THE DATASHEET OF

SRP5020C-4R7M

BOURNS®

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**

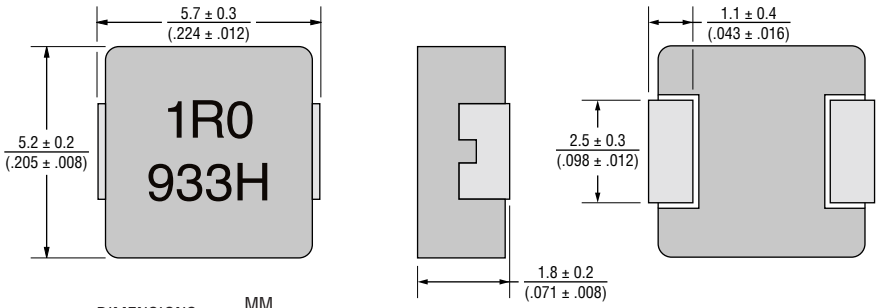
This series is currently available but not recommended for new designs.

SRP5020C Series – Shielded Power Inductors

Electrical Specifications @ 25 °C

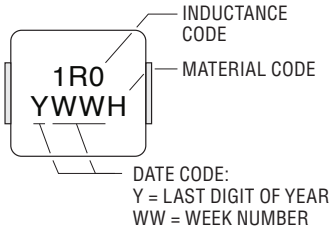
Bourns Part Number	Inductance @ 100 kHz / 1 V		Q Min. @ 100 kHz	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	I rms (A) Typ.	I sat (A) Typ.
	L (µH)	Tol. %						
SRP5020C-R10Y	0.10	± 30 %	5	200	2.7	3	20	36
SRP5020C-R15Y	0.15	± 30 %	5	180	3.6	4	18	34
SRP5020C-R22M	0.22	± 20 %	5	125	4.1	4.6	16	23
SRP5020C-R33M	0.33	± 20 %	5	86	5.5	6.1	14	17
SRP5020C-R47M	0.47	± 20 %	10	80	6.8	7.6	11.5	16
SRP5020C-R68M	0.68	± 20 %	10	58	10.6	11.7	10	13
SRP5020C-1R0M	1.0	± 20 %	20	55	13.8	15.2	9	10.5
SRP5020C-1R5M	1.5	± 20 %	20	42	25.6	28.7	7	9.6
SRP5020C-2R2M	2.2	± 20 %	20	40	36	41	5.5	8.8
SRP5020C-3R3M	3.3	± 20 %	20	30	66	74	4	7
SRP5020C-4R7M	4.7	± 20 %	20	27	95	109	3.2	6
SRP5020C-6R8M	6.8	± 20 %	20	25	130	150	2.8	5
SRP5020C-8R2M	8.2	± 20 %	20	15	150	171	2.6	4
SRP5020C-100M	10	± 20 %	20	10	180	190	2.5	3.6

Product Dimensions



DIMENSIONS: MM (INCHES)

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

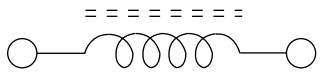
Core.....Metal alloy powder
Wire .....Enameled copper
Terminal Finish .....Sn
Packaging..... 3000 pcs. per 13-inch reel

How to Order

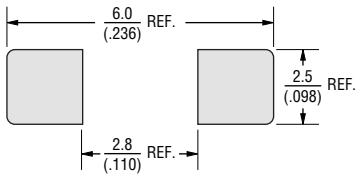
SRP5020C - 100M

Model
Value Code (see table)

Schematic



Recommended Layout



DIMENSIONS: MM (INCHES)

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.

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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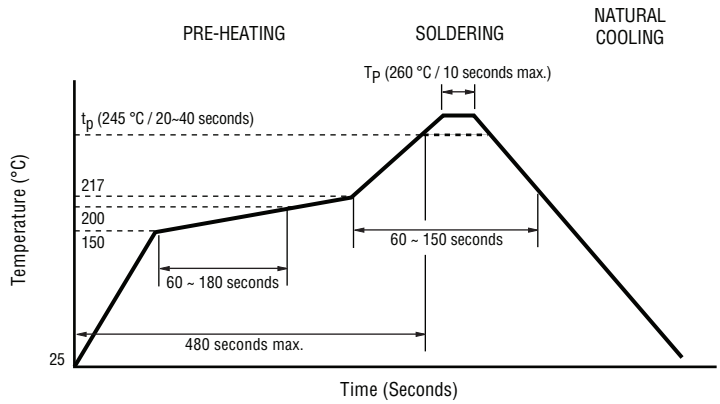
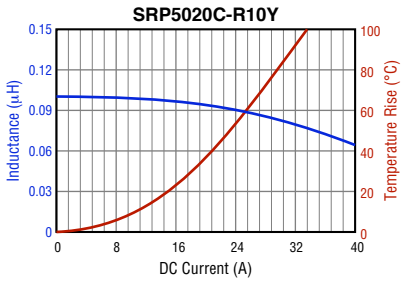
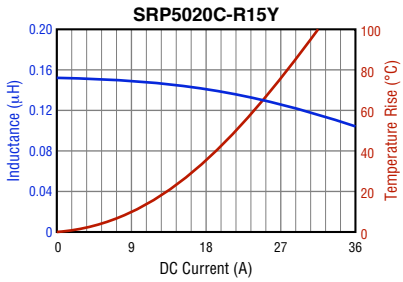
Soldering Profile

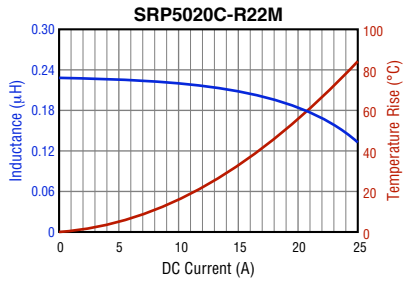


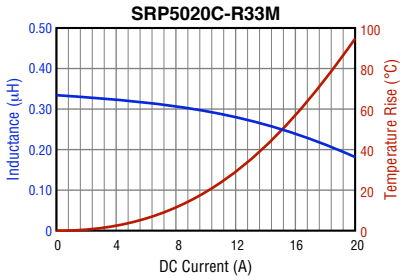
REFLOW TIMES: 3 MAX.

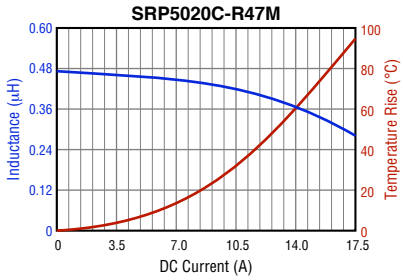
L vs. I Charts

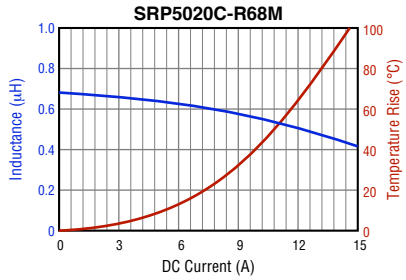


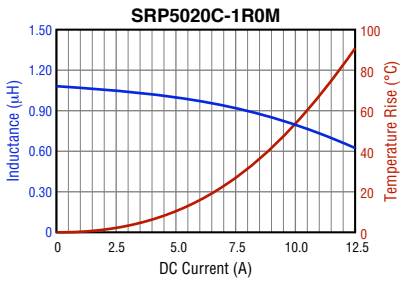


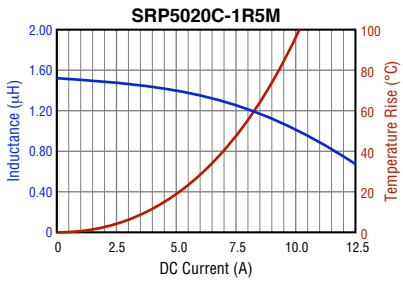


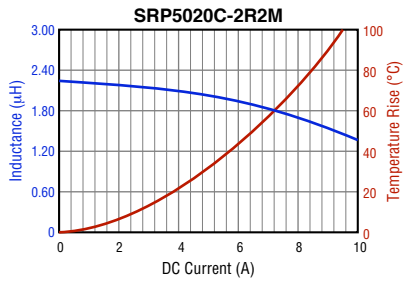












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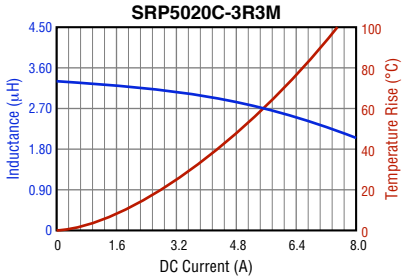
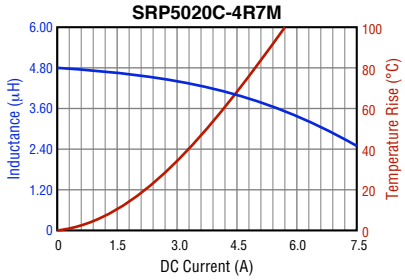
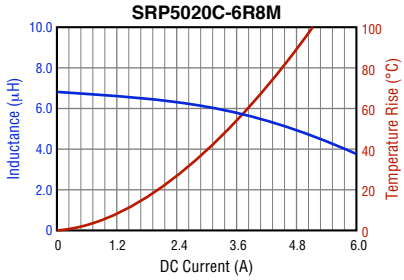
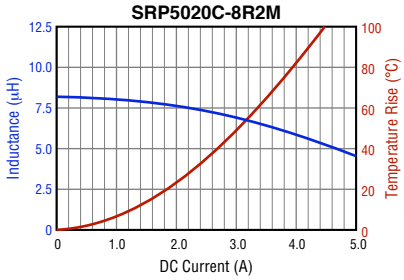
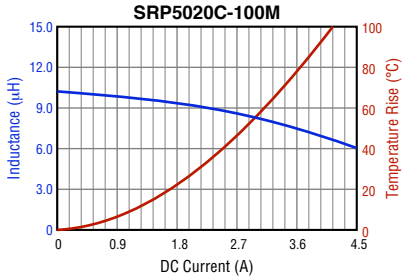
L vs. I Charts (Continued)











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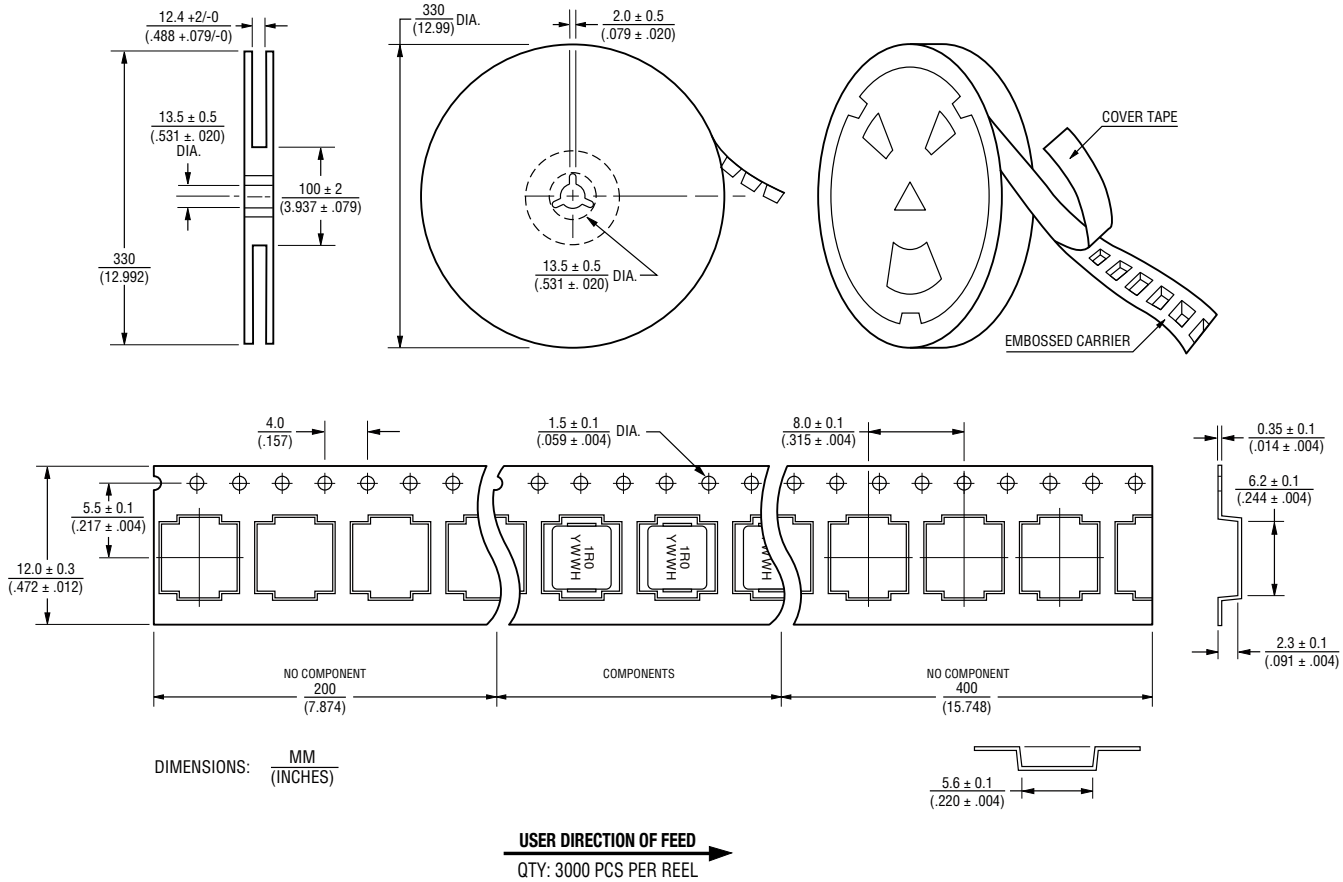
Packaging Specifications



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- Shortage Management
- Alternative Solution
- Excess Inventory Management