



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



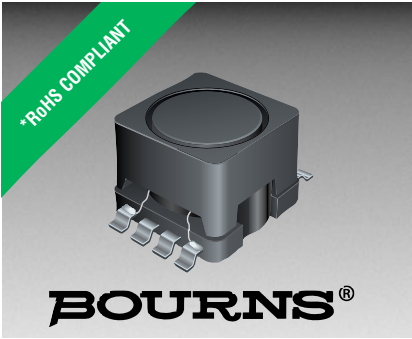
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### Features

- Available in E6 series
- High inductance up to 10 mH
- Low 6.0 mm profile
- Gull wing leads
- RoHS compliant\*

### Applications

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

## SRR0906 Series - SMD Shielded Power Inductors

### Electrical Specifications

Bourns Part No.	Inductance 1 KHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)	**K- Factor
	μH	Tol. %							
SRR0906-2R7ML	2.7	±20	23	7.96	85.0	0.032	3.20	5.80	173
SRR0906-3R5ML	3.5	±20	23	7.96	80.0	0.036	2.90	5.20	148
SRR0906-4R7ML	4.7	±20	23	7.96	40.0	0.040	2.70	4.30	130
SRR0906-5R6ML	5.6	±20	23	7.96	57.0	0.046	2.50	4.20	115
SRR0906-6R8ML	6.8	±20	23	7.96	38.0	0.050	2.30	3.40	104
SRR0906-8R2ML	8.2	±20	23	7.96	30.0	0.055	2.10	3.20	94
SRR0906-100ML	10	±20	35	2.52	29.0	0.080	1.80	2.70	80
SRR0906-120ML	12	±20	35	2.52	26.0	0.085	1.70	2.60	74
SRR0906-150ML	15	±20	35	2.52	23.0	0.100	1.60	2.40	65
SRR0906-180ML	18	±20	35	2.52	22.0	0.110	1.50	2.00	61
SRR0906-220ML	22	±20	35	2.52	19.0	0.130	1.40	1.90	52
SRR0906-270ML	27	±20	35	2.52	17.0	0.140	1.30	1.80	47
SRR0906-330ML	33	±20	35	2.52	15.0	0.150	1.20	1.60	43
SRR0906-390ML	39	±20	35	2.52	14.0	0.160	1.10	1.40	42
SRR0906-470ML	47	±20	35	2.52	12.0	0.180	1.00	1.30	36
SRR0906-560ML	56	±20	35	2.52	12.0	0.300	0.93	1.20	34
SRR0906-680ML	68	±20	40	2.52	9.0	0.350	0.85	1.00	31
SRR0906-820ML	82	±20	40	2.52	8.0	0.370	0.78	0.90	28
SRR0906-101YL	100	±15	40	0.796	7.5	0.420	0.70	0.90	25
SRR0906-121YL	120	±15	40	0.796	7.0	0.480	0.65	0.75	23
SRR0906-151YL	150	±15	40	0.796	6.0	0.550	0.60	0.70	20
SRR0906-181YL	180	±15	40	0.796	5.5	0.820	0.52	0.70	19
SRR0906-221YL	220	±15	40	0.796	5.0	1.000	0.48	0.60	16
SRR0906-271YL	270	±15	40	0.796	5.0	1.100	0.44	0.55	15
SRR0906-331YL	330	±15	40	0.796	4.5	1.300	0.40	0.51	13
SRR0906-391YL	390	±15	40	0.796	4.2	1.400	0.38	0.50	12
SRR0906-471YL	470	±15	40	0.796	4.0	1.600	0.35	0.40	11
SRR0906-561YL	560	±15	60	0.796	3.2	2.700	0.28	0.35	11
SRR0906-681YL	680	±15	60	0.796	2.7	3.200	0.25	0.33	9
SRR0906-821YL	820	±15	85	0.796	2.6	3.500	0.23	0.30	9
SRR0906-102YL	1000	±15	100	0.252	2.3	4.000	0.22	0.26	8
SRR0906-122YL	1200	±15	100	0.252	2.3	4.400	0.20	0.24	7
SRR0906-152YL	1500	±15	100	0.252	2.0	5.200	0.18	0.22	6
SRR0906-182YL	1800	±15	100	0.252	1.7	7.000	0.17	0.20	6
SRR0906-222YL	2200	±15	100	0.252	1.5	8.500	0.16	0.18	5
SRR0906-272YL	2700	±15	100	0.252	1.4	9.200	0.14	0.17	5
SRR0906-332YL	3300	±15	100	0.252	1.3	11.000	0.12	0.15	4
SRR0906-392YL	3900	±15	100	0.252	1.2	16.000	0.11	0.13	4
SRR0906-472YL	4700	±15	100	0.252	1.0	19.000	0.10	0.11	4
SRR0906-562YL	5600	±15	100	0.252	0.9	21.000	0.09	0.11	3
SRR0906-682YL	6800	±15	100	0.252	0.9	24.000	0.09	0.10	3
SRR0906-822YL	8200	±15	100	0.252	0.8	31.000	0.08	0.09	3
SRR0906-103YL	10000	±15	100	0.0796	0.7	38.000	0.07	0.08	2

Multiple windings possible (up to four windings).

\*\*K-Factor: To calculate core flux density, Bp-p (gauss) = K x L(μH) x ΔI (peak-to-peak ripple current, A), determine core loss from Core Loss vs. Flux Density plot.

### Schematic



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

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

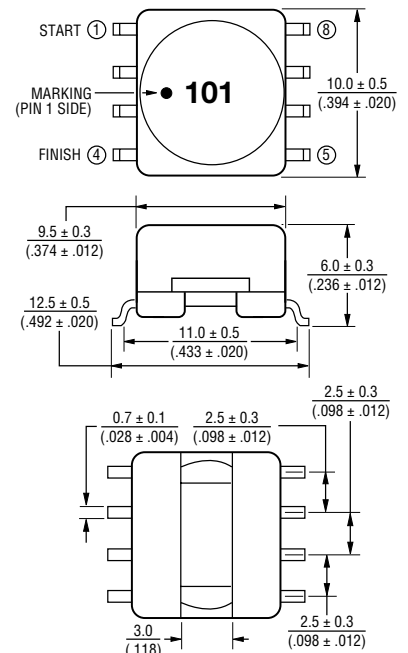
### General Specifications

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.

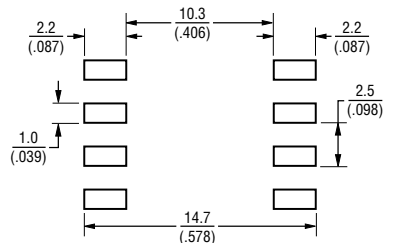
### Materials

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

### Product Dimensions



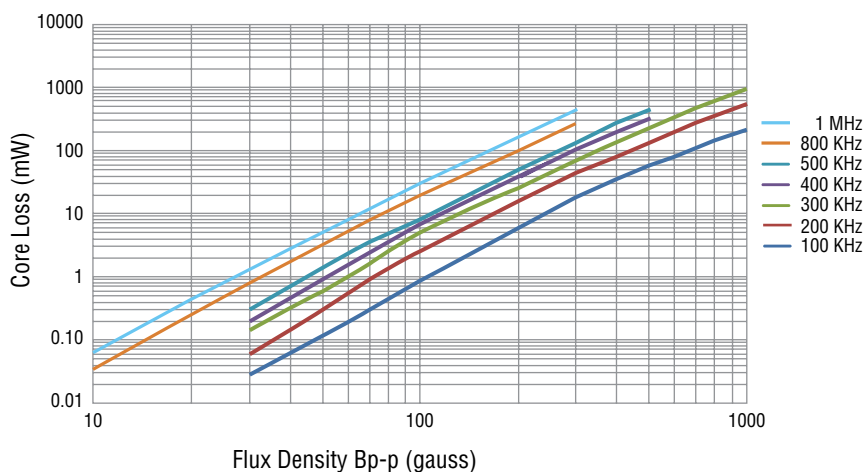
### Recommended Layout



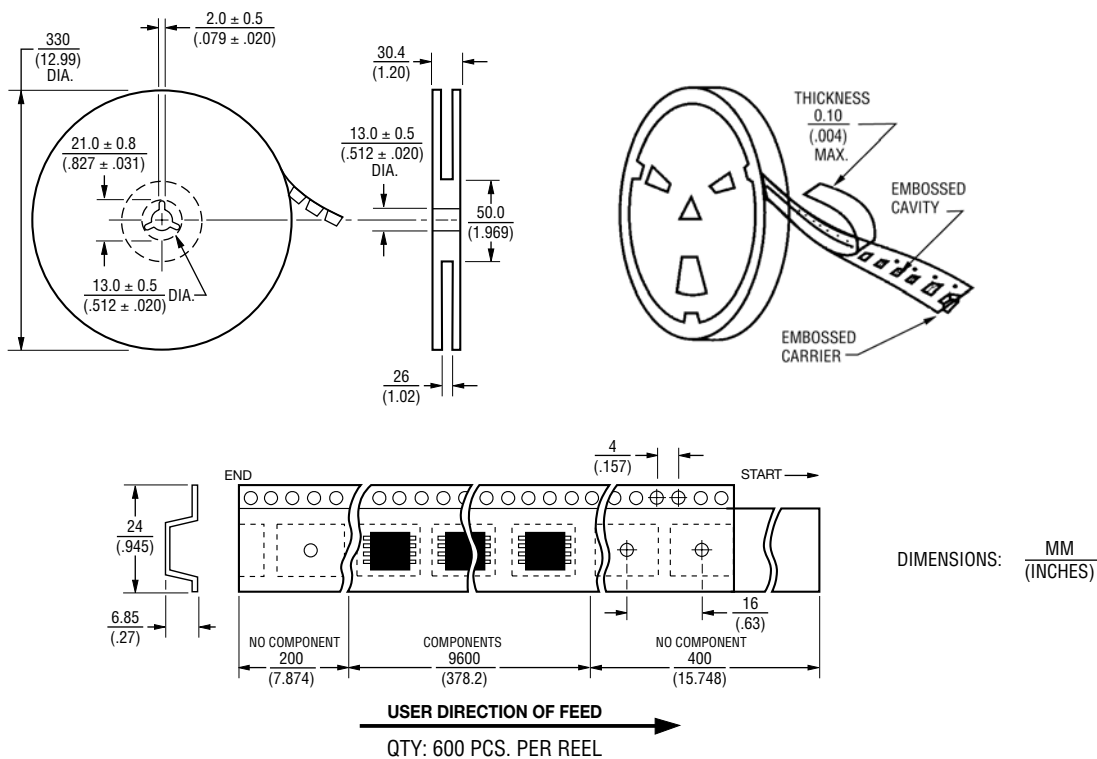
# SRR0906 Series - SMD Shielded Power Inductors

**BOURNS®**

## Core Loss vs. Flux Density



## Packaging Specifications



REV. 03/17

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