

#### **Features**

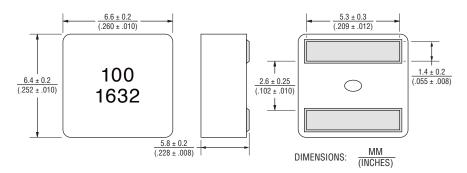
- Shielded construction
- Metal alloy powder core
- High saturation current
- Flat wire
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## SRP6060FA Series – Shielded Power Inductors

#### Electrical Specifications @ 25 °C

	Inductance @ 100 kHz / 1 V		SRF DCR	DCR	l rms (A) Typ.		I sat	
Bourns Part Number	L (μH)	Tol. %	(MHz) Typ.	(mΩ) Typ.	(mΩ) Max.	20 °C Temp. Rise	40 °C Temp. Rise	(A) Typ.
SRP6060FA-4R7M	4.70	± 20 %	24	13.1	14.4	8.0	11.0	10.5
SRP6060FA-5R6M	5.60	± 20 %	18	14.3	15.8	7.5	10.0	10.0
SRP6060FA-6R8M	6.80	± 20 %	16	18.9	20.8	7.0	9.0	9.2
SRP6060FA-8R2M	8.20	± 20 %	14	22.5	24.8	6.0	8.0	8.5
SRP6060FA-100M	10.0	± 20 %	12	26.6	29.3	5.0	7.0	7.6
SRP6060FA-150M	15.0	± 20 %	11	39.0	43.0	4.5	6.0	5.8
SRP6060FA-220M	22.0	± 20 %	10	55.0	60.5	3.8	5.0	5.6

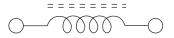
#### **Product Dimensions**



#### **How to Order**

# SRP6060FA - 100M Model — Value Code (see table)

#### **Schematic**



#### **General Specifications**

Operating Temperature

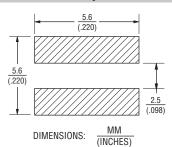
.....-55 °C to +155 °C (Temperature rise included)
Storage Temperature (Component)
....-55 °C to +155 °C
Rated Current ........Inductance drops

30 % at Isat Temperature Rise ......20 or 40 °C at rated Irms¹

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

#### **Recommended Layout**



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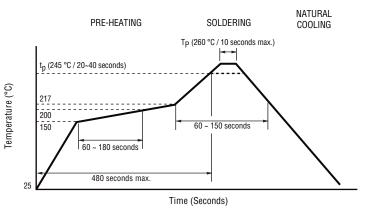
#### WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

- \* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
- \*\* Bourns follows the prevailing definition of "halogen free" in the industry. 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.

#### **Soldering Profile**



REFLOW TIMES: 3 MAX.

NOTE: 0.15 mm thick solder paste recommended.

emperature Rise (°C)

10

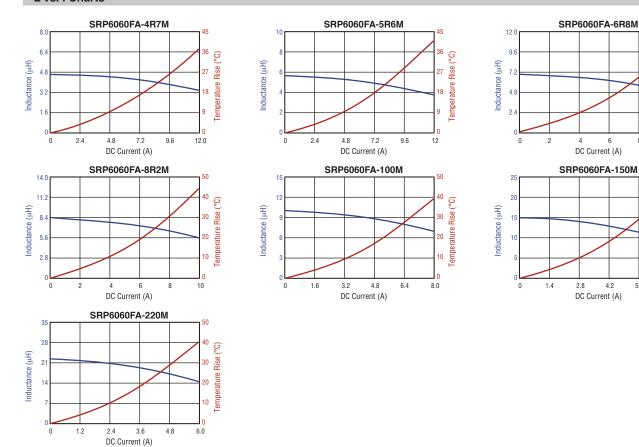
50

7.0

5.6

remperature Rise (°C)

#### L vs. I Charts

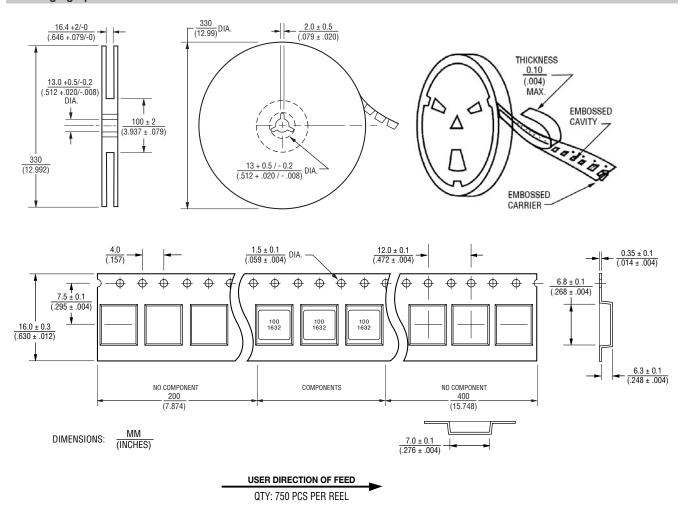


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#### **Packaging Specifications**



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