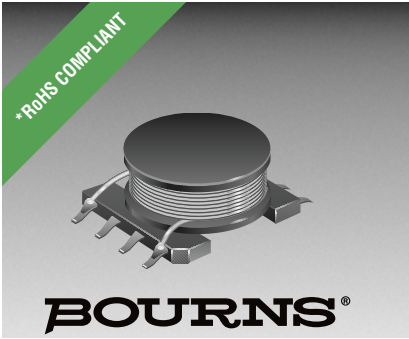




**THE DATASHEET OF  
SDR0906-120ML**





### Features

- High inductance up to 1.2 mH
- E12 series available
- Wide inductance range
- RoHS compliant\*

### Applications

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

## SDR0906 Series - SMD Power Inductors

### Electrical Specifications

Bourns Part Number	Inductance 1 kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SDR0906-2R2ML	2.2	± 20	30	7.96	105	0.03	4.00	6.70
SDR0906-2R7ML	2.7	± 20	30	7.96	84	0.04	3.50	6.50
SDR0906-3R9ML	3.9	± 20	28	7.96	77	0.04	3.30	5.50
SDR0906-4R7ML	4.7	± 20	27	7.96	55	0.05	3.00	4.80
SDR0906-5R6ML	5.6	± 20	28	7.96	42	0.06	2.80	4.50
SDR0906-6R8ML	6.8	± 20	27	7.96	36	0.06	2.60	4.50
SDR0906-8R2ML	8.2	± 20	27	7.96	29	0.07	2.40	4.00
SDR0906-100ML	10	± 20	35	2.52	25	0.09	2.10	3.20
SDR0906-120ML	12	± 20	35	2.52	23	0.10	2.00	3.10
SDR0906-150ML	15	± 20	35	2.52	22	0.11	1.90	2.90
SDR0906-180ML	18	± 20	35	2.52	19	0.12	1.80	2.40
SDR0906-220ML	22	± 20	35	2.52	16	0.13	1.60	2.40
SDR0906-270KL	27	± 10	35	2.52	15	0.15	1.40	2.20
SDR0906-330KL	33	± 10	35	2.52	14	0.18	1.25	2.00
SDR0906-390KL	39	± 10	25	2.52	13	0.19	1.15	1.60
SDR0906-470KL	47	± 10	25	2.52	12	0.23	1.10	1.50
SDR0906-560KL	56	± 10	25	2.52	12	0.26	1.05	1.40
SDR0906-680KL	68	± 10	20	2.52	10	0.31	1.00	1.40
SDR0906-820KL	82	± 10	20	2.52	9	0.33	0.95	1.30
SDR0906-101KL	100	± 10	15	0.796	8	0.39	0.90	1.10
SDR0906-121KL	120	± 10	15	0.796	8	0.43	0.85	1.10
SDR0906-151KL	150	± 10	15	0.796	7	0.56	0.75	0.90
SDR0906-181KL	180	± 10	15	0.796	6	0.64	0.70	0.82
SDR0906-221KL	220	± 10	20	0.796	6	0.85	0.60	0.80
SDR0906-271KL	270	± 10	20	0.796	5	1.00	0.55	0.76
SDR0906-331KL	330	± 10	15	0.796	5	1.27	0.50	0.65
SDR0906-391KL	390	± 10	15	0.796	5	1.40	0.45	0.64
SDR0906-471KL	470	± 10	15	0.796	5	1.63	0.40	0.57
SDR0906-561KL	560	± 10	15	0.796	4	2.10	0.32	0.53
SDR0906-681KL	680	± 10	15	0.796	4	2.40	0.28	0.46
SDR0906-821KL	820	± 10	15	0.796	3	2.75	0.24	0.36
SDR0906-102KL	1000	± 10	60	0.252	2	3.50	0.22	0.35
SDR0906-122KL	1200	± 10	60	0.252	2	4.00	0.20	0.28
SDR0906-152KL	1500	± 10	70	0.252	2	5.00	0.18	0.26
SDR0906-182KL	1800	± 10	60	0.252	2	5.80	0.17	0.24
SDR0906-222KL	2200	± 10	94	0.252	2	8.00	0.14	0.23
SDR0906-272KL	2700	± 10	90	0.252	1	9.00	0.13	0.23
SDR0906-332KL	3300	± 10	78	0.252	1	10.00	0.12	0.18
SDR0906-392KL	3900	± 10	96	0.252	1	13.50	0.10	0.18
SDR0906-472KL	4700	± 10	86	0.252	1	15.00	0.09	0.16
SDR0906-562KL	5600	± 10	100	0.252	1	20.00	0.07	0.15
SDR0906-682KL	6800	± 10	90	0.252	1	23.00	0.06	0.14
SDR0906-822KL	8200	± 10	100	0.252	1	28.00	0.05	0.12
SDR0906-103KL	10000	± 10	100	0.0796	1	33.00	0.04	0.10

Multiple windings possible (up to four windings).

### Electrical Schematic



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

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf)

### General Specifications

Test Frequency ..... 1 KHz  
 Test Voltage ..... 1 V  
 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 for 5 sec.  
 Moisture Sensitivity Level..... 1  
 ESD Classification (HBM)..... N/A

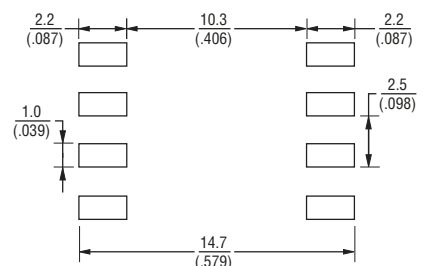
### Materials

Core..... Ferrite DR core  
 Wire ..... Enameled copper wire  
 Base ..... LCP  
 Adhesive..... Epoxy resin  
 Terminal..... Cu/Sn  
 Rated Current ..... Ind. drop 10 % typ. at Isat  
 Temperature Rise ..... 40 °C max. at rated I rms  
 Packaging..... 600 pcs. per reel

### Product Dimensions



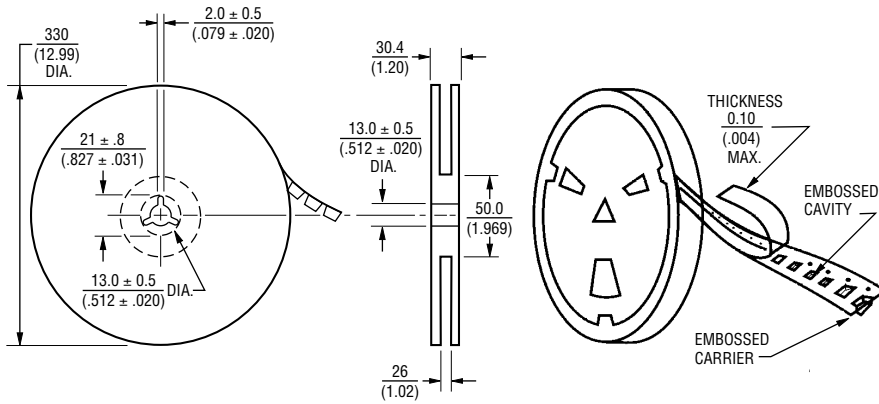
### Recommended Layout



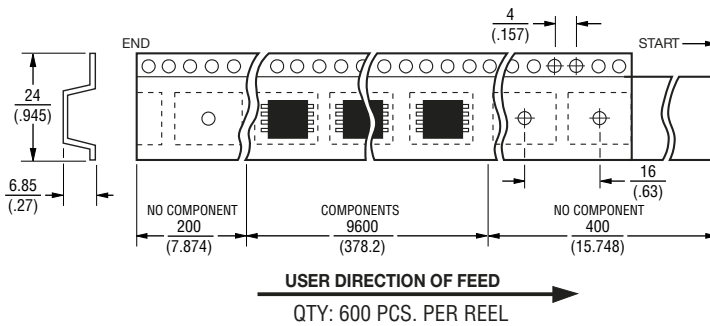
# SDR0906 Series - SMD Power Inductors

**BOURNS®**

## Packaging Specifications



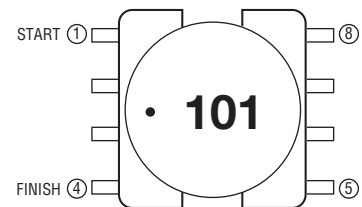
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$



## Materials

Paper  
Plastics

## Typical Part Marking



## Strength of Cover Tape



The force for tearing off cover tape is 10 to 130 grams in the arrow direction.

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REV. 03/18

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