



**THE DATASHEET OF  
SRR5018-270Y**





## Features

- Height of 2.0 mm max.
- Current rating up to 3 A
- RoHS compliant\*

## Applications

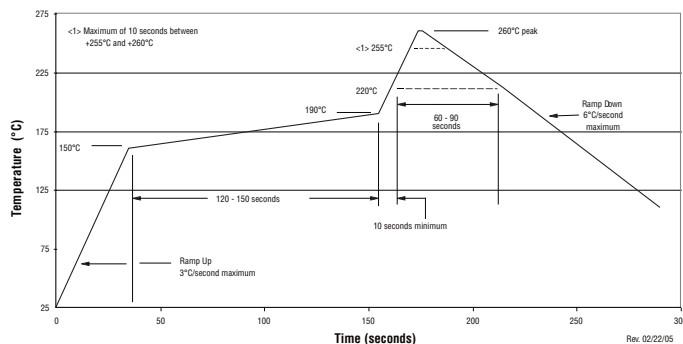
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

# SRR5018 Series - Shielded Power Inductors

## Electrical Specifications

Bourns Part No.	Inductance 100 KHz		Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	DCR Max. (mΩ)	I rms (A)	I sat (A)
	uH	Tol. (%)						
SRR5018-1R2Y	1.2	±30	9.2	7.96	118	30	3.00	3.50
SRR5018-1R8Y	1.8	±30	8.9	7.96	93	35	2.60	3.00
SRR5018-2R5Y	2.5	±30	8.6	7.96	74	40	2.40	2.70
SRR5018-3R0Y	3.0	±30	8.3	7.96	79	45	2.20	2.40
SRR5018-3R9Y	3.9	±30	8	7.96	64	55	2.00	2.10
SRR5018-4R1Y	4.1	±30	8	7.96	60	55	2.00	2.10
SRR5018-5R0Y	5.0	±30	7.9	7.96	55	60	1.65	1.80
SRR5018-5R4Y	5.4	±30	7.4	7.96	58	76	1.65	1.65
SRR5018-6R2Y	6.2	±30	7.5	7.96	51	80	1.45	1.60
SRR5018-7R5Y	7.5	±30	7.9	7.96	42	90	1.35	1.50
SRR5018-8R9Y	8.9	±30	7.3	7.96	40	116	1.25	1.25
SRR5018-9R0Y	9.0	±30	7.2	7.96	37	110	1.25	1.35
SRR5018-100Y	10	±30	11	2.52	41	130	1.10	1.25
SRR5018-120Y	12	±30	8.6	2.52	39	160	1.00	1.15
SRR5018-150Y	15	±30	12.7	2.52	32	190	0.95	1.10
SRR5018-180Y	18	±30	8.8	2.52	29	210	0.90	1.00
SRR5018-220Y	22	±30	14.7	2.52	22	280	0.80	0.90
SRR5018-270Y	27	±30	10.2	2.52	21	320	0.75	0.80
SRR5018-330Y	33	±30	10.9	2.52	20	350	0.65	0.70
SRR5018-390Y	39	±30	10.6	2.52	17	500	0.55	0.65
SRR5018-470Y	47	±30	8.9	2.52	14	550	0.52	0.60
SRR5018-560Y	56	±30	8.9	2.52	13	600	0.48	0.55
SRR5018-680Y	68	±30	9.9	2.52	12	850	0.40	0.50
SRR5018-820Y	82	±30	9.1	2.52	11	950	0.38	0.45
SRR5018-101Y	100	±30	13.1	0.796	10	1100	0.35	0.42
SRR5018-121Y	120	±30	12.9	0.796	11	1420	0.30	0.40
SRR5018-151Y	150	±30	11.8	0.796	11	1650	0.28	0.35
SRR5018-181Y	180	±30	13.6	0.796	10	2300	0.25	0.32
SRR5018-221Y	220	±30	8.7	0.796	8	2500	0.23	0.30

## Soldering Profile



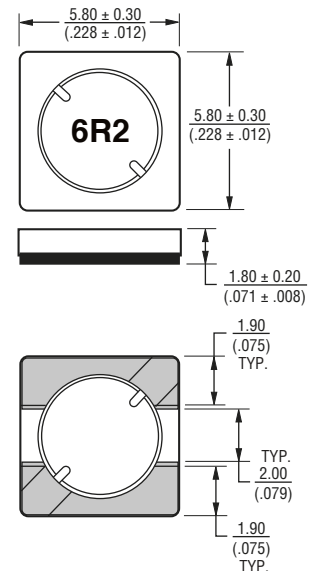
## General Specifications

Test Voltage ..... 0.1 V, 100 KHz  
 Reflow Soldering .. 230 °C, 50 sec. max.  
 Operating Temperature  
 ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .. -40 °C to +125 °C  
 Resistance to Soldering Heat  
 ..... 260 °C, 10 sec.  
 Moisture Sensitivity Level..... 1  
 ESD Classification (HBM)..... N/A

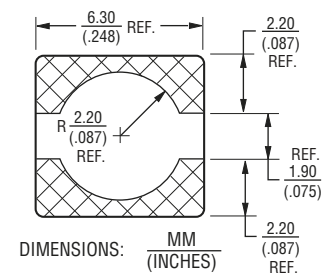
## Materials

Core ..... Ferrite  
 Wire ..... Enameled copper  
 Adhesive ..... Epoxy resin  
 Terminal ..... Ag/Ni/Sn  
 Rated Current  
 ..... Ind. drop of 35 % typ. at Isat  
 Temp. Rise ..... 40 °C typ. at rated Irms  
 Packaging ..... 500 pcs. per reel

## Product Dimensions



## Recommended Layout



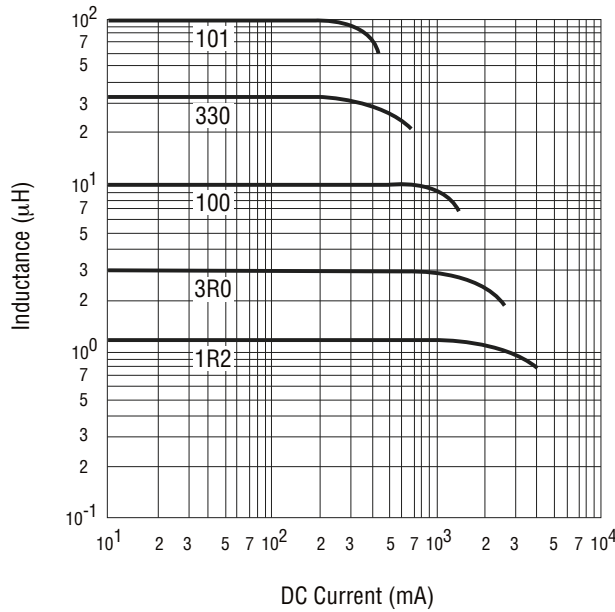
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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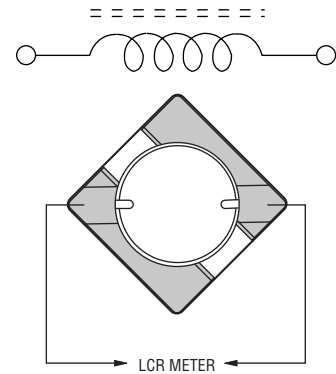
# SRR5018 Series - Shielded Power Inductors

**BOURNS®**

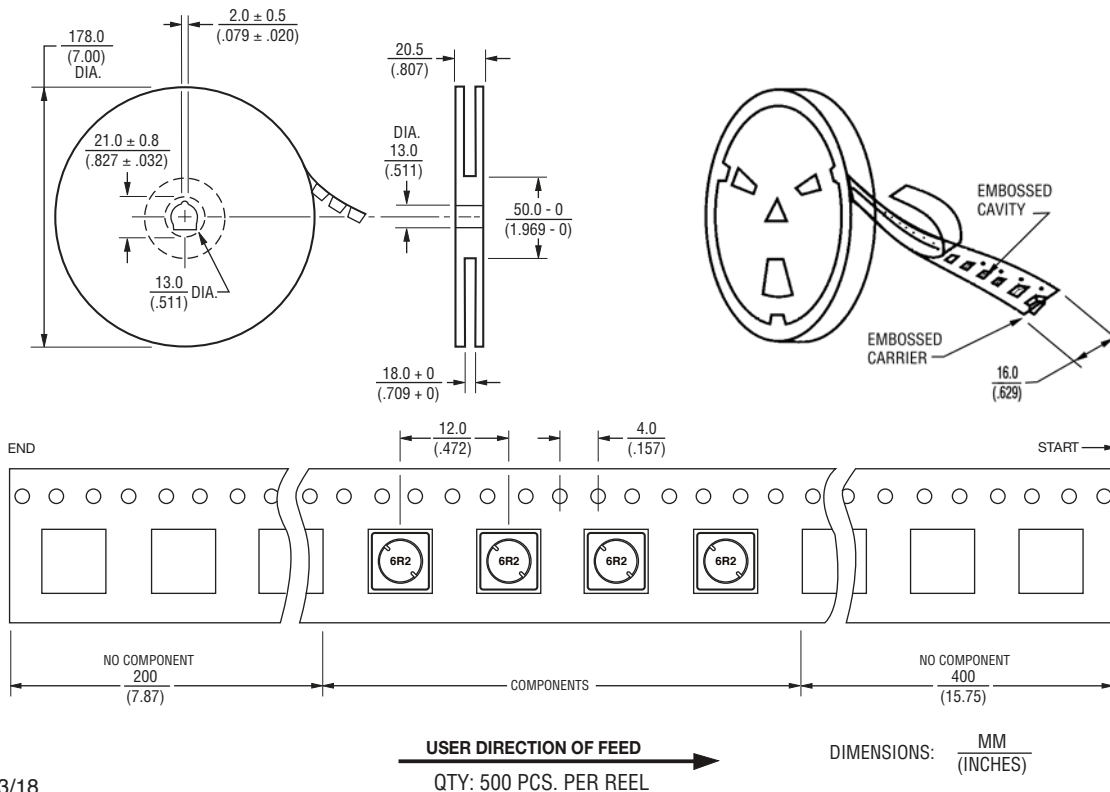
## Inductance vs. Current



## Electrical Schematic



## Packaging Specifications



REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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