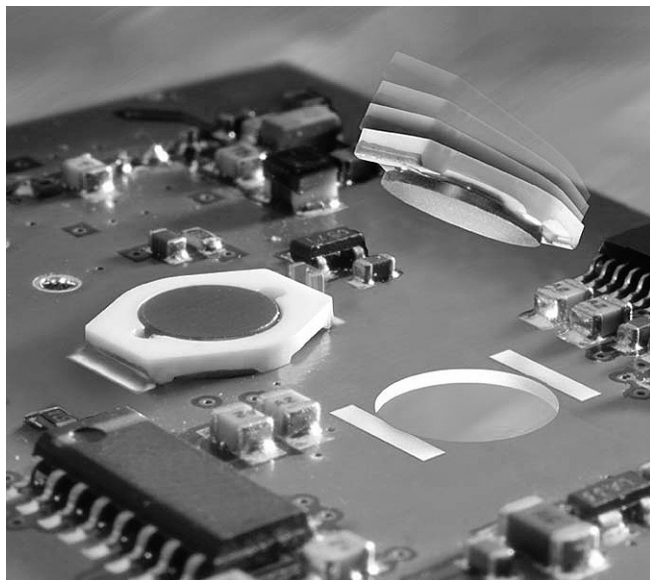


SMT Power Inductors - LPO2506



- On-board style – 1.65 mm high
- InBoard® style – only 1.19 high

Designer's Kit C332 contains 3 of all InBoard® styles

Designer's Kit C333 contains 3 of all On-board styles

Core material Ferrite

Core and winding loss See www.coilcraft.com/coreloss

Terminations RoHS compliant silver-palladium-platinum-glass frit. Other terminations available at additional cost.

Weight 240 – 260 mg

Ambient temperature –40°C to +85°C with Irms current

Maximum part temperature +125°C (ambient + temp rise)

Storage temperature Component: –40°C to +125°C

Tape and reel packaging: –40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 1000/13" reel Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.37 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

InBoard style part number ¹	On-board style part number ¹	L ±20% ² (μH)	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 **termination** and **packaging** codes:

LPO2506O-105LD

Termination: L = RoHS compliant silver-palladium-platinum-glass frit
Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).

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

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.

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

4. Current that causes a 40°C temperature rise from 25°C ambient.

5. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

SPICE models ON OUR WEB SITE

Document 208-1 Revised 10/21/20

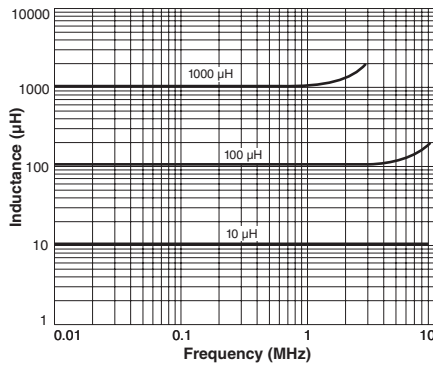
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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

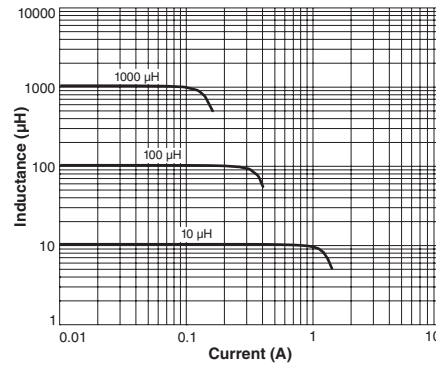


SMT Power Inductors - LPO2506 Series

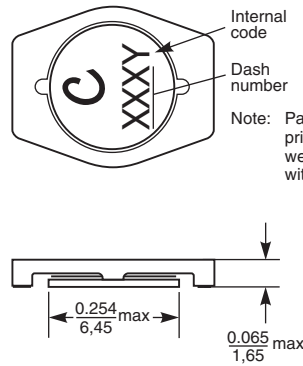
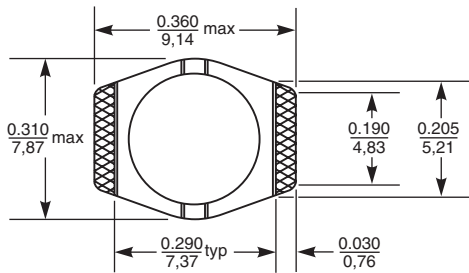
Typical L vs Frequency



Typical L vs Current

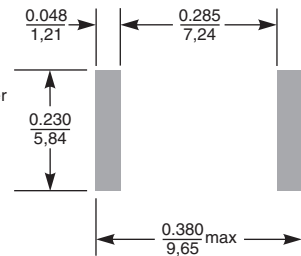


On-board Style

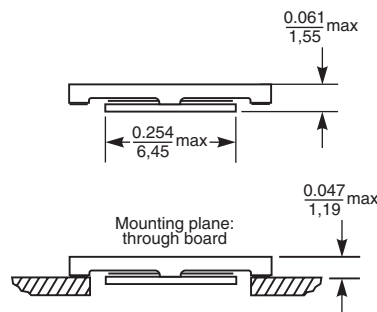
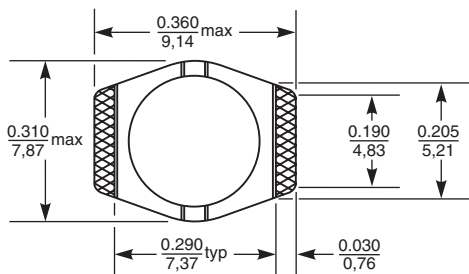


Note: Parts manufactured prior to March, 2011 were marked only with the dash number

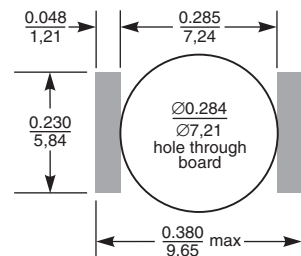
Recommended Land Pattern



InBoard Style



Recommended Land Pattern



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Coilcraft:

[LPO2506O-223LD](#) [LPO2506O-473LB](#) [LPO2506I-153LD](#) [LPO2506O-472LD](#) [LPO2506O-684LB](#) [LPO2506O-683LB](#)
[LPO2506I-474LB](#) [LPO2506I-104LD](#) [LPO2506I-154LB](#) [LPO2506I-822LD](#) [LPO2506I-682LD](#) [LPO2506I-684LD](#)
[LPO2506O-104LB](#) [LPO2506I-333LD](#) [LPO2506O-104LD](#) [LPO2506I-104LB](#) [LPO2506I-154LD](#) [LPO2506I-684LB](#)
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