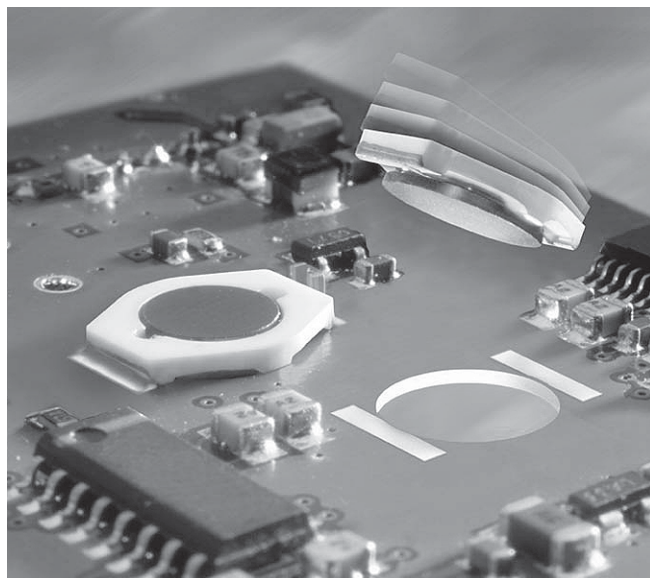




SMT Power Inductors - LPO2506 Series



With an above-board height of just 1,19 mm, this is our thinnest power inductor series, perfect for PC Card or other low profile applications.

The LPO2506 comes in two styles. One is a standard on-board design that is 1,65 mm high. The second uses Coilcraft's InBoard® Technology. By dropping the inductor core through a hole in the circuit board, the above-board height is reduced to 1,19 mm. (Custom designs can reduce this even further to a maximum of 0,9 mm, depending on board thickness.)

Coilcraft **Designer's Kit C332** contains samples of all in-board values shown; **Kit C333** contains all on-board values. To order, contact Coilcraft, or purchase them online at <http://order.coilcraft.com>.



SPICE models ON OUR WEB SITE OR CD

| In-board style part number ¹ | On-board style part number ¹ | L $\pm 20\%$ ² (μ H) | DCR max (Ohms) | SRF typ (MHz) | Isat ³ (A) | Irms ⁴ (A) |
|--|--|---|-------------------|------------------|--------------------------|--------------------------|
| LPO2506I-472L_ | LPO2506O-472L_ | 4.7 | 0.145 | 90 | 1.6 | 1.9 |
| LPO2506I-682L_ | LPO2506O-682L_ | 6.8 | 0.165 | 75 | 1.3 | 1.7 |
| LPO2506I-822L_ | LPO2506O-822L_ | 8.2 | 0.200 | 65 | 1.0 | 1.5 |
| LPO2506I-103L_ | LPO2506O-103L_ | 10 | 0.240 | 60 | 1.0 | 1.5 |
| LPO2506I-153L_ | LPO2506O-153L_ | 15 | 0.300 | 45 | 0.90 | 1.3 |
| LPO2506I-223L_ | LPO2506O-223L_ | 22 | 0.420 | 35 | 0.70 | 1.0 |
| LPO2506I-333L_ | LPO2506O-333L_ | 33 | 0.550 | 30 | 0.60 | 0.90 |
| LPO2506I-473L_ | LPO2506O-473L_ | 47 | 0.765 | 22 | 0.50 | 0.70 |
| LPO2506I-683L_ | LPO2506O-683L_ | 68 | 1.10 | 20 | 0.40 | 0.60 |
| LPO2506I-104L_ | LPO2506O-104L_ | 100 | 1.60 | 15 | 0.30 | 0.50 |
| LPO2506I-154L_ | LPO2506O-154L_ | 150 | 2.50 | 12 | 0.25 | 0.40 |
| LPO2506I-224L_ | LPO2506O-224L_ | 220 | 3.65 | 10 | 0.22 | 0.32 |
| LPO2506I-334L_ | LPO2506O-334L_ | 330 | 4.65 | 8.0 | 0.18 | 0.28 |
| LPO2506I-474L_ | LPO2506O-474L_ | 470 | 6.75 | 6.5 | 0.14 | 0.24 |
| LPO2506I-684L_ | LPO2506O-684L_ | 680 | 9.15 | 5.5 | 0.12 | 0.20 |
| LPO2506I-105L_ | LPO2506O-105L_ | 1000 | 14.20 | 4.5 | 0.10 | 0.16 |

1. When ordering, please specify **packaging** code:

LPO2506I-105L D

Packaging: **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (1000 parts per full reel).

B = Less than full reel. In tape, but not machine ready.

To have a leader and trailer added (\$25 charge), use code letter D instead.

2. Tested at 100 kHz, 0.1 Vrms, 0 Adc.

3. DC current at which the inductance drops 10% (typ) from its value without current.

4. Average current for a 40°C rise above 25°C ambient.

5. Operating temperature range -40°C to +85°C.

6. Electrical specifications at 25°C.

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Specifications subject to change without notice.
Please check our website for latest information.

Document 208-1 Revised 05/23/05

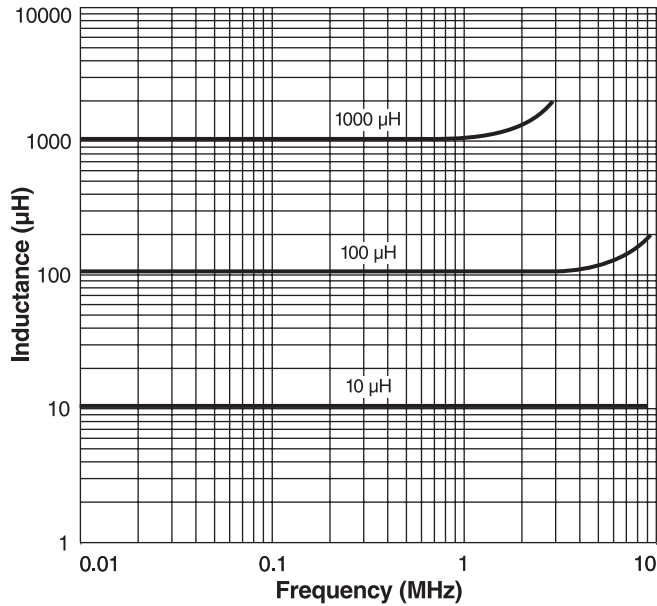
1102 Silver Lake Road Cary, Illinois 60013 **Phone** 847/639-6400 **Fax** 847/639-1469

E-mail info@coilcraft.com **Web** <http://www.coilcraft.com>

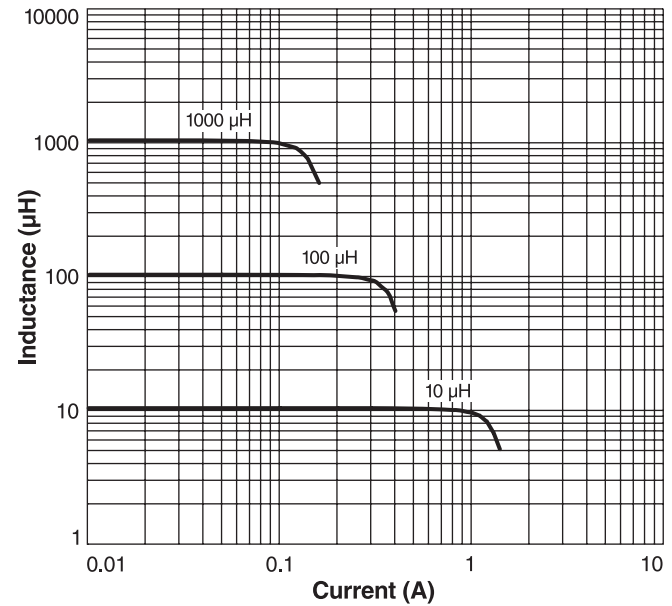


SMT Power Inductors - LPO2506 Series

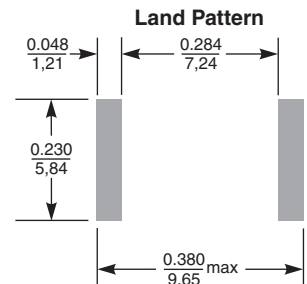
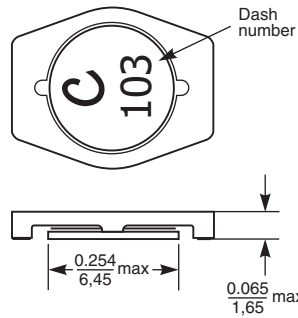
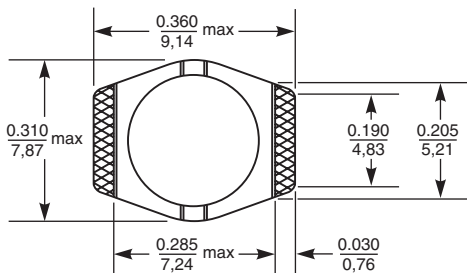
Typical L vs Frequency



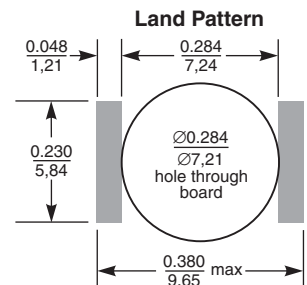
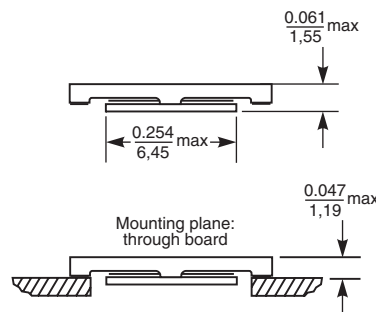
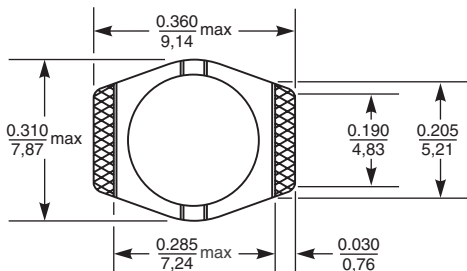
Typical L vs Current



On-board Style



In-board Style



Terminations: Silver-palladium-platinum-glass frit

Weight: 0.24 – 0.26 g

Tape and reel: 1000/13" reel 16 mm tape width

For packaging data see Tape and Reel Specifications section.

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Please check our website for latest information.

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