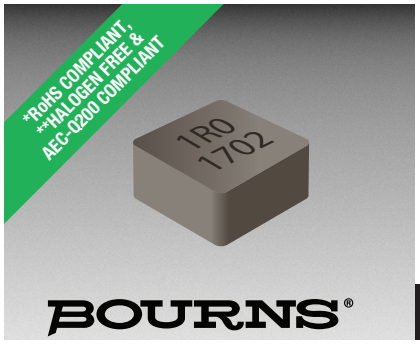


Features

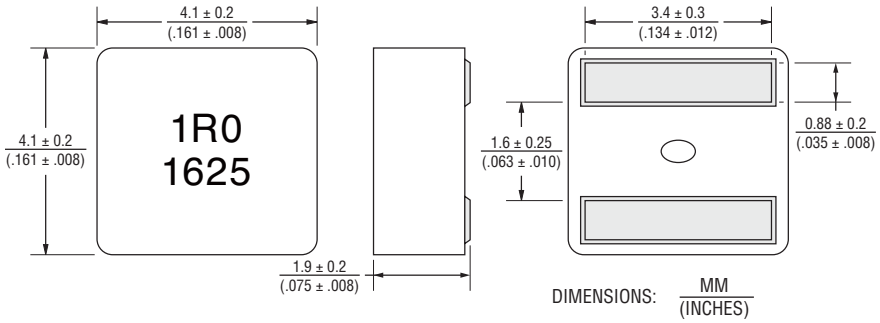
- Shielded construction
- Metal alloy powder core
- High saturation current
- Flat wire
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP4020FA Series – Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 1 V		Q Min.	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	I rms (A) Typ.		I sat (A) Typ.		
	L (μH)	Tol. %					20 °C Temp. Rise	40 °C Temp. Rise	10 % L Drop	20 % L Drop	30 % L Drop
SRP4020FA-R47M	0.47	± 20 %	30	90	6.0	6.8	9.8	13.2	7.0	10.0	14.0
SRP4020FA-R68M	0.68	± 20 %	20	73	7.3	8.2	9.2	12.0	5.2	8.0	11.6
SRP4020FA-R82M	0.82	± 20 %	20	62	8.6	9.5	8.5	11.5	4.8	6.5	10.2
SRP4020FA-1R0M	1.0	± 20 %	20	56	10.6	11.7	8.0	11.0	4.5	5.4	9.2
SRP4020FA-1R2M	1.2	± 20 %	20	53	12.2	13.4	7.2	9.5	4.3	5.0	8.6
SRP4020FA-1R5M	1.5	± 20 %	20	45	14.4	15.8	6.7	9.1	4.1	4.5	7.5
SRP4020FA-2R0M	2.0	± 20 %	15	40	21.15	23.3	6.2	8.2	3.2	4.0	6.2
SRP4020FA-2R2M	2.2	± 20 %	15	38	21.35	23.5	6.0	8.0	3.1	3.8	6.0
SRP4020FA-3R3M	3.3	± 20 %	15	26	34.2	38.3	4.4	5.5	2.7	3.4	5.3
SRP4020FA-4R7M	4.7	± 20 %	15	25	52.0	57.2	3.8	5.1	2.0	2.7	4.0

Product Dimensions



General Specifications

Operating Temperature .....-55 °C to +155 °C
(Temperature rise included)
Storage Temperature (Component) .....-55 °C to +155 °C
Rated Current ..... Inductance drops 10, 20 or 30 % at Isat
Temperature Rise .....20 or 40 °C at rated Irms[1]
MSL 1
ESD Classification (HBM)..... N/A

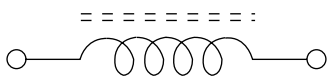
Note 1: Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

How to Order

SRP4020FA - 1R0M

Model
Value Code (see table)

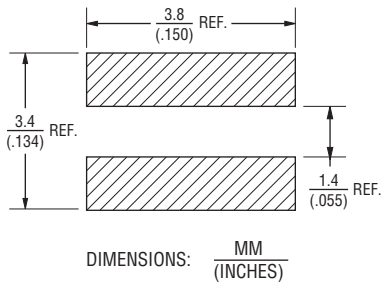
Schematic



Materials

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

Recommended Layout



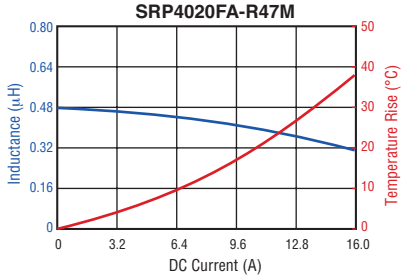
Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com
EMEA: Tel: +36 88 520 390 • Email: eurocus@bourns.com
The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com
www.bourns.com

WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

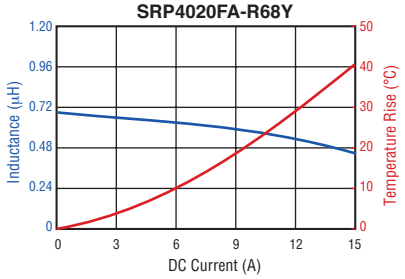
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
**Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
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Users should verify actual device performance in their specific applications.
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L vs. I Charts

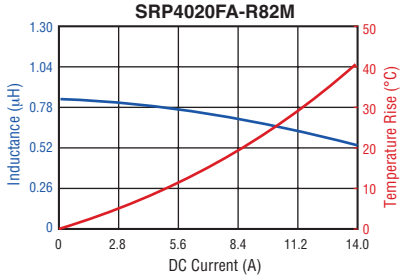
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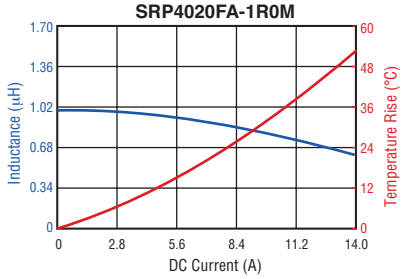
SRP4020FA-R68Y



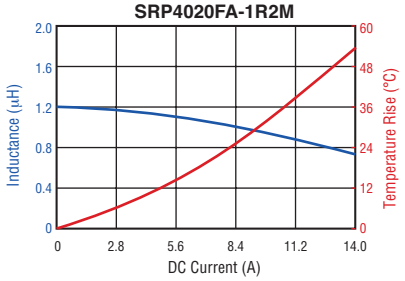
SRP4020FA-R82M



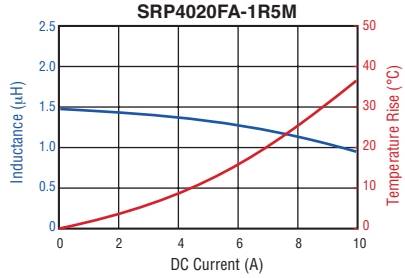
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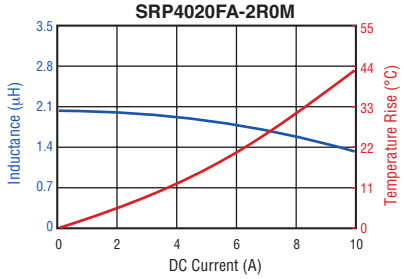
SRP4020FA-1R2M



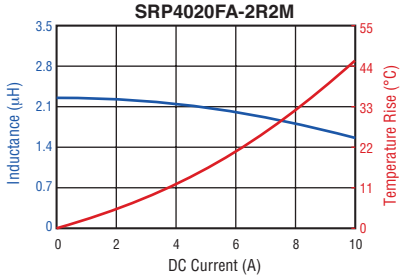
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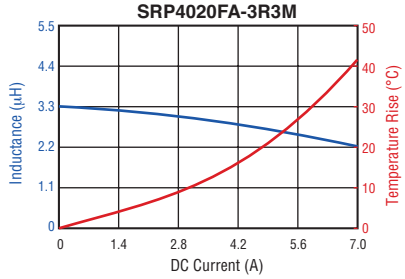
SRP4020FA-2R0M



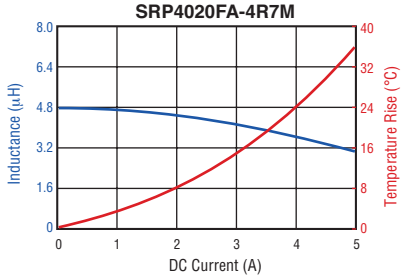
SRP4020FA-2R2M



SRP4020FA-3R3M

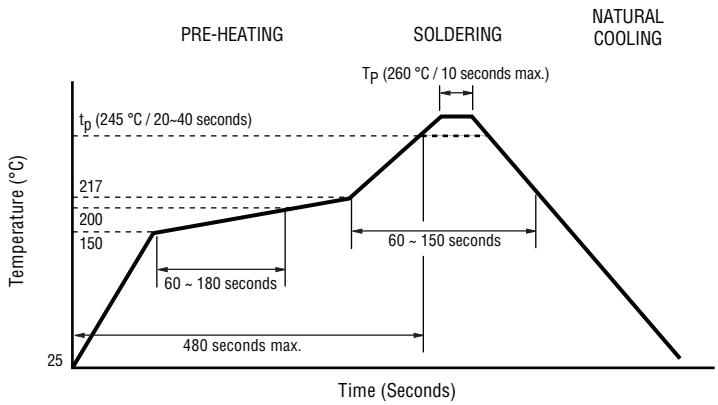


SRP4020FA-4R7M



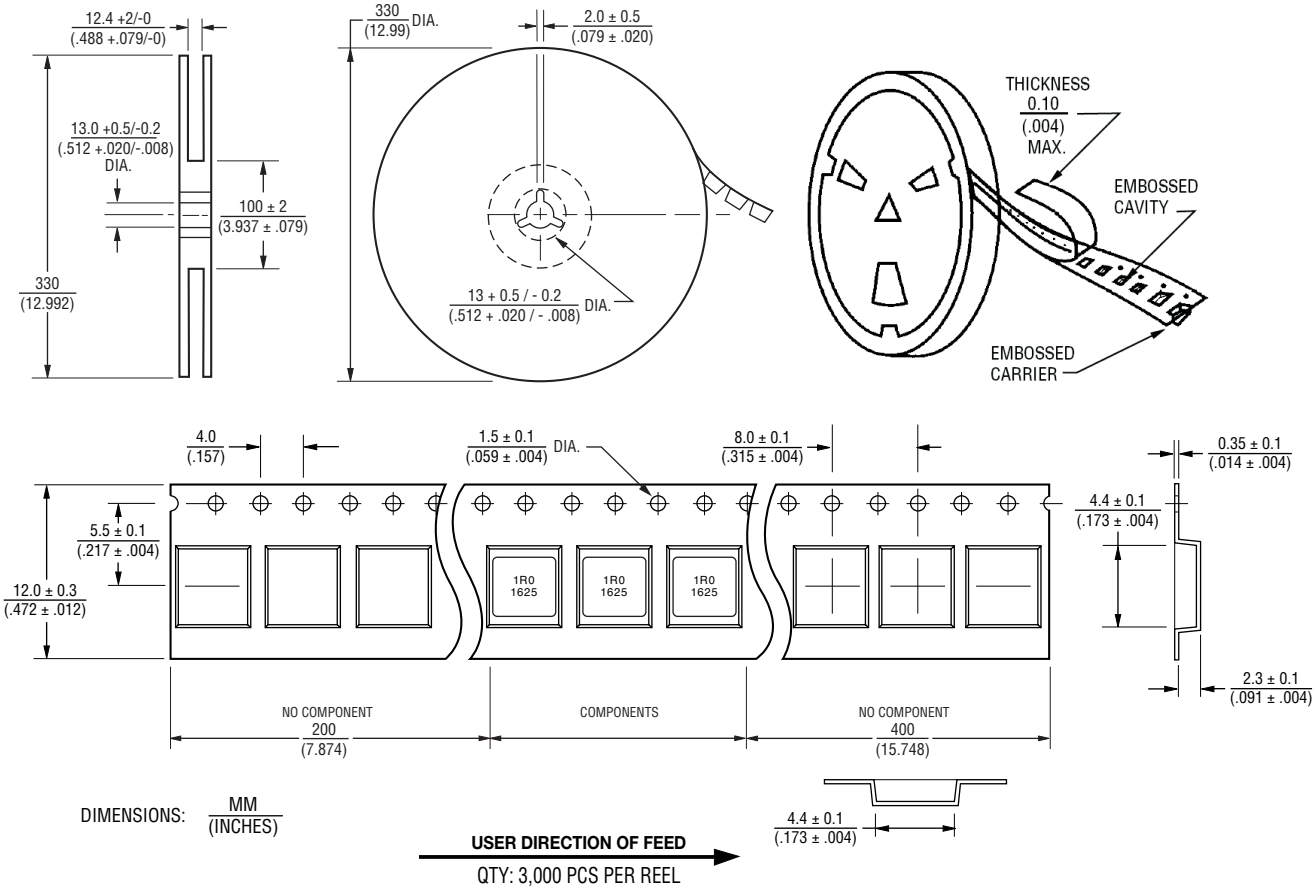
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Soldering Profile



REFLOW TIMES: 3 MAX.

Packaging Specifications



REV. 01/19

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