



## Features

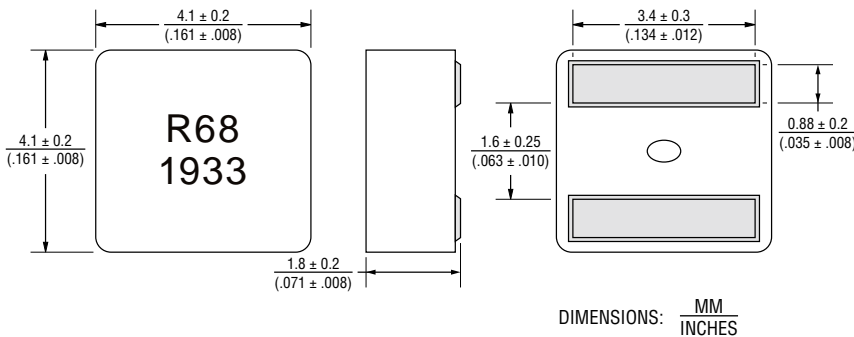
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## SRP4018FA Series – Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 0.1 V		Q Min. @ 100 kHz	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
SRP4018FA-R33M	0.33	± 20 %	15	92	4.7	5.2	11	15	8.0	11.5	15
SRP4018FA-R47M	0.47	± 20 %	15	90	6.0	6.8	9.8	13.2	7.0	10.0	14
SRP4018FA-R60M	0.60	± 20 %	15	85	6.9	7.8	9.4	12.4	5.8	8.8	12.8
SRP4018FA-R68M	0.68	± 20 %	15	73	7.3	8.2	9.2	12	5.2	8.0	11.6
SRP4018FA-R82M	0.82	± 20 %	15	62	8.6	9.5	8.5	11.5	4.8	6.5	10.2
SRP4018FA-1R0M	1.00	± 20 %	15	56	10.6	11.7	8.0	11	4.5	5.4	9.2
SRP4018FA-1R2M	1.20	± 20 %	15	53	12.2	13.4	7.2	9.5	4.3	5.0	8.6

### Product Dimensions



### General Specifications

Operating Temperature ..... -55 °C to +155 °C  
(Temperature rise included)

Storage Temperature (Component) ..... -55 °C to +155 °C

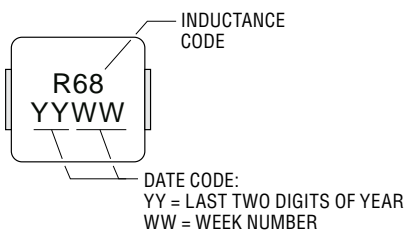
Rated Current  
Inductance drops 10, 20 or 30 % at Isat  
Temperature Rise ..... 20 or 40 °C at rated Irms<sup>1</sup>

MSL ..... 1

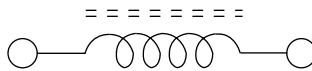
ESD Classification (HBM) ..... N/A

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.

### Typical Part Marking



### Schematic



### How to Order

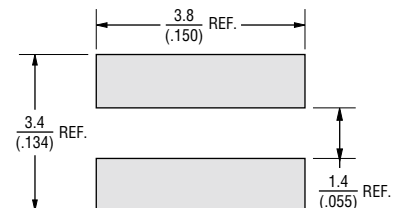
Model SRP4018FA - 1R0M

Value Code (see table) \_\_\_\_\_

### Materials

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

### Recommended Layout



**WARNING**  
Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://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.

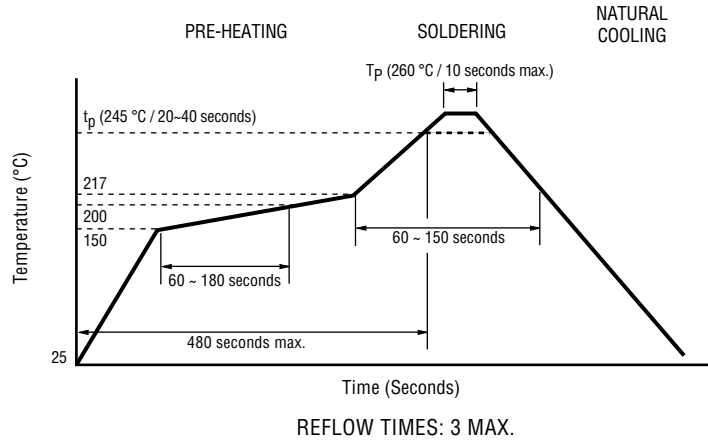
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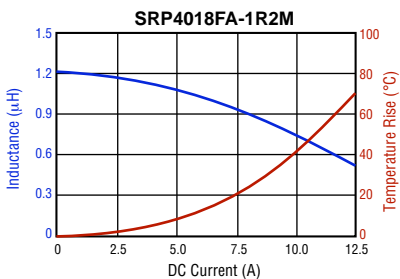
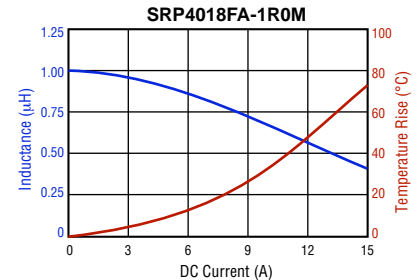
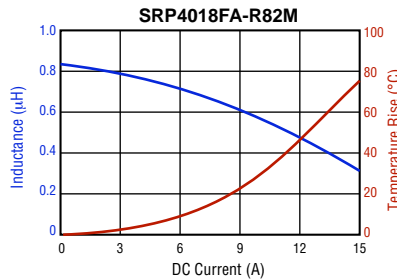
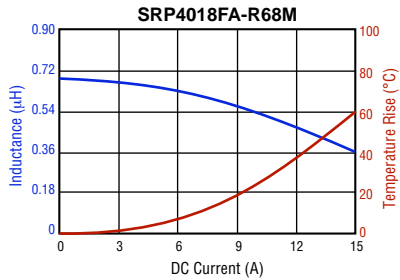
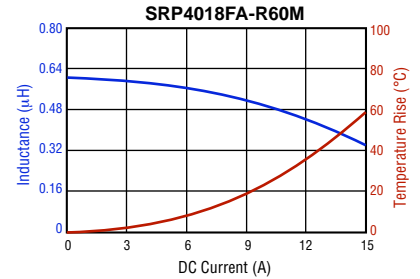
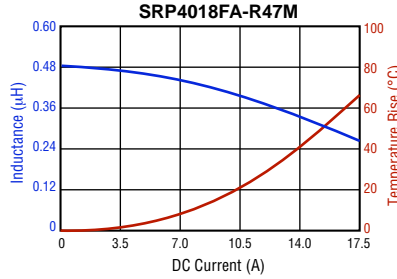
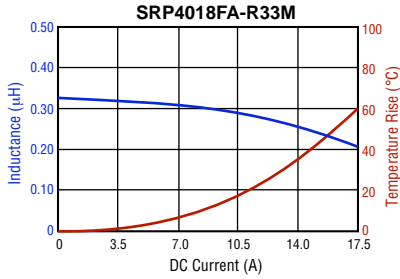
# SRP4018FA Series – Shielded Power Inductors



## Soldering Profile



## L vs. I Charts



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Users should verify actual device performance in their specific applications.

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