

Features

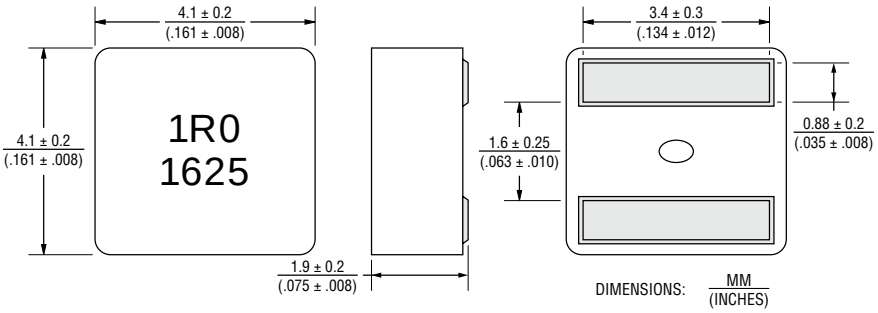
- Shielded construction
- Metal alloy powder core
- High saturation current
- Flat wire
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP4020FA Series – Shielded Power Inductors

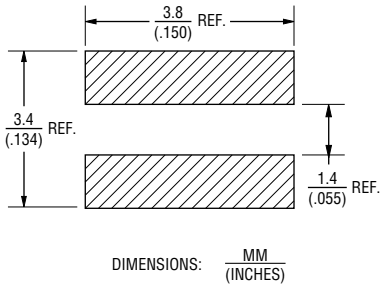
Electrical Specifications @ 25 °C

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

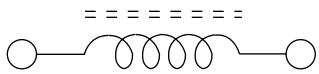
Product Dimensions



Recommended Layout



Schematic



How to Order

SRP4020FA - 1R0M

Model

Value Code (see table)

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

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.

Materials

Core ..... Metal alloy powder

Wire ..... Enameled copper

Terminal Finish ..... Sn

Packaging ..... 3000 pcs. per 13-inch reel

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

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

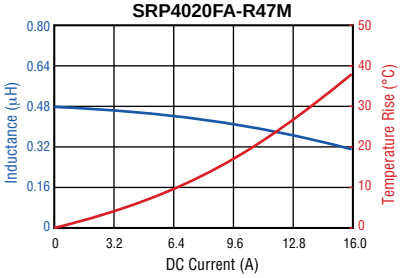
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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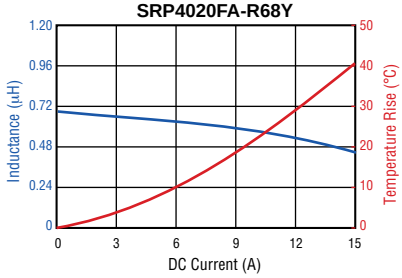
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L vs. I Charts

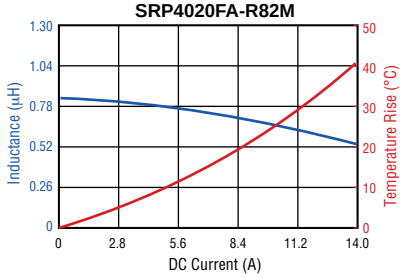
SRP4020FA-R47M



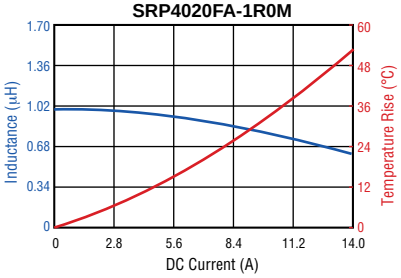
SRP4020FA-R68Y



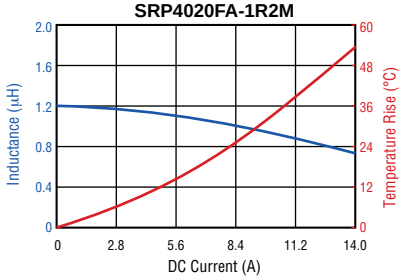
SRP4020FA-R82M



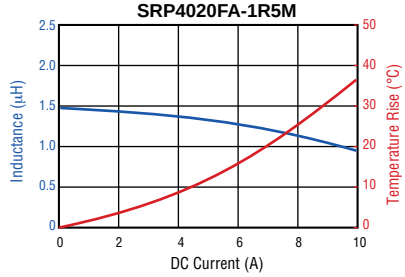
SRP4020FA-1R0M



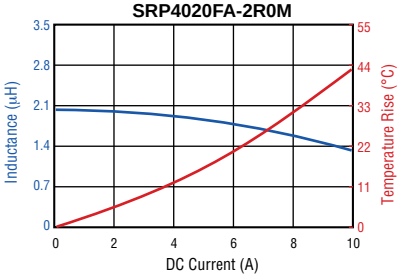
SRP4020FA-1R2M



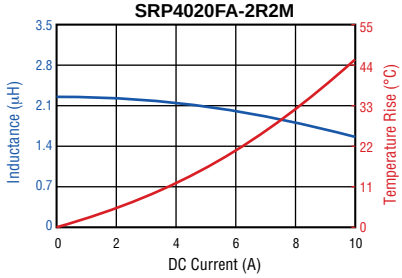
SRP4020FA-1R5M



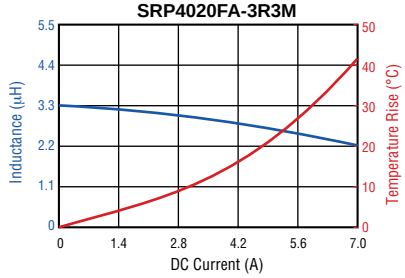
SRP4020FA-2R0M



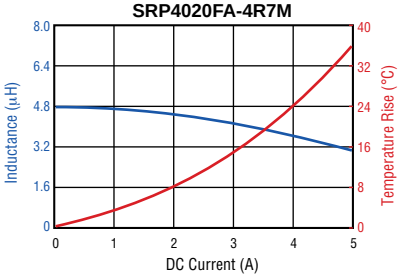
SRP4020FA-2R2M



SRP4020FA-3R3M



SRP4020FA-4R7M



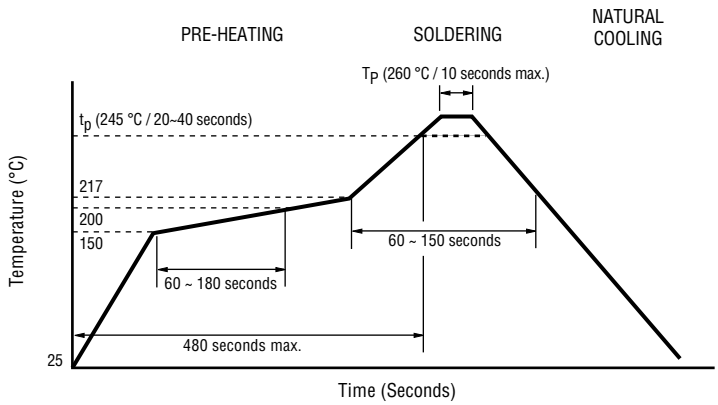
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Americas: Tel: +1 951-781-5500 • Email: americus@bourns.com
Mexico: Tel: +52-614-478-0400 • Email: mexicus@bourns.com
Asia: Tel: +886-2-2562-4117 • Email: asiacus@bourns.com
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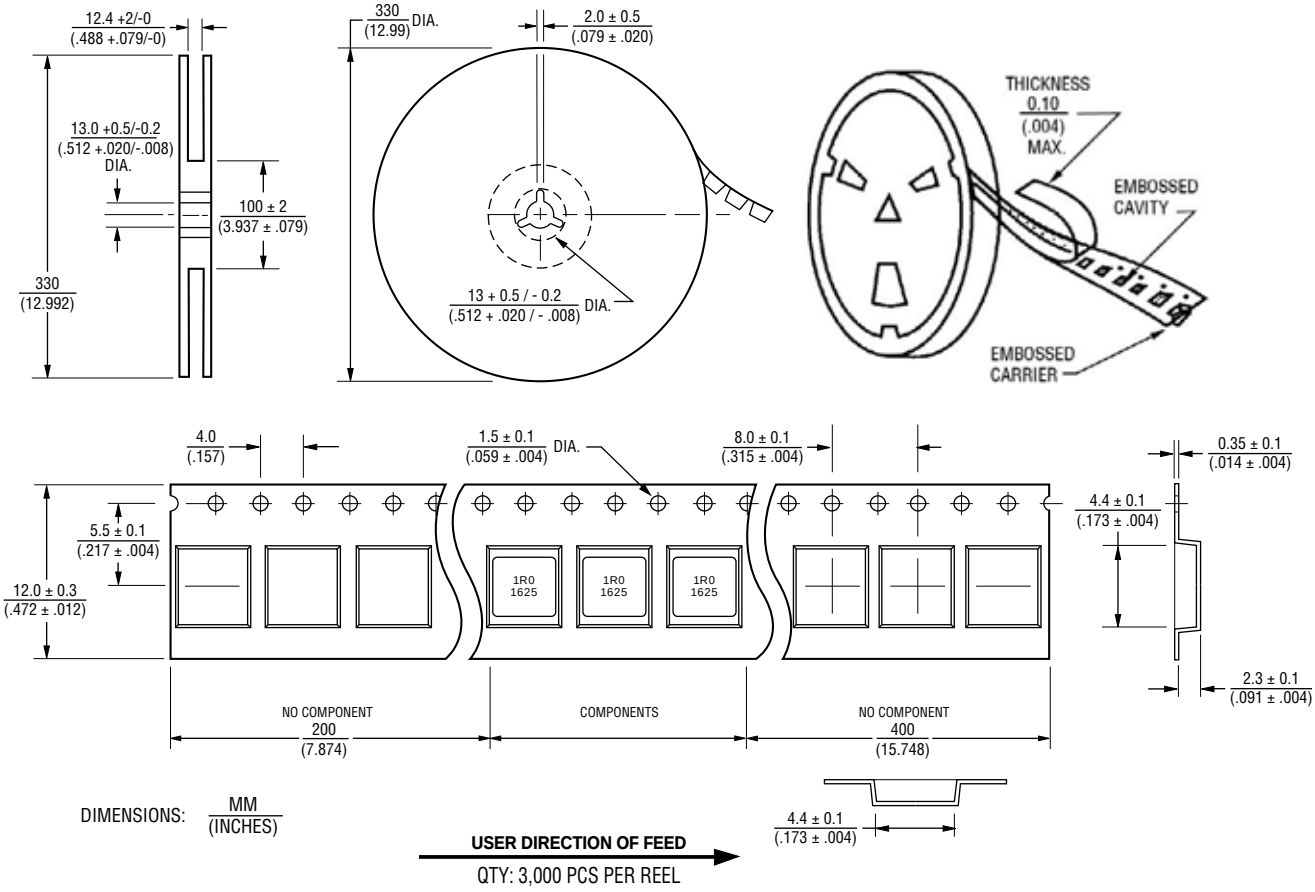
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Soldering Profile



REFLOW TIMES: 3 MAX.

Packaging Specifications



REV. 06/24

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