

#### **Features**

- Shielded construction for low radiation
- Low profile: 1.4 mm
- RoHS compliant\* and halogen free\*\*

### **Applications**

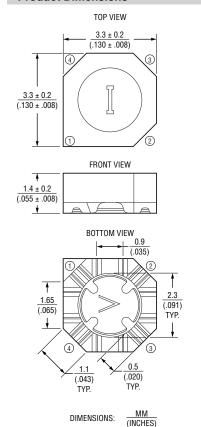
- SEPIC topology
- Power supplies

# SRF3015 Series - Dual-Winding Shielded Power Inductors

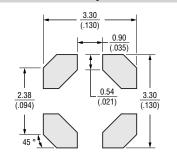
#### Electrical Specifications @ 25 °C

Bourns Part Number	L1, L2 @ 100 kHz / 0.1 V (µH)		DCR1, DCR2 (Ω)		SRF (MHz)	LK (μH)	Irms (A)	Isat (A)	Marking
	L (μH)	Tol. (%)	Тур.	Max.	Тур.	Тур.	Тур.	Тур.	
SRF3015-1R0Y	1.00		0.09	0.12	160	0.09	1.10	1.65	Α
SRF3015-1R5Y	1.50		0.13	0.17	140	0.11	0.95	1.35	В
SRF3015-2R2Y	2.20		0.21	0.27	110	0.14	0.75	1.10	С
SRF3015-3R3Y	3.30		0.29	0.37	90	0.16	0.64	0.92	D
SRF3015-4R7Y	4.70	30	0.39	0.51	79	0.18	0.55	0.77	Е
SRF3015-6R8Y	6.80		0.55	0.72	58	0.22	0.45	0.64	F
SRF3015-100Y	10.0		0.95	1.25	48	0.28	0.35	0.53	G
SRF3015-150Y	15.0		1.45	1.90	35	0.37	0.28	0.43	Н
SRF3015-220Y	22.0		1.70	2.00	30	0.55	0.26	0.37	I

#### **Product Dimensions**

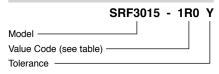


#### **Recommended Layout**



DIMENSIONS: (INCHES)

#### **How to Order**



#### **Additional Information**

Click these links for more information:











INVENTORY SAMPLES

#### **General Specifications**

Operating Temperature

.....-40 °C to +125 °C (Temperature rise included) Storage Temperature... -40 °C to +125 °C Temperature Rise

......40 °C typ. at rated I<sub>rms</sub> Rated Current

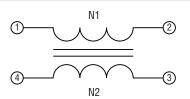
.....Inductance drops 30 % at Isat Hi-pot

(N1-N2) ... 100 VAC/60Hz, 3 mA, 1 min. Moisture Sensitivity Level......1 ESD Classification (HBM) .....N/A

#### **Materials**

Core Material ..... Ferrite Wire ......Enameled copper Terminal Finish ...... Sn Packaging...... 1,200 pcs. per 7-inch reel

#### **Schematic**



# **BOURNS**®

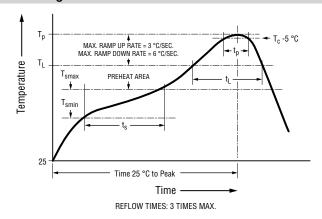
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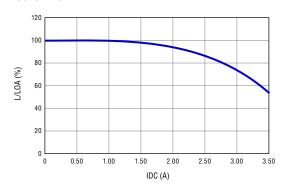
#### **Soldering Profile**

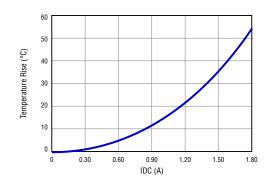


Profile Feature	Pb Free Assembly			
Preheat - Temperature Min. (T <sub>smin</sub> ) - Temperature Max. (T <sub>smax</sub> ) - Time(t <sub>s</sub> ) from T <sub>smin</sub> to T <sub>smax</sub>	150 °C 200 °C 60-120 seconds			
Ramp-up Rate (T <sub>L</sub> to T <sub>p</sub> )	3 °C/second max.			
Liquidous temperature ( $T_L$ ) Time ( $t_L$ ) maintained above $T_L$	217 °C 60-150 seconds			
Peak package body temperature (Tp)	250 °C			
Time (t <sub>p</sub> ) at T <sub>c</sub> - 5 °C (T <sub>p</sub> should be equal to or less than T <sub>c</sub> )	< 30 seconds			
Ramp-Down Rate (T <sub>p</sub> to T <sub>L</sub> )	6 °C/second max.			
Time 25 °C to Peak Temperature	8 minutes max.			

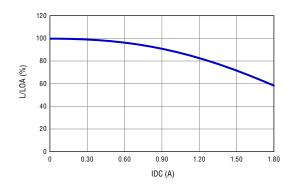
#### L vs I Charts

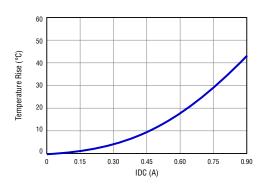
#### SRF3015-1R0Y





#### SRF3015-4R7Y





Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

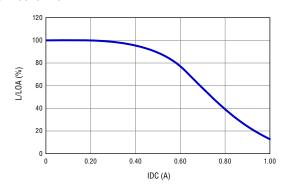
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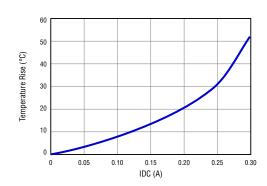
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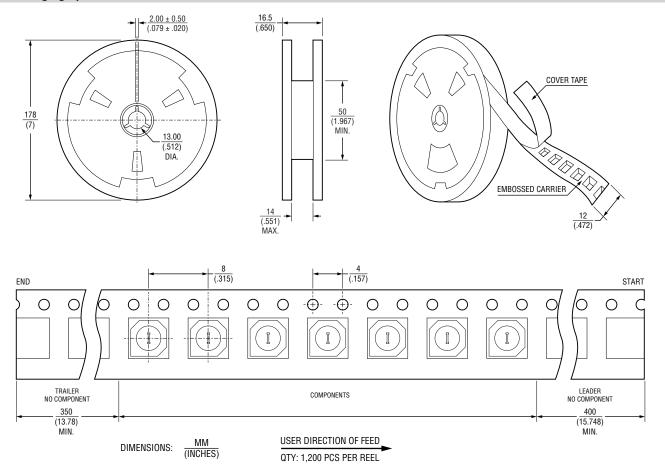
#### L vs I Charts (continued)

#### SRF3015-220Y





#### **Packaging Specifications**



#### REV. 09/24

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