

**BOURNS®**

## Features

- Available in E6 series
- Low profile of only 5.0mm
- Inductance as low as 1µH

## Applications

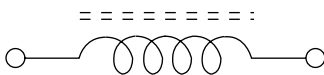
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communications equipment
  - Camcorders
  - LCD TVs
  - Car radios

# SDR1005 Series - SMD Power Inductors

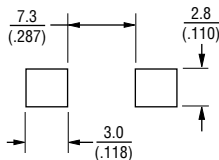
### Electrical Specifications

Bourns Part No.	Inductance 1kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC (Ω)	I rms Max. (A)	I sat Typ. (A)
	(µH)	Tol. %						
SDR1005-1R0M	1	± 20	20	10	137	0.007	7.50	9.00
SDR1005-1R5M	1.5	± 20	50	3	95	0.009	6.50	8.00
SDR1005-2R5M	2.5	± 20	50	3	56	0.012	5.50	7.00
SDR1005-3R3M	3.3	± 20	50	4	54	0.015	5.00	6.40
SDR1005-4R7M	4.7	± 20	50	4	42	0.019	4.50	5.40
SDR1005-6R8M	6.8	± 20	50	3	31	0.030	3.40	4.50
SDR1005-100M	10	± 20	50	3	26	0.050	2.90	3.70
SDR1005-150M	15	± 20	50	3	22	0.060	2.50	3.00
SDR1005-220M	22	± 20	40	3	18	0.10	2.00	2.50
SDR1005-330K	33	± 10	25	1	14	0.12	1.80	2.00
SDR1005-470K	47	± 10	25	1	12	0.19	1.40	1.60
SDR1005-680K	68	± 10	25	1	11	0.24	1.20	1.40
SDR1005-101K	100	± 10	30	0.05	8	0.33	1.00	1.20
SDR1005-151K	150	± 10	30	0.05	6	0.59	0.80	1.00
SDR1005-221K	220	± 10	33	0.05	5	0.78	0.70	0.80
SDR1005-331K	330	± 10	33	0.05	4	1.15	0.55	0.60
SDR1005-471K	470	± 10	57	0.05	4	1.70	0.45	0.50
SDR1005-681K	680	± 10	57	0.05	3	2.60	0.35	0.40
SDR1005-102K	1000	± 10	81	0.07	2	3.90	0.30	0.35
SDR1005-152K	1500	± 10	91	0.07	2	6.30	0.25	0.30
SDR1005-222K	2200	± 10	91	0.07	2	8.20	0.20	0.24
SDR1005-332K	3300	± 10	93	0.07	1	14.00	0.16	0.18
SDR1005-472K	4700	± 10	93	0.07	1	17.00	0.15	0.16
SDR1005-682K	6800	± 10	93	0.07	1	30.00	0.11	0.12
SDR1005-822K	8200	± 10	100	0.07	1	34.00	0.11	0.12
SDR1005-103K	10000	± 10	101	0.07	1	39.00	0.10	0.11

### Electrical Schematic



### Recommended Layout



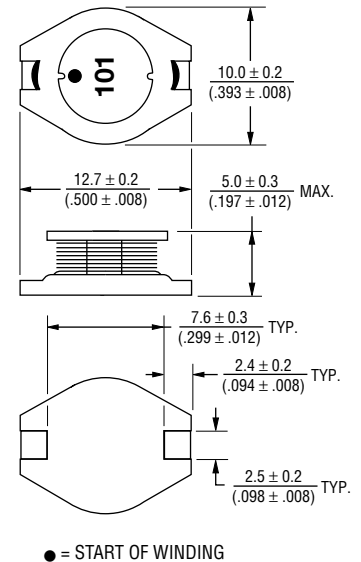
### General Specifications

Test Voltage .....0.1V  
 Reflow soldering .....230°C; 10 sec max.  
 Operating Temperature ...-40°C to +105°C  
 Storage Temperature ....-40°C to +125°C  
 Resistance to Soldering Heat  
 .....260°C for 5 sec.

### Materials

Core .....Ferrite DR  
 Wire .....Enamelled copper  
 Base .....LCP E4008  
 Terminal Electrode .....Nickel Bronze  
 Rated Current  
 .....Ind. drop 10% typ. at Isat  
 Temperature Rise .....15°C max.  
 at rated I rms  
 Packaging .....600 pcs. per reel

### Product Dimensions

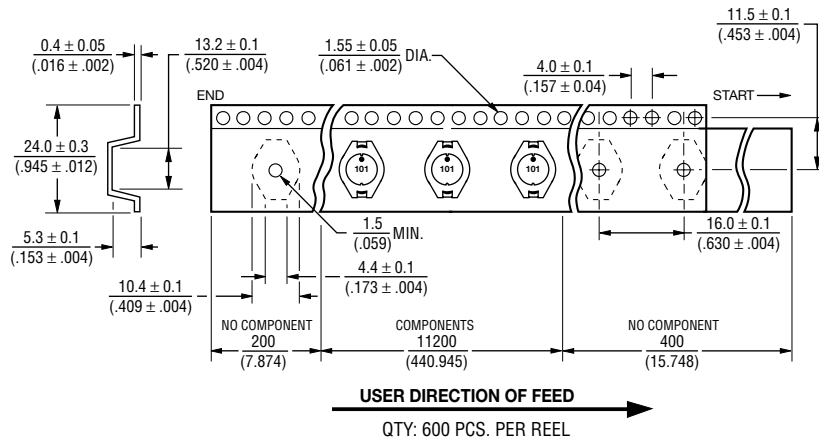
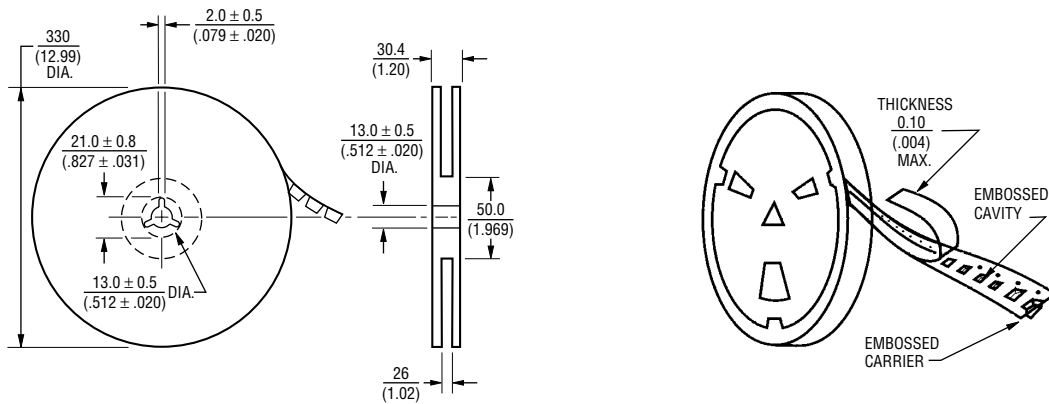


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

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## Packaging Specifications



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