



Features

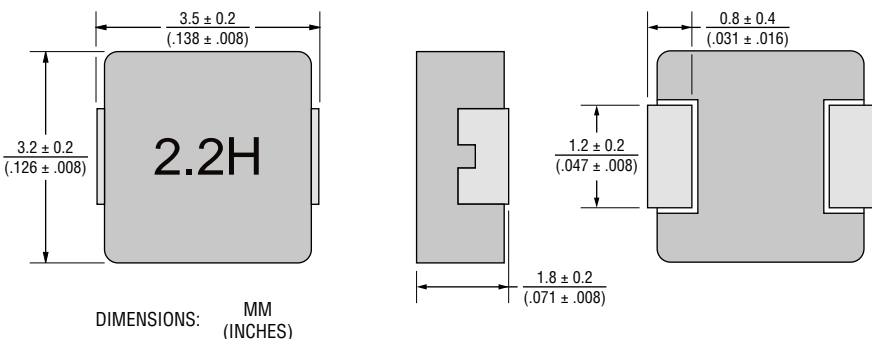
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range 0.1 to 10 μ H
- RoHS compliant* and halogen free**

SRP3020C Series – Shielded Power Inductors

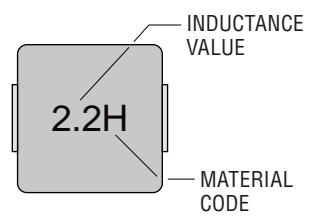
Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 1 V		Q Min. @ 100 kHz	SRF (MHz) Typ.	DCR (m Ω) Typ.	DCR (m Ω) Max.	I rms (A) Typ.	I sat (A) Typ.	Marking
	L (μ H)	Tol. %							
SRP3020C-R10Y	0.10	$\pm 30\%$	10	208	6.5	7	10	11.5	.10H
SRP3020C-R22Y	0.22	$\pm 30\%$	10	140	11.5	14	8.5	9.2	.22H
SRP3020C-R36M	0.36	$\pm 20\%$	10	105	17	21	7	8	.36H
SRP3020C-R47M	0.47	$\pm 20\%$	10	83	19.7	23	6	7	.47H
SRP3020C-R68M	0.68	$\pm 20\%$	10	72	24	29	5.5	6	.68H
SRP3020C-1R0M	1.0	$\pm 20\%$	10	66	30	36	5	5.5	1.0H
SRP3020C-1R5M	1.5	$\pm 20\%$	10	50	44	50	3.7	4	1.5H
SRP3020C-2R2M	2.2	$\pm 20\%$	10	75	65	75	3.5	3.7	2.2H
SRP3020C-3R3M	3.3	$\pm 20\%$	10	145	125	145	2.6	2.8	3.3H
SRP3020C-4R7M	4.7	$\pm 20\%$	10	200	167	200	1.8	2	4.7H
SRP3020C-5R6M	5.6	$\pm 20\%$	10	238	205	238	1.7	1.9	5.6H
SRP3020C-6R8M	6.8	$\pm 20\%$	10	300	260	300	1.6	1.8	6.8H
SRP3020C-8R2M	8.2	$\pm 20\%$	10	390	340	390	1.4	1.4	8.2H
SRP3020C-100M	10	$\pm 20\%$	10	422	360	422	1.3	1.3	10H

Product Dimensions



Typical Part Marking



General Specifications

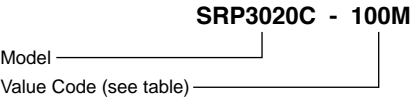
Operating Temperature
-40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature (Component)
-40 °C to +125 °C
 Rated Current
 Inductance drops 30 % at Isat
 Temperature Rise ... 40 °C at rated Irms!
 MSL 1
 ESD Classification (HBM)..... N/A

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.

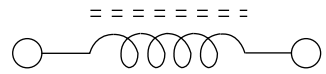
Materials

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

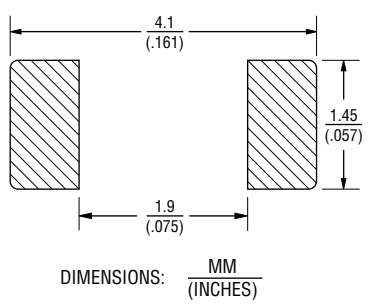
How to Order



Schematic



Recommended Layout

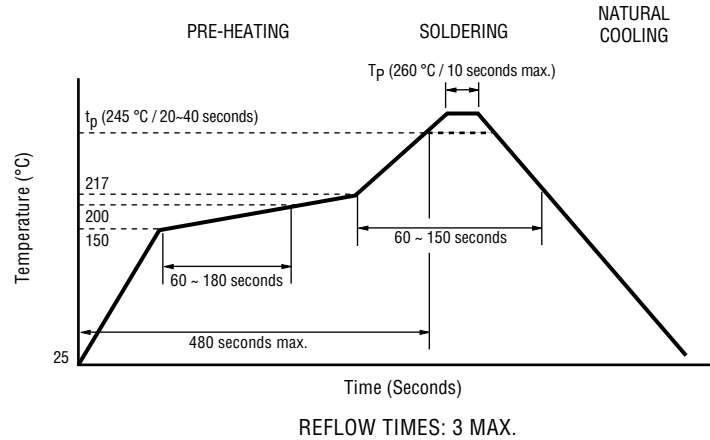


* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
 ** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
 Specifications are subject to change without notice.
 Users should verify actual device performance in their specific applications.
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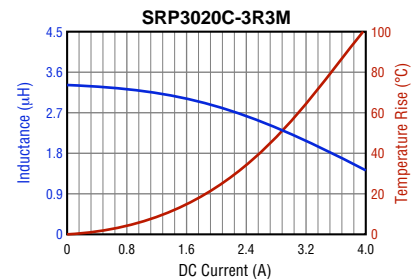
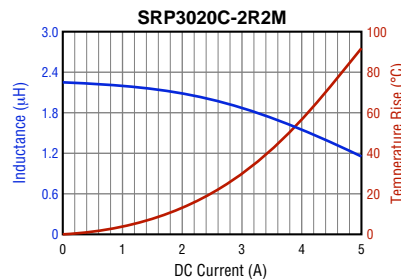
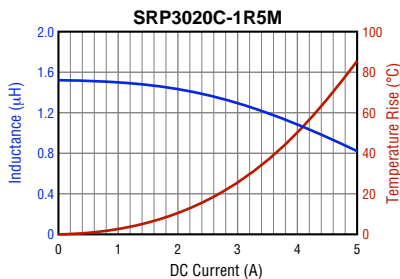
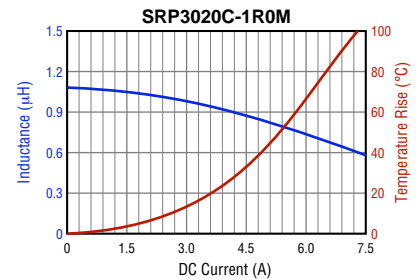
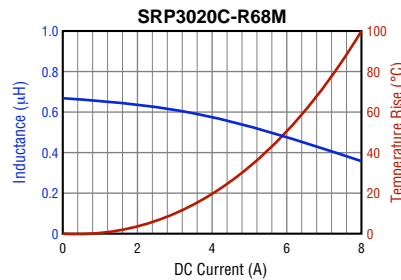
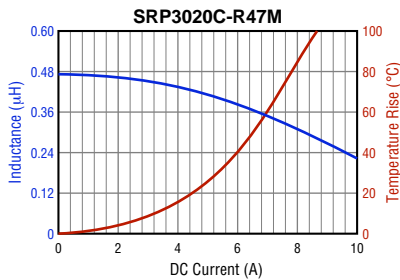
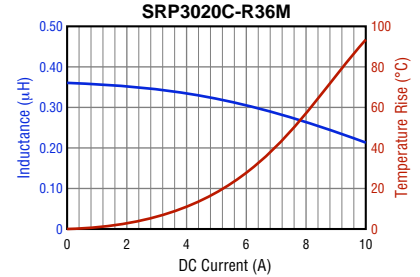
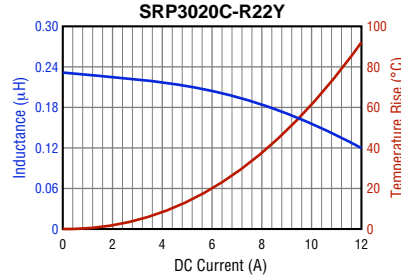
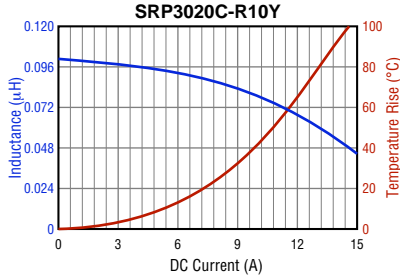
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Soldering Profile



L vs. I Charts



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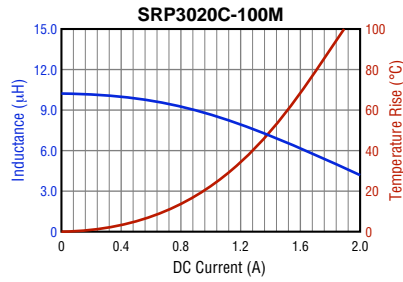
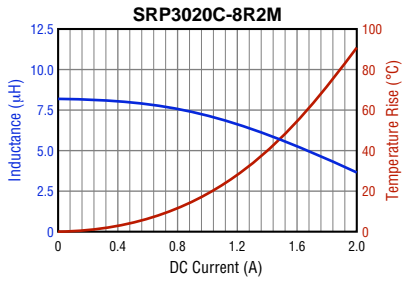
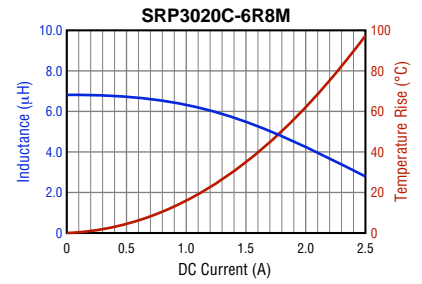
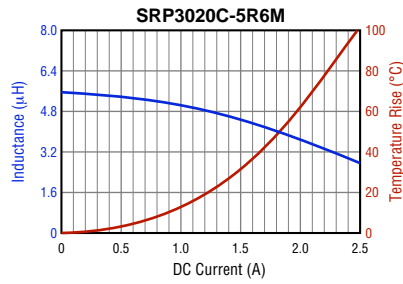
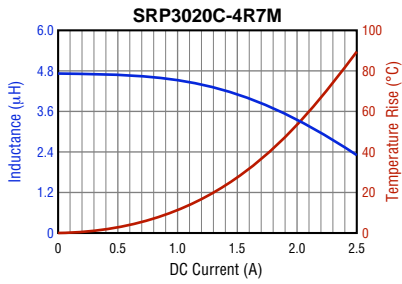
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L vs. I Charts (Continued)



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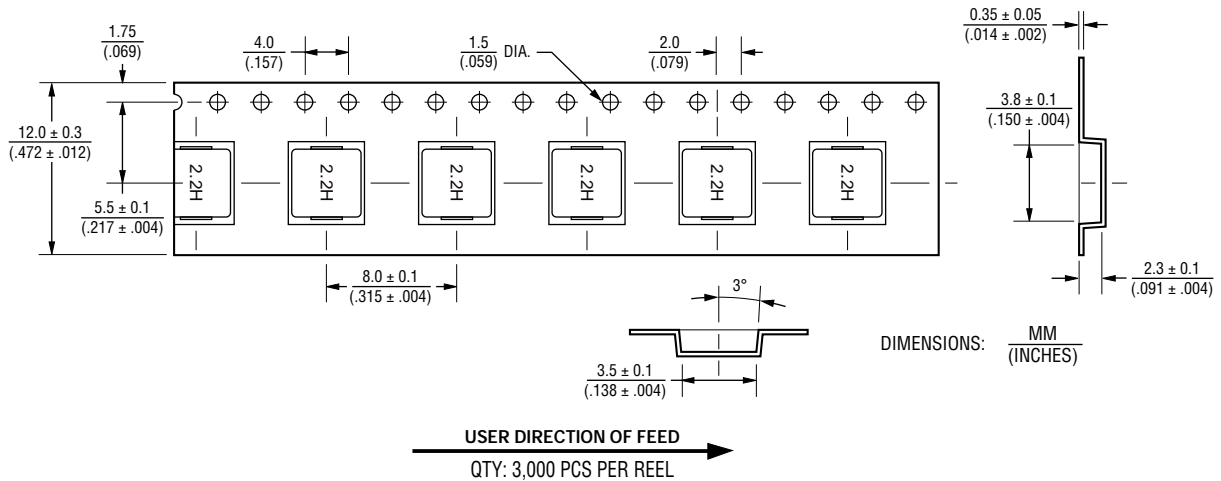
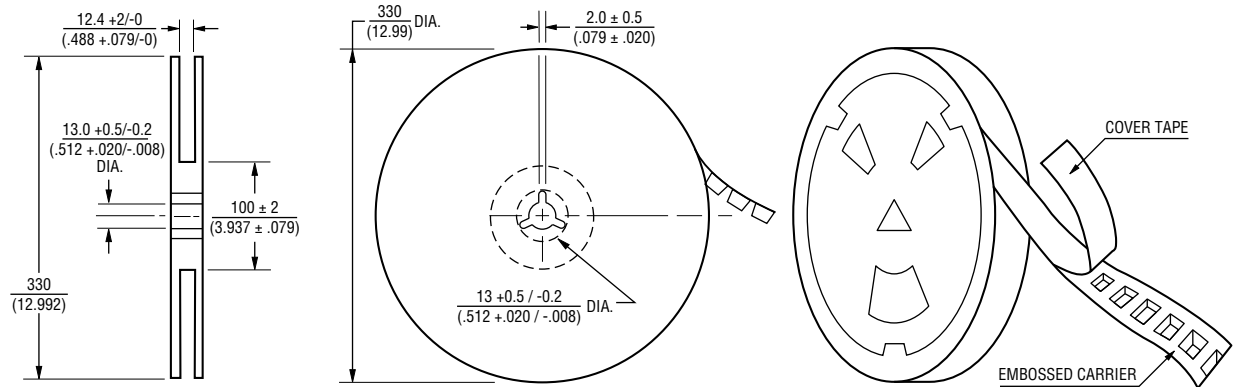
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SRP3020C Series – Shielded Power Inductors

BOURNS®

Packaging Specifications



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