



THE DATASHEET OF SRP5030C-6R8M





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**



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

SRP5030C 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.
	L (μ H)	Tol. %						
SRP5030C-R10Y	0.10	± 30 %	10	177	2.5	3	25	33
SRP5030C-R12Y	0.12	± 30 %	10	177	2.5	3	23	31
SRP5030C-R15Y	0.15	± 30 %	12	130	2.6	3.2	22	30
SRP5030C-R33M	0.33	± 20 %	12	85	4.4	5	17	20
SRP5030C-R47M	0.47	± 20 %	20	60	6.4	7.4	16	17
SRP5030C-R68M	0.68	± 20 %	20	56	8.7	10	12	15
SRP5030C-1R0M	1.0	± 20 %	20	43	12	14	10	12
SRP5030C-1R5M	1.5	± 20 %	20	35	16	19	8	10.5
SRP5030C-2R2M	2.2	± 20 %	20	30	26	32	7	8
SRP5030C-3R3M	3.3	± 20 %	20	25	33	38	5	7
SRP5030C-4R7M	4.7	± 20 %	20	20	50	53	4	6
SRP5030C-5R6M	5.6	± 20 %	20	18	55	63	3.6	5
SRP5030C-6R8M	6.8	± 20 %	20	16	63	72	3.3	4
SRP5030C-100M	10	± 20 %	20	15	102	122	2.8	2.8

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 Irms¹

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

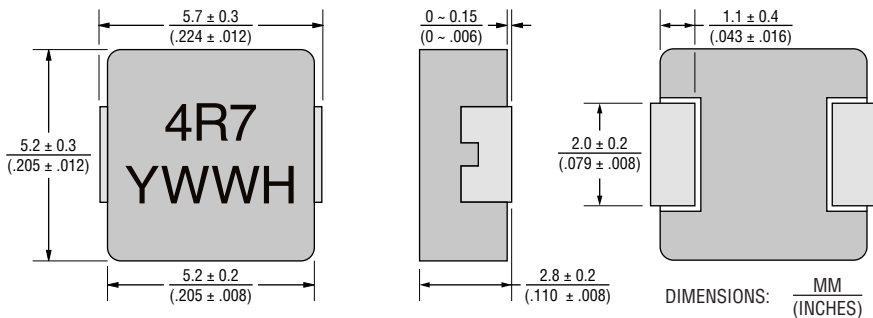
Core..... Metal alloy powder

Wire Enameled copper

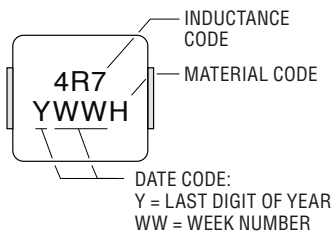
Terminal Finish Sn

Packaging..... 2000 pcs. per 13-inch reel

Product Dimensions



Typical Part Marking

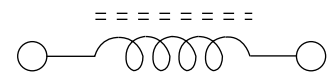


How to Order

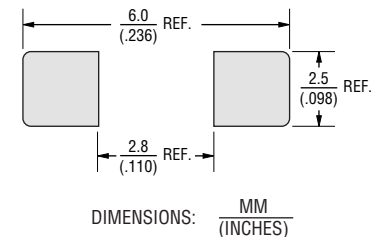
SRP5030C - 100M

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.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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WARNING

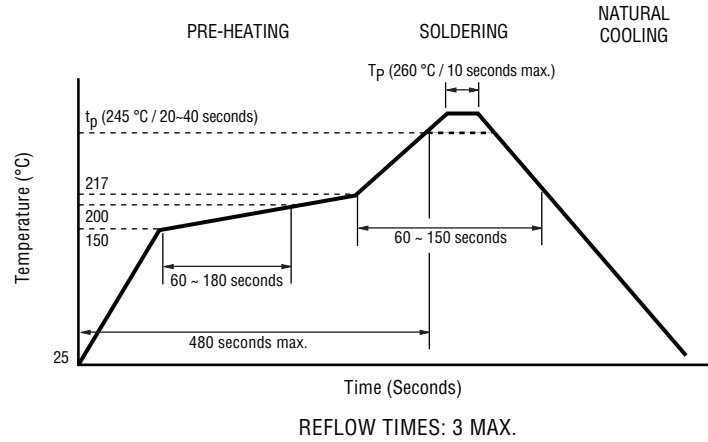
Cancer and Reproductive Harm

www.P65Warnings.ca.gov

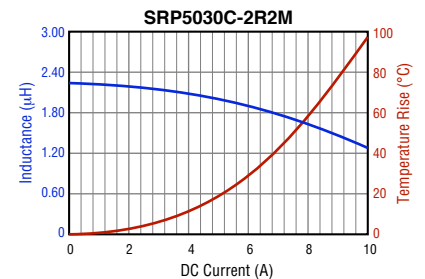
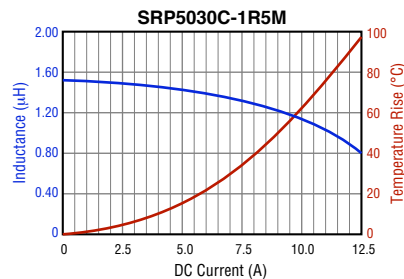
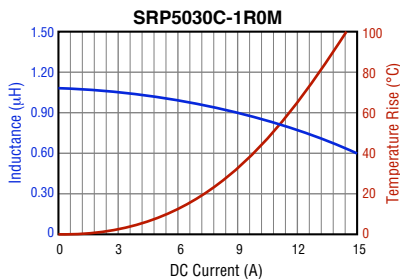
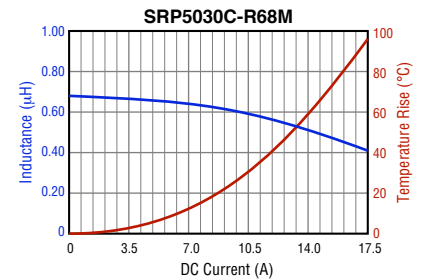
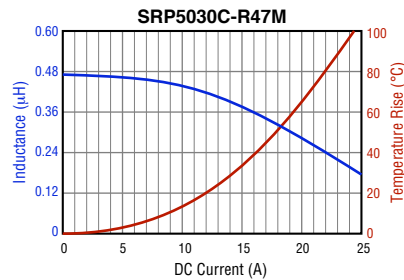
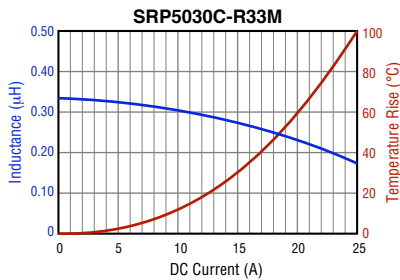
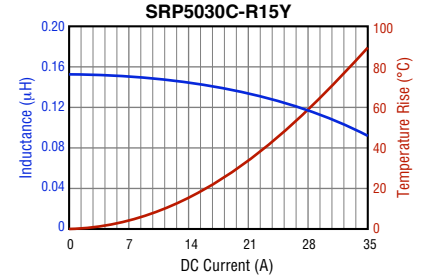
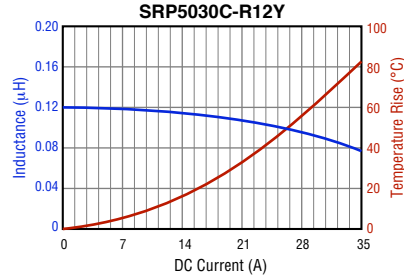
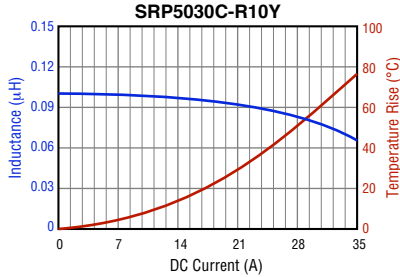
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BOURNS®

Soldering Profile



L vs. I Charts



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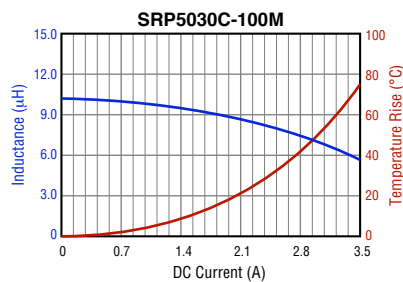
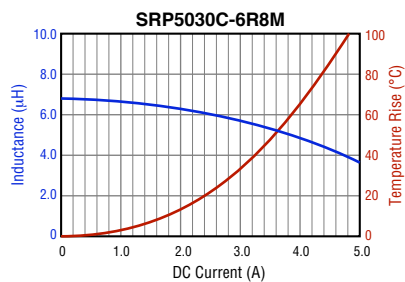
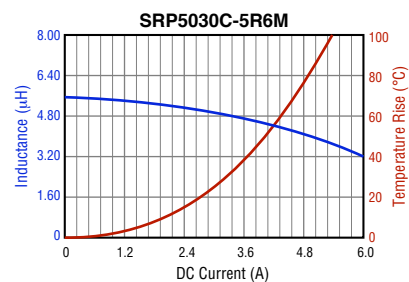
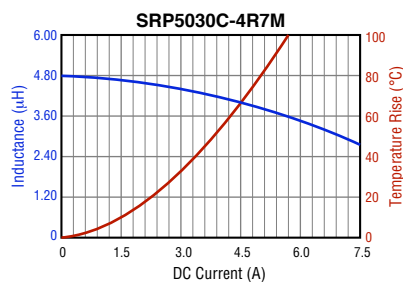
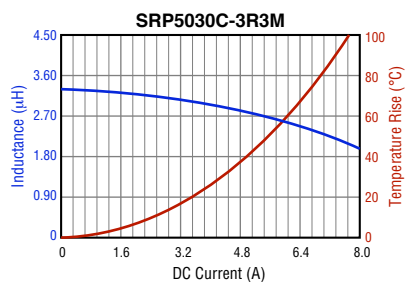
Users should verify actual device performance in their specific applications.

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L vs. I Charts (Continued)



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BOURNS®

12.4 +2/-0
(.488 +.079/-0)

13.0 +0.5 / -0.2
(.512 +.020 / -.008) DIA.

330
(12.992)

100 ± 2
(3.937 ± .079)

2.0 ± 0.5
(.079 ± .020)

330
(12.99) DIA.

13.0 +0.5 / -0.2
(.512 +.020 / -.008) DIA.

COVER TAPE

EMBOSSED CARRIER

4.0
(.157)

1.5 ± 0.1
(.059 ± .004) DIA.

8.0 ± 0.1
(.315 ± .004)

0.35 ± 0.05
(.014 ± .002)

6.2 ± 0.1
(.244 ± .004)

3.3 ± 0.1
(.130 ± .004)

NO COMPONENT 200
(7.874)

COMPONENTS 400
(15.748)

NO COMPONENT 400
(15.748)

5.6 ± 0.1
(.220 ± .004)

DIMENSIONS: MM
(INCHES)

USER DIRECTION OF FEED

QTY: 2000 PCS PER REEL

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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