

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**

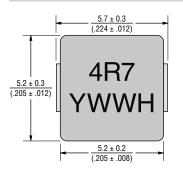
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SRP5030C Series – Shielded Power Inductors

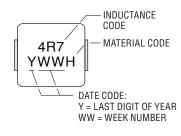
Electrical Specifications @ 25 °C

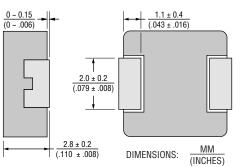
Bourns	Inductance @ 100 kHz / 1 V		Q Min. @	SRF (MHz)	DCR (mΩ)	DCR (mΩ)	l rms (A)	l sat (A)
Part Number	L (µH)	Tol. %	100 kHz	Тур.	Тур.	Max.	Тур.	Typ.
SRP5030C-R10Y	0.10	± 30 %	10	177	2.5	3	25	33
SRP5030C-R12Y	0.12	± 30 %	10	177	2.5	3	23	31
SRP5030C-R15Y	0.15	± 30 %	12	130	2.6	3.2	22	30
SRP5030C-R33M	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

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
MSL1
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.

This series is currently available but

not recommended for new designs.

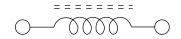
Materials

Core	. Metal alloy powder
Wire	Enameled copper
Terminal Finish	Sn
Packaging 2000 p	ocs. per 13-inch reel

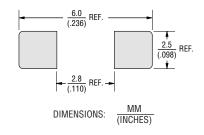
How to Order



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 (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) 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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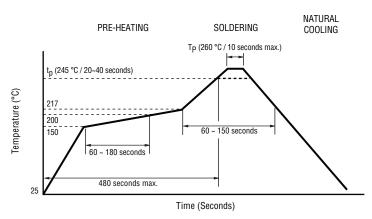
WARNING

Cancer and Reproductive Harm

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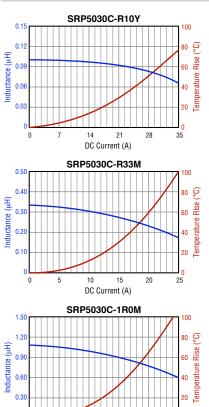
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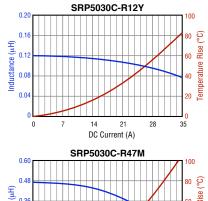
Soldering Profile

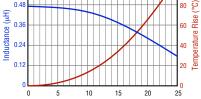


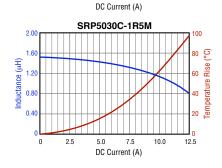


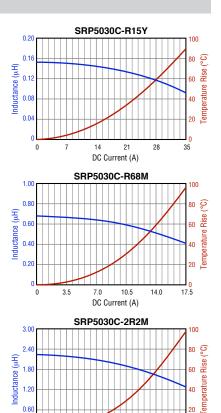
L vs. I Charts











10

8

n

0

2

4

6

DC Current (A)

Specifications are subject to change without notice.

6

9

DC Current (A)

12

15

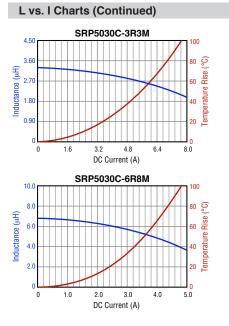
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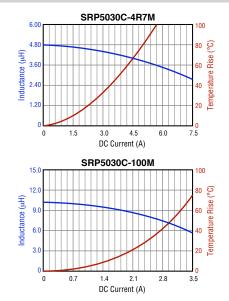
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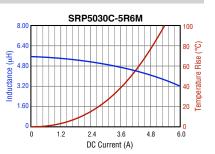
3

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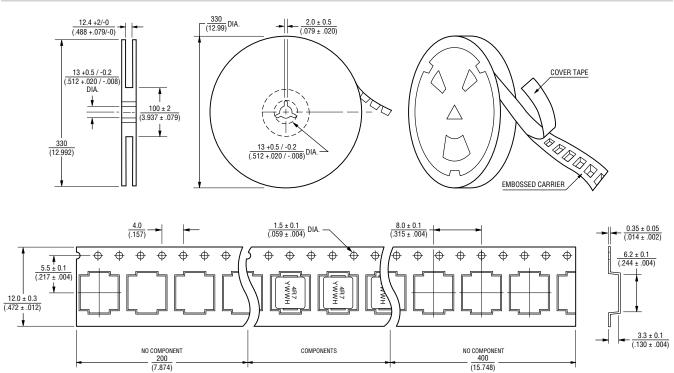
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(15.748)

 $\frac{5.6 \pm 0.1}{(.220 \pm .004)}$

Packaging Specifications



MM (INCHES) DIMENSIONS:

> USER DIRECTION OF FEED QTY: 2000 PCS PER REEL

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REV. 05/22

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