



**THE DATASHEET OF  
SRR6028-120Y**





## Features

- Height of 3.0 mm max.
- Current rating up to 3.4 A
- RoHS compliant\*

## Applications

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

# SRR6028 Series - Shielded SMD Power Inductors

## Electrical Characteristics

Bourns Part Number	Inductance 100 kHz		Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	DCR Max. (mΩ)	I rms (A)	I sat (A)
	(μH)	Tol. %						
SRR6028-1R5Y	1.5	±30	8	7.96	55	14	3.40	3.50
SRR6028-2R5Y	2.5	±30	8.5	7.96	50	25	2.80	3.00
SRR6028-3R0Y	3.0	±30	9	7.96	45	28	3.00	2.60
SRR6028-3R3Y	3.3	±30	10	7.96	45	28	2.50	2.60
SRR6028-3R9Y	3.9	±30	9	7.96	40	32	2.45	2.30
SRR6028-5R0Y	5.0	±30	7.5	7.96	38	36	2.40	2.10
SRR6028-6R0Y	6.0	±30	9	7.96	35	40	2.30	2.00
SRR6028-7R3Y	7.3	±30	6	7.96	30	52	2.20	1.85
SRR6028-8R6Y	8.6	±30	8	2.52	28	56	2.10	1.82
SRR6028-100Y	10	±30	11	2.52	25	65	2.00	1.70
SRR6028-120Y	12	±30	10	2.52	24	70	1.90	1.50
SRR6028-150Y	15	±30	9.5	2.52	22	78	1.70	1.30
SRR6028-180Y	18	±30	9	2.52	21	85	1.50	1.10
SRR6028-220Y	22	±30	8.5	2.52	20	115	1.40	1.08
SRR6028-270Y	27	±30	9	2.52	19	130	1.20	1.00
SRR6028-330Y	33	±30	10	2.52	18	155	1.15	0.92
SRR6028-390Y	39	±30	10	2.52	17	195	1.00	0.75
SRR6028-470Y	47	±30	10	2.52	16	235	0.92	0.72
SRR6028-560Y	56	±30	10	0.796	15	260	0.85	0.65
SRR6028-680Y	68	±30	11	0.796	15	300	0.80	0.60
SRR6028-820Y	82	±30	9	0.796	14	400	0.70	0.56
SRR6028-101Y	100	±30	8.5	0.796	14	500	0.58	0.55
SRR6028-151Y	150	±30	12	0.796	13	680	0.50	0.42
SRR6028-221Y	220	±30	15	0.796	12	820	0.45	0.36
SRR6028-331Y	330	±30	11	0.796	10	1400	0.37	0.27
SRR6028-471Y	470	±30	11	0.796	9	2100	0.27	0.22
SRR6028-681Y	680	±30	13	0.796	8	3100	0.22	0.20
SRR6028-102Y	1000	±30	32	0.252	7	4500	0.15	0.17

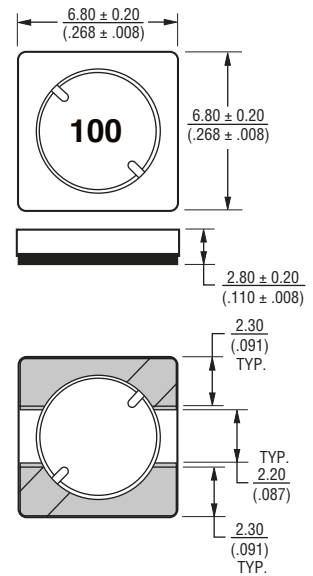
## General Specifications

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

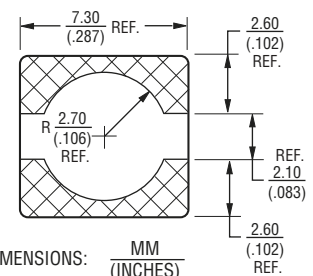
## Materials

Core ..... Ferrite  
 Wire ..... Enameled copper  
 Adhesive..... Epoxy resin  
 Terminal..... Ag/Ni/Sn  
 Rated Current  
 ..... Ind. drop 35 % typ. at Isat  
 Temperature Rise..... 30 °C typ.  
 at rated Irms  
 Packaging..... 500 pcs. per reel

## Product Dimensions

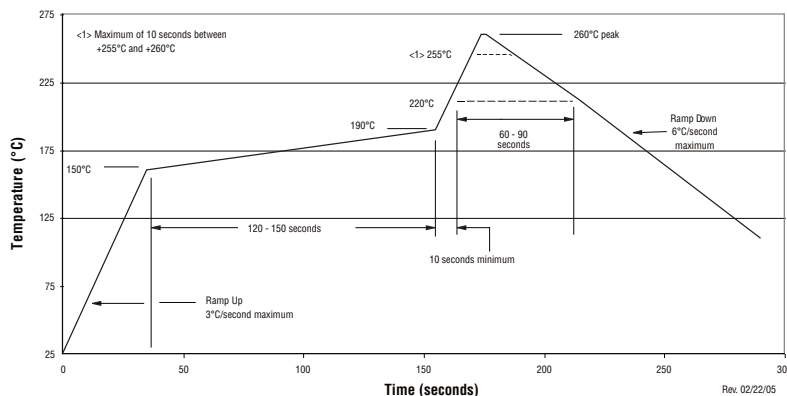


## Recommended Layout



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

## Soldering Profile



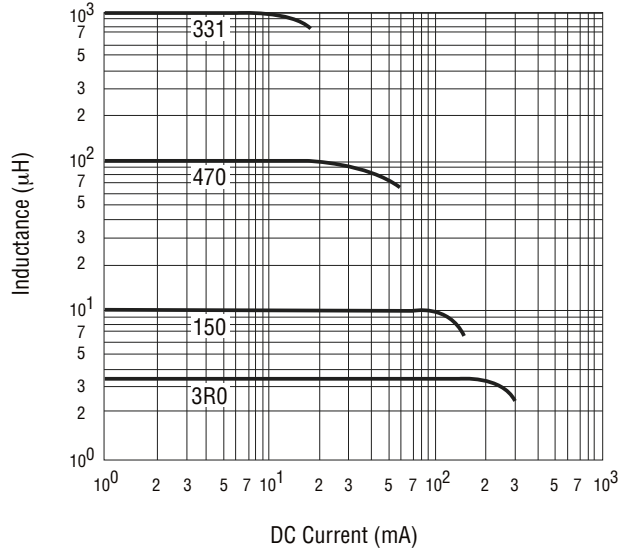
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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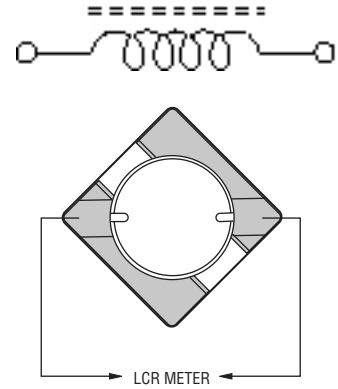
# SRR6028 Series - Shielded SMD Power Inductors

**BOURNS®**

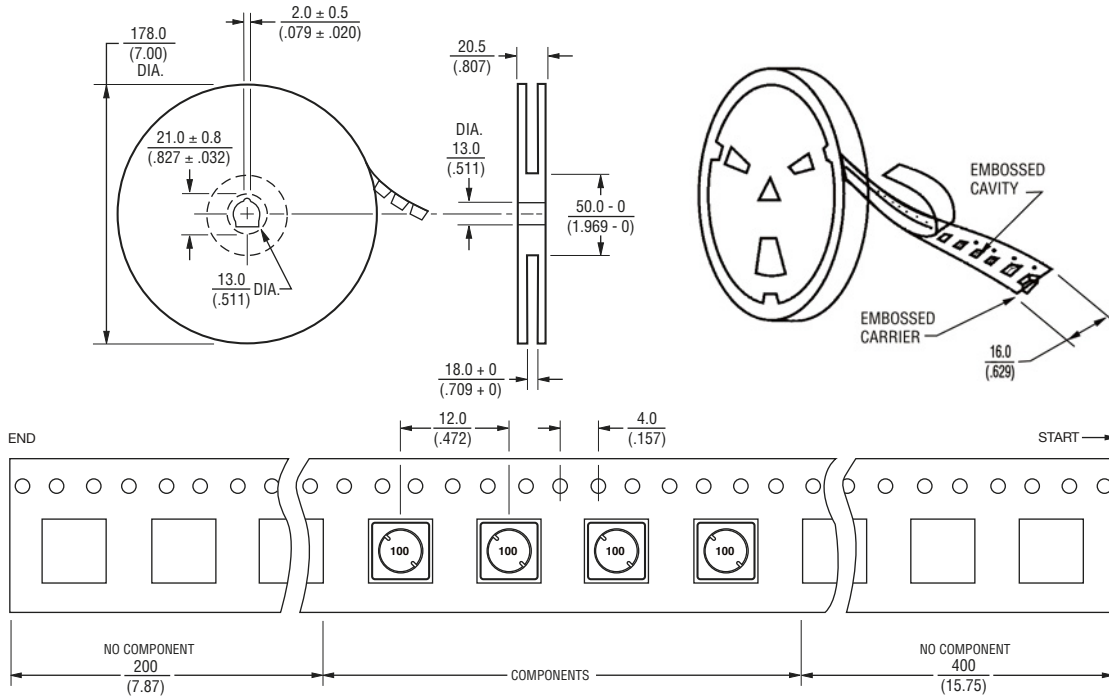
## Inductance vs. Current



## Electrical Schematic



## Packaging Specifications



USER DIRECTION OF FEED → DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$   
 QTY: 500 PCS. PER REEL

REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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