THE DATASHEET OF

SRP3012C-R22M

BOURNS®

Features

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

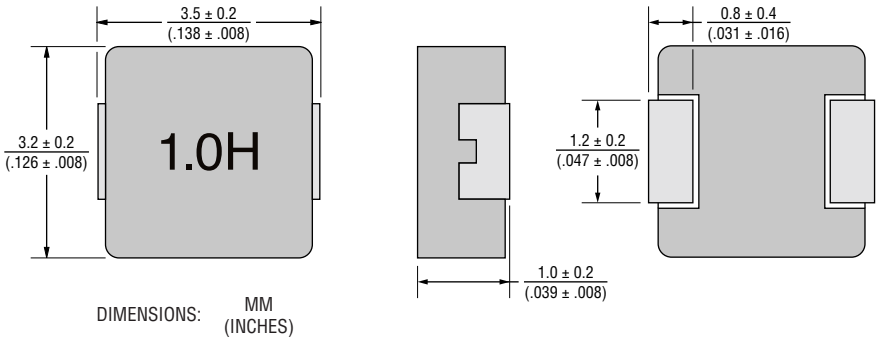
This series is currently available but not recommended for new designs.

SRP3012C Series – Shielded Power Inductors

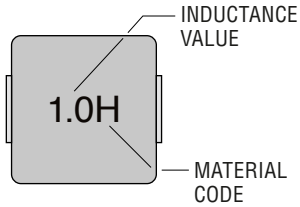
Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 1 V		Q Min. @ 100 kHz	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	I rms (A) Typ.	I sat (A) Typ.	Marking
	L (µH)	Tol. %							
SRP3012C-R15Y	0.15	± 30 %	10	180	9.6	11	10	14	.15H
SRP3012C-R22M	0.22	± 20 %	10	140	14	17	8	12	.22H
SRP3012C-R33M	0.33	± 20 %	10	115	16	20	7	9.8	.33H
SRP3012C-R47M	0.47	± 20 %	10	98	25	30	5	6.5	.47H
SRP3012C-R68M	0.68	± 20 %	10	75	34	40	4.5	5.8	.68H
SRP3012C-1R0M	1.0	± 20 %	10	50	50	60	3.3	5.2	1.0H
SRP3012C-1R5M	1.5	± 20 %	10	42	71	85	3	4	1.5H
SRP3012C-2R2M	2.2	± 20 %	10	38	98	115	2.7	3.2	2.2H
SRP3012C-3R3M	3.3	± 20 %	10	34	172	198	2	2.6	3.3H
SRP3012C-4R7M	4.7	± 20 %	10	31	245	282	1.6	2.3	4.7H
SRP3012C-5R6M	5.6	± 20 %	10	27	310	360	1.5	2	5.6H
SRP3012C-6R8M	6.8	± 20 %	10	26	360	400	1.4	1.8	6.8H
SRP3012C-8R2M	8.2	± 20 %	10	25	420	463	1.2	1.5	8.2H
SRP3012C-100M	10	± 20 %	10	24	450	520	1.1	1.4	10H

Product Dimensions



Typical Part Marking



General Specifications

Operating Temperature
.....-40 °C to +125 °C
(Temperature rise included)
Storage Temperature (Component)
.....-40 °C to +125 °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 can affect the part temperature. Part temperature should be verified in the end application.

Materials

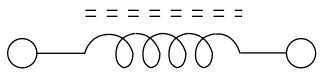
Core.....Metal alloy powder
Wire .....Enameled copper
Terminal Finish .....Sn
Packaging..... 4000 pcs. per 13-inch reel

How to Order

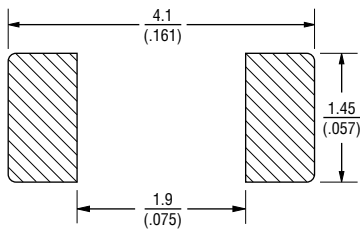
SRP3012C - 100M

Model
Value Code (see table)

Schematic



Recommended Layout



* 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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Users should verify actual device performance in their specific applications.
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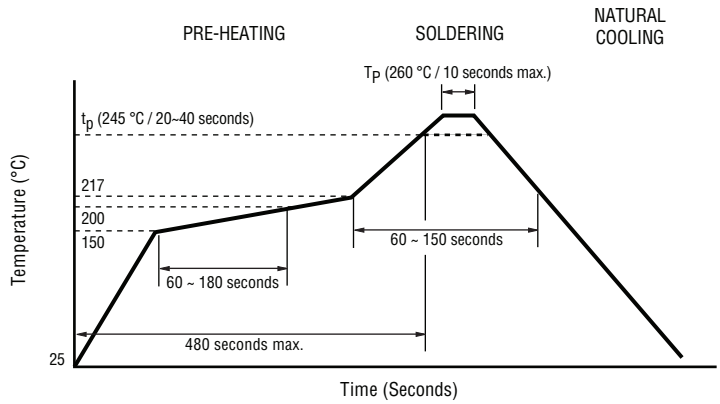
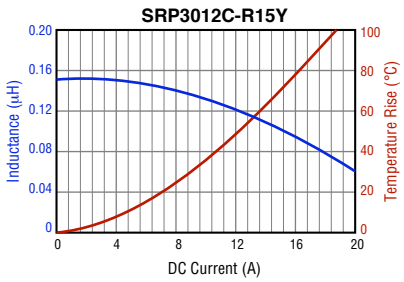
WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

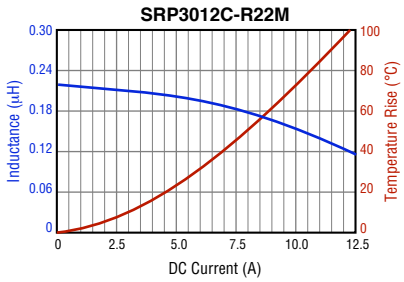
Soldering Profile

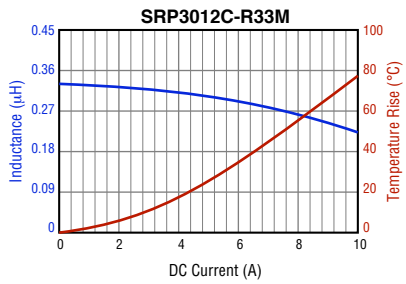


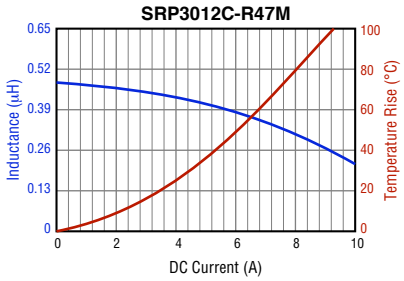
REFLOW TIMES: 3 MAX.

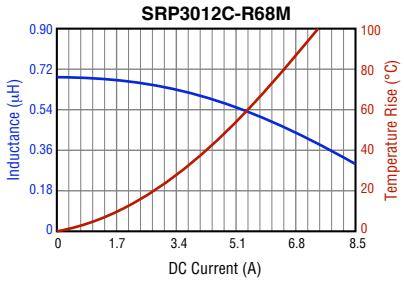
L vs. I Charts

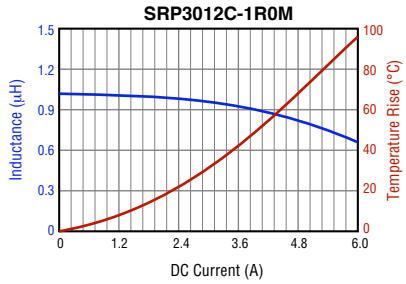


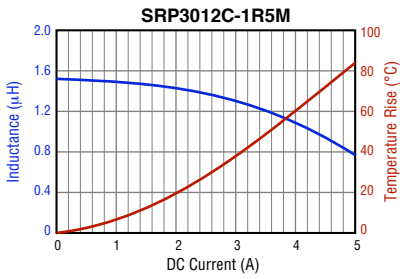


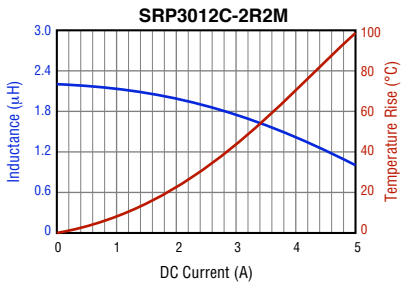


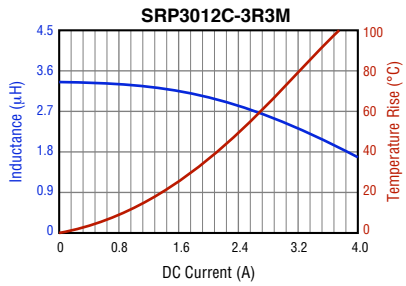












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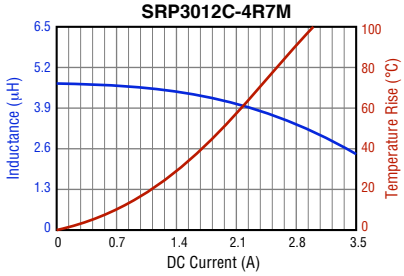
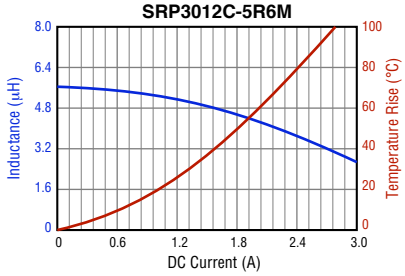
L vs. I Charts (Continued)

SRP3012C-4R7M



SRP3012C-5R6M



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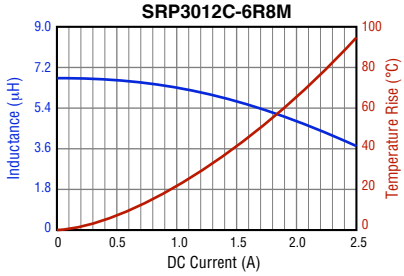
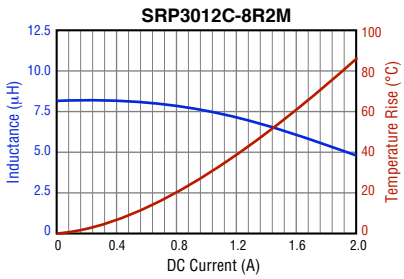
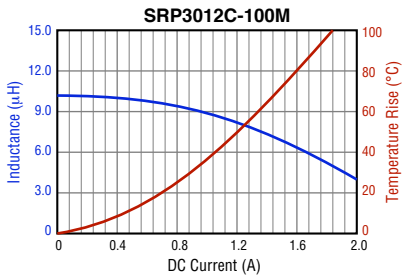


SRP3012C-8R2M



SRP3012C-100M



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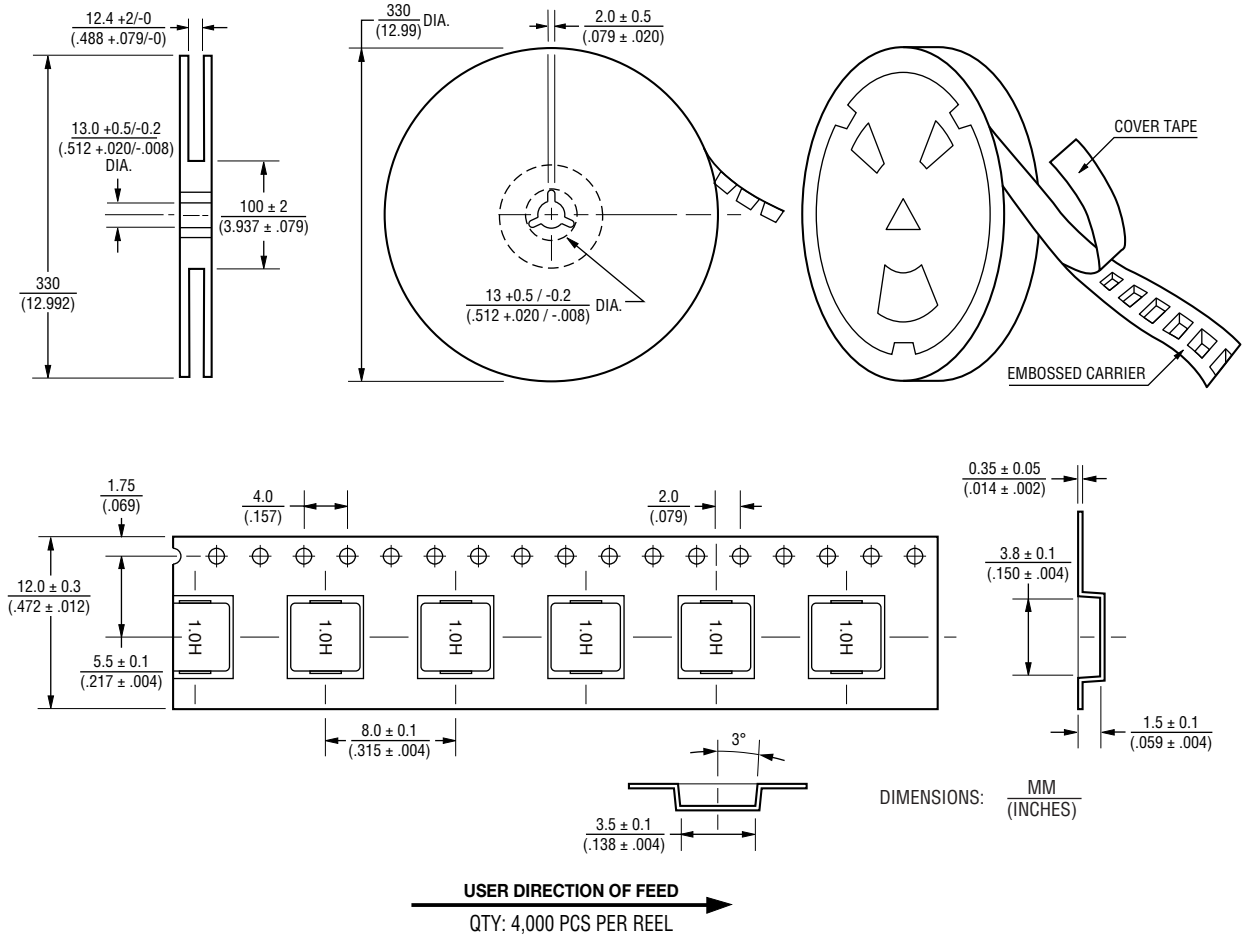
Packaging Specifications



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