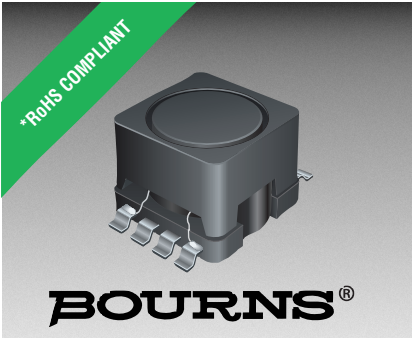




**THE DATASHEET OF
SRR0906-470ML**





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

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 |

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.
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

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
 Temp. Rise 40 °C max. at rated I rms
 Packaging 600 pcs. per reel

Product Dimensions

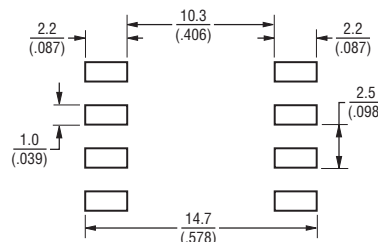


Multiple windings possible (up to four windings).

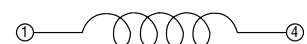
**K-Factor: To calculate core flux density, Bp-p (gauss) = K x L(μH) x Δ I (peak-to-peak ripple current, A), determine core loss from Core Loss vs. Flux Density plot.

*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.

Recommended Layout



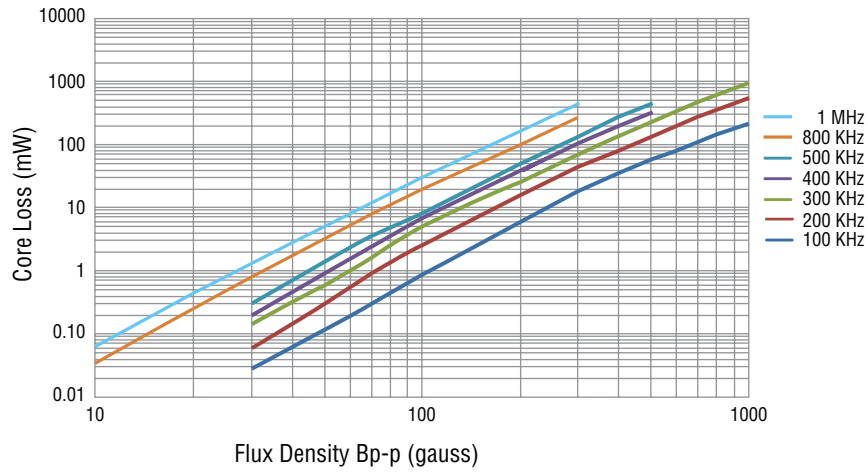
Schematic



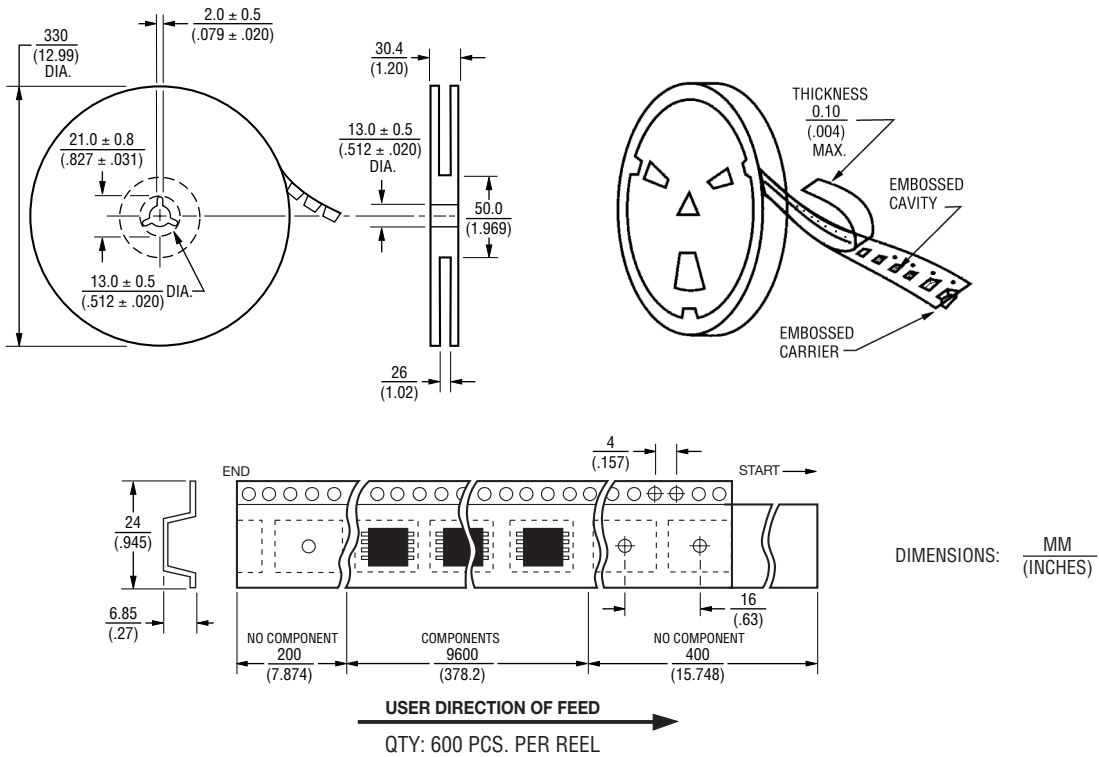
SRR0906 Series - SMD Shielded Power Inductors

BOURNS®

Core Loss vs. Flux Density



Packaging Specifications



REV. 03/18

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.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View SRR0906-470ML on WIN SOURCE](#)
- ⊖ [Bourns Inc. Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management