



**THE DATASHEET OF  
SDR0906-390KL**





### 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)**

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### 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

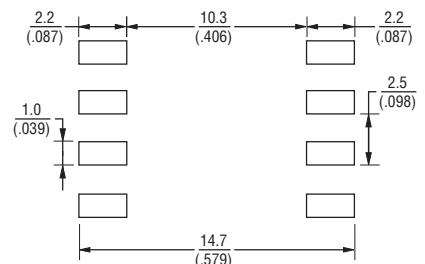
### Materials

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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