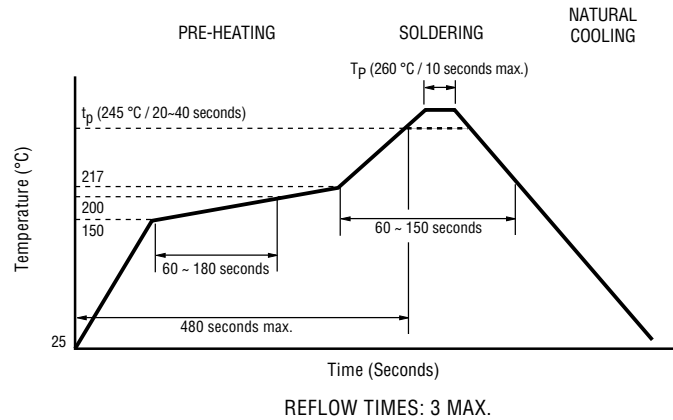
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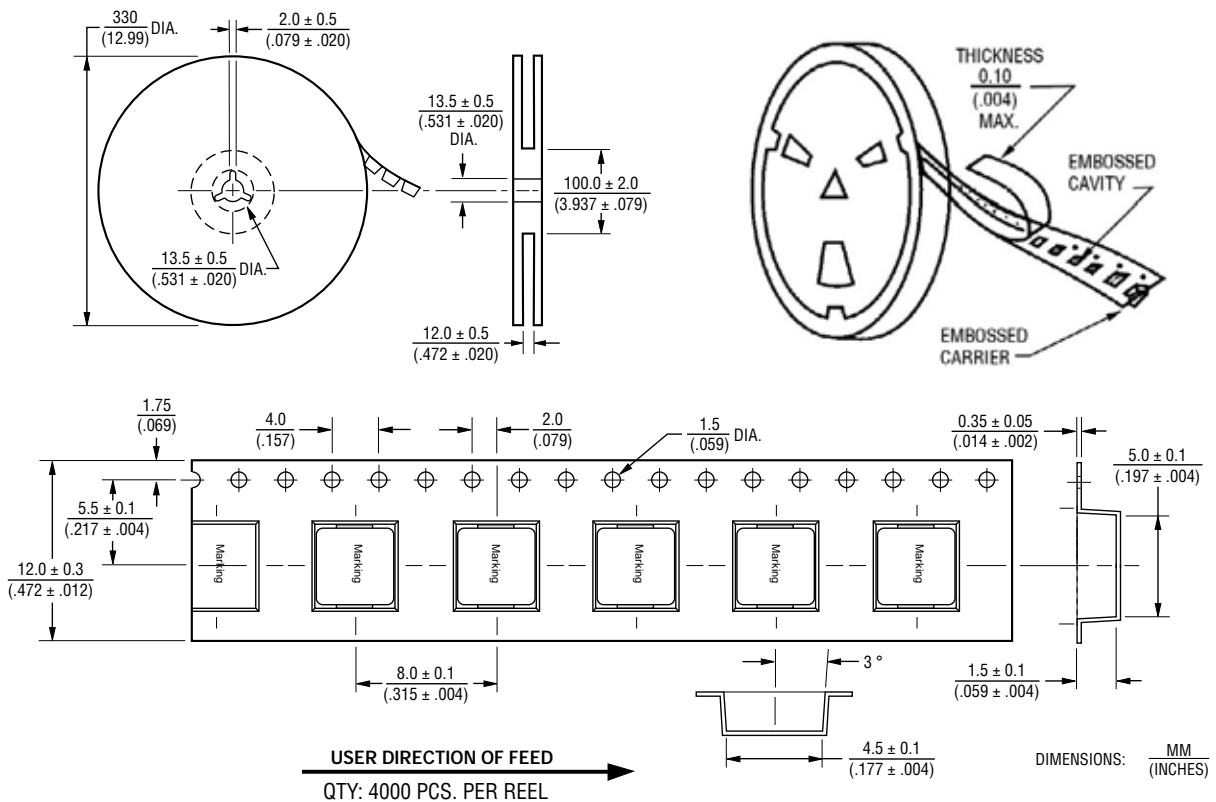
SRP4012TA Series – Shielded Power Inductors

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Soldering Profile



Packaging Specifications



REV. 06/24

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