THE DATASHEET OF

SRP3020C-R22Y

Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range 0.1 to 10 µH
- RoHS compliant* and halogen free**

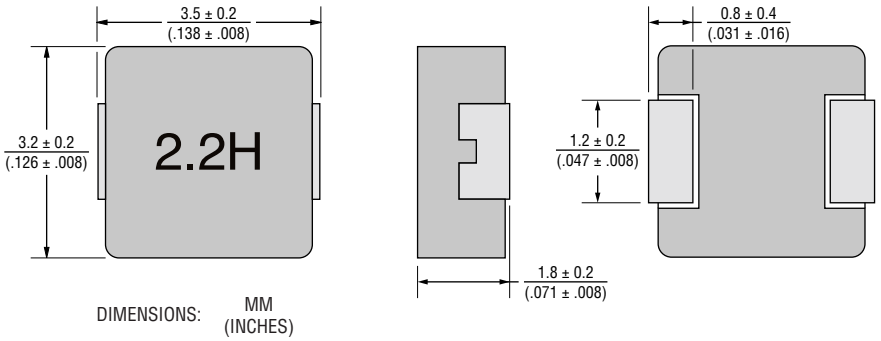
This series is currently available but not recommended for new designs.

SRP3020C Series – Shielded Power Inductors

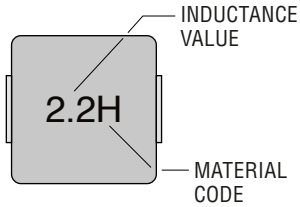
Electrical Specifications @ 25 °C

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. %							
SRP3020C-R10Y	0.10	± 30 %	10	208	6.5	7	10	11.5	.10H
SRP3020C-R22Y	0.22	± 30 %	10	140	11.5	14	8.5	9.2	.22H
SRP3020C-R36M	0.36	± 20 %	10	105	17	21	7	8	.36H
SRP3020C-R47M	0.47	± 20 %	10	83	19.7	23	6	7	.47H
SRP3020C-R68M	0.68	± 20 %	10	72	24	29	5.5	6	.68H
SRP3020C-1R0M	1.0	± 20 %	10	66	30	36	5	5.5	1.0H
SRP3020C-1R5M	1.5	± 20 %	10	50	44	50	3.7	4	1.5H
SRP3020C-2R2M	2.2	± 20 %	10	47	65	75	3.5	3.7	2.2H
SRP3020C-3R3M	3.3	± 20 %	10	44	125	145	2.6	2.8	3.3H
SRP3020C-4R7M	4.7	± 20 %	10	29	167	200	1.8	2	4.7H
SRP3020C-5R6M	5.6	± 20 %	10	28	205	238	1.7	1.9	5.6H
SRP3020C-6R8M	6.8	± 20 %	10	27	260	300	1.6	1.8	6.8H
SRP3020C-8R2M	8.2	± 20 %	10	27	340	390	1.4	1.4	8.2H
SRP3020C-100M	10	± 20 %	10	26	360	422	1.3	1.3	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

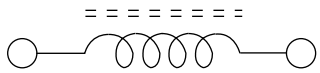
Core.....Metal alloy powder
Wire .....Enameled copper
Terminal Finish .....Sn
Packaging..... 3000 pcs. per 13-inch reel

How to Order

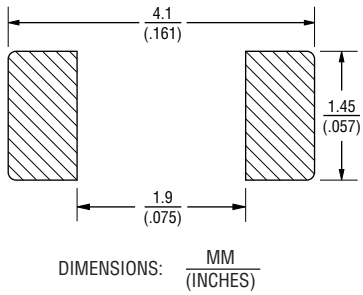
SRP3020C - 100M

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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Users should verify actual device performance in their specific applications.
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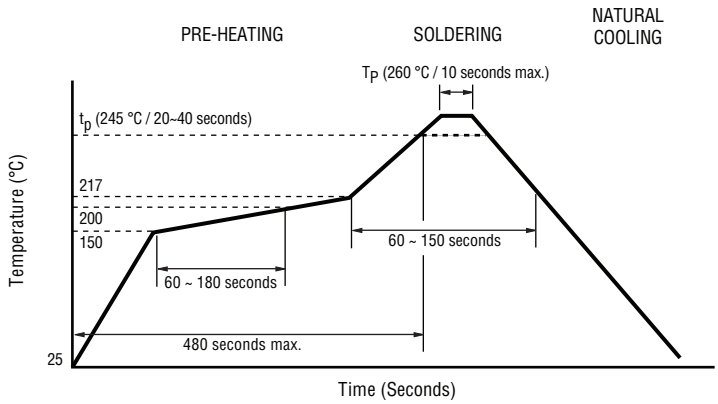
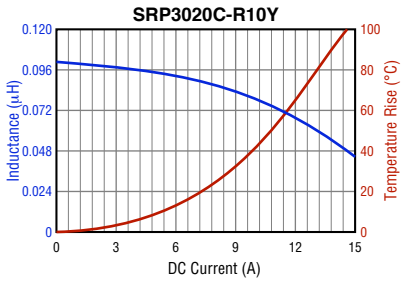
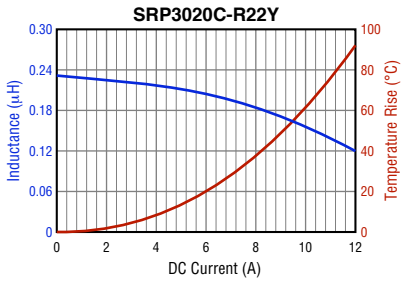
Soldering Profile

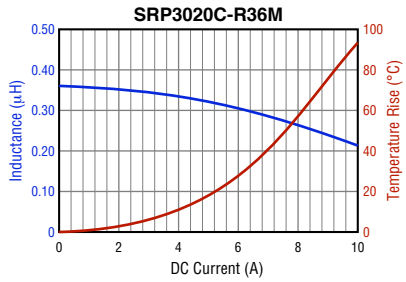


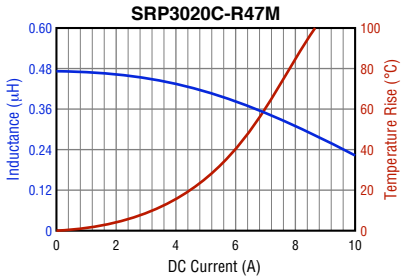
REFLOW TIMES: 3 MAX.

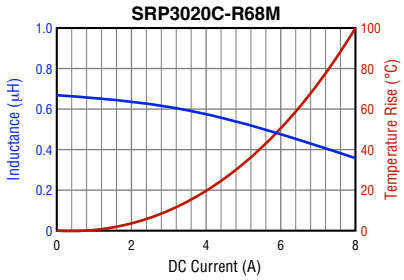
L vs. I Charts

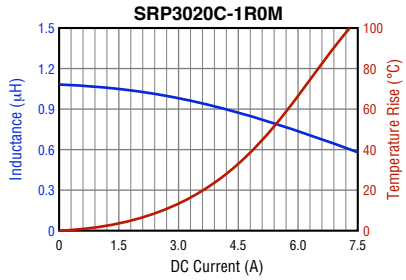


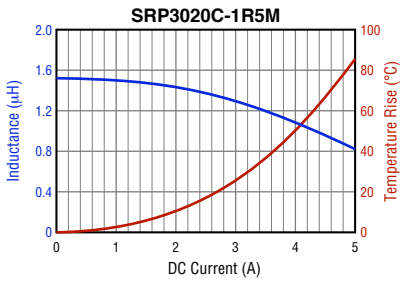


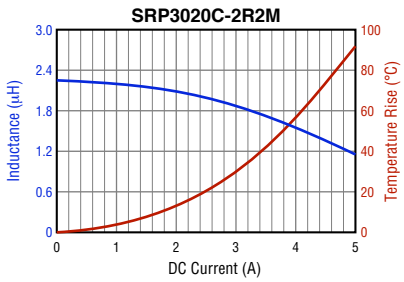


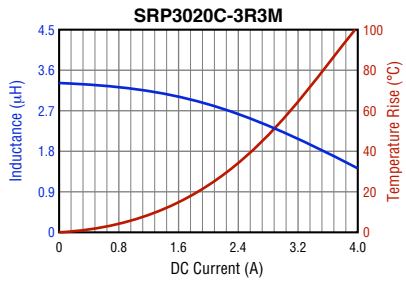












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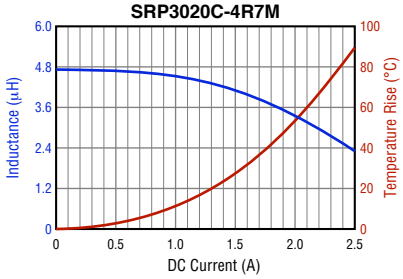
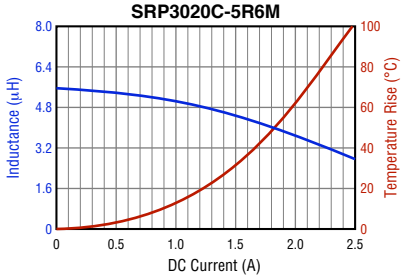
L vs. I Charts (Continued)

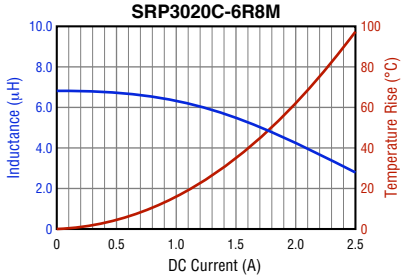
SRP3020C-4R7M



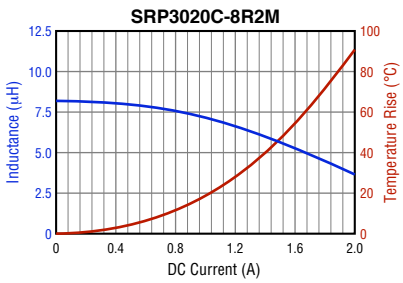
SRP3020C-5R6M



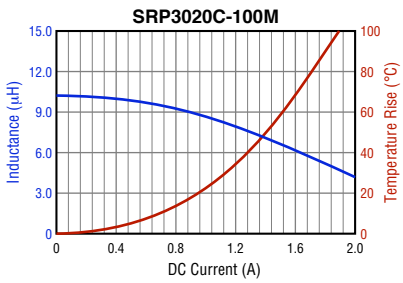
SRP3020C-6R8M



SRP3020C-8R2M



SRP3020C-100M



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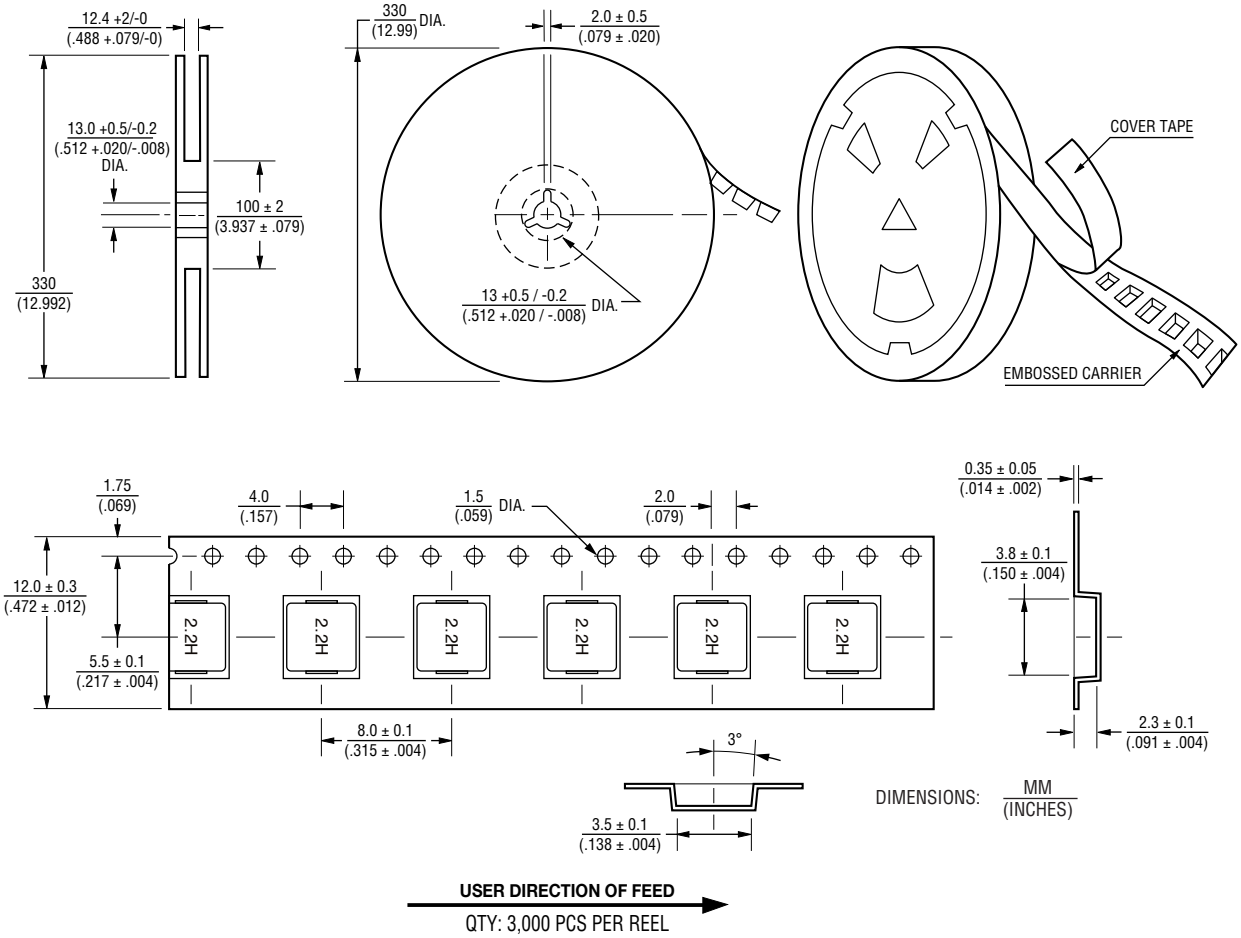
Packaging Specifications



BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com
EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com
The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com
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