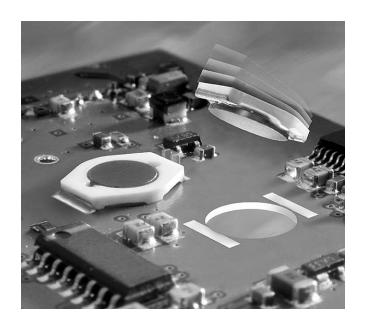


# SMT Power Inductors - LPO2506 Series



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 "In-Board 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 reduced this even further to a maximum of 0.9mm, depending on board thickness.)

Coilcraft **Designer's Kit C132** contains samples of all in-board values shown; **Kit C133** contains all on-board values. To order, contact Coilcraft or purchase them on-line at http://order.coilcraft.com.

**PSPICE models** SEE DOC 209

In-board style part number	On-board style part number	Inductance¹ (μH) ± 20%	DCR max (Ohms)	SRF typ (MHz)	I sat² (A)	I rms³ (A rms)
LPO2506IB-472	LPO2506OB-472	4.7	.145	90	1.60	1.90
LPO2506IB-682	LPO2506OB-682	6.8	.165	75	1.30	1.70
LPO2506IB-103	LPO2506OB-103	10	.240	60	1.00	1.50
LPO2506IB-153	LPO2506OB-153	15	.300	45	.900	1.30
LPO2506IB-223	LPO2506OB-223	22	.420	35	.700	1.00
LPO2506IB-333	LPO2506OB-333	33	.550	30	.600	.900
LPO2506IB-473	LPO2506OB-473	47	.765	22	.500	.700
LPO2506IB-683	LPO2506OB-683	68	1.10	20	.400	.600
LPO2506IB-104	LPO2506OB-104	100	1.60	15	.300	.500
LPO2506IB-154	LPO2506OB-154	150	2.50	12	.250	.400
LPO2506IB-224	LPO2506OB-224	220	3.65	10	.220	.320
LPO2506IB-334	LPO2506OB-334	330	4.65	8.0	.180	.280
LPO2506IB-474	LPO2506OB-474	470	6.75	6.5	.140	.240
LPO2506IB-684	LPO2506OB-684	680	9.15	5.5	.120	.200
LPO2506IB-105	LPO2506OB-105	1000	14.20	4.5	.100	.160

For environmental data see "Product Specifications" (Document 164)

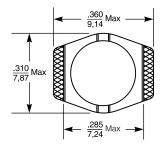
- 1. Tested @ 100 kHz, 0.1 Vrms.
- 2. Inductance drop = 10% typ. at rated Isat.
- 3.  $\Delta T = 40^{\circ}$  C rise typ. at Irms.
- 4. Operating temperature range -40° C to +85° C.
- 5. Electrical specifications at 25° C.

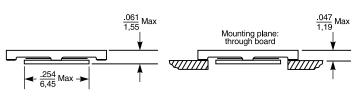


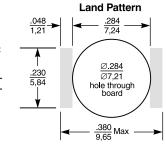


# **SMT Power Inductors - LPO2506 Series**

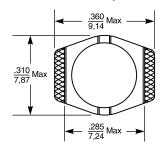
## **In-board Style**

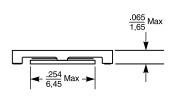


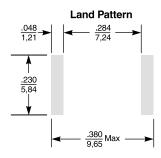




### **On-board Style**

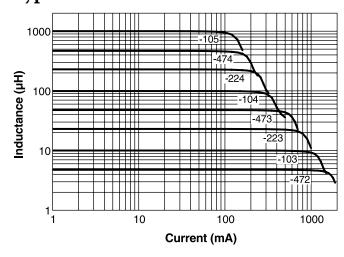






Parts/reel: 13" 2,000 Tape width: 16 mm For packaging data see "Tape and Reel Specifications" section (Doc. 173)

### Typical Inductance vs. Current





Specifications subject to change without notice. Document 208-2 Revised 3/22/99