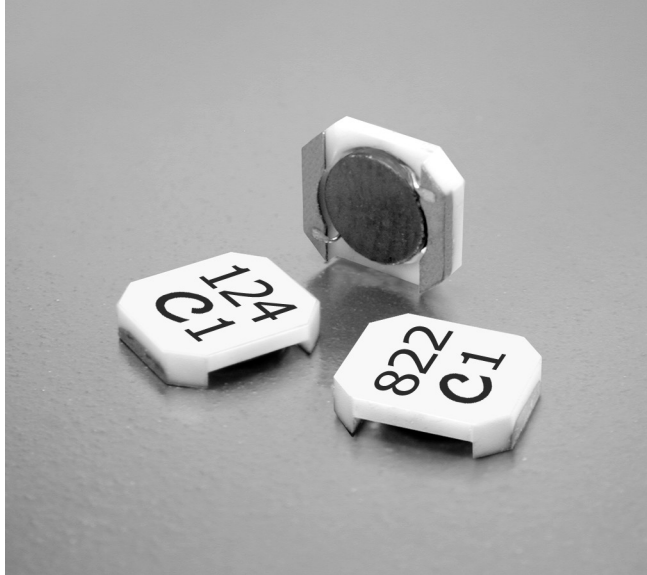


SMT Power Inductors - LPO4812



- Very low profile - only 1.2 mm high!
- Handles up to 1.3 Amps saturating current

Designer's Kit C357 contains 3 each of all values

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 53 – 61 mg

Ambient temperature -40°C to +85°C with I_{rms} 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 1000/7" reel; 3500/13" reel Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.3 mm pocket depth

Recommended pick and place nozzle OD: 4.6 mm; ID: ≤ 2.3 mm

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

Part number ¹	L ² (µH)	DCR max (Ohms)	SRF typ (MHz)	I _{sat} ³ (A)	I _{rms} ⁴ (A)
LPO4812-102ML_	1.0 ±20%	0.055	270	1.30	0.85
LPO4812-152ML_	1.5 ±20%	0.080	220	1.00	0.85
LPO4812-222ML_	2.2 ±20%	0.090	170	0.80	0.85
LPO4812-332ML_	3.3 ±20%	0.120	140	0.70	0.80
LPO4812-472ML_	4.7 ±20%	0.155	110	0.60	0.80
LPO4812-682ML_	6.8 ±20%	0.225	90	0.45	0.78
LPO4812-822ML_	8.2 ±20%	0.270	70	0.45	0.77
LPO4812-103KL_	10 ±10%	0.300	60	0.40	0.76
LPO4812-153KL_	15 ±10%	0.460	50	0.32	0.72
LPO4812-223KL_	22 ±10%	0.640	40	0.28	0.59
LPO4812-333KL_	33 ±10%	0.850	30	0.22	0.54
LPO4812-473KL_	47 ±10%	1.30	28	0.20	0.50
LPO4812-683KL_	68 ±10%	1.80	22	0.16	0.39
LPO4812-104KL_	100 ±10%	2.60	18	0.13	0.32
LPO4812-154KL_	150 ±10%	4.20	14	0.10	0.26
LPO4812-224KL_	220 ±10%	5.50	11	0.09	0.24

1. When ordering, please specify **termination** and **packaging** codes:

LPO4812-473MLC

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: C = 7" machine-ready reel. EIA-481 embossed plastic tape (1000 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

D = 13" machine-ready reel. EIA-481 embossed plastic tape (3500 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 C.

2. Inductance 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. 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



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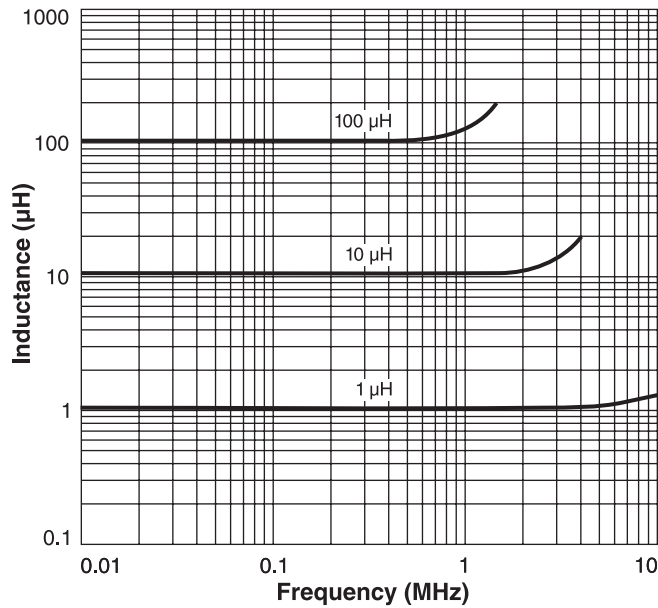
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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

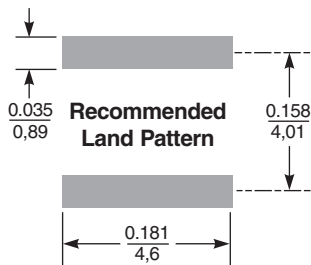
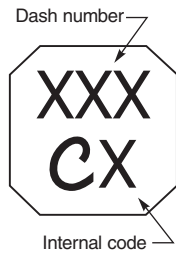
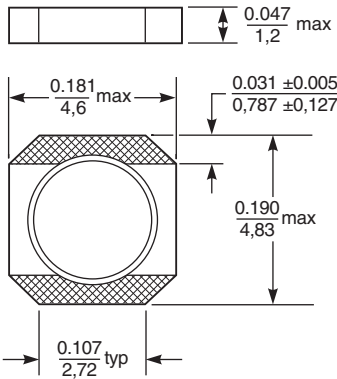
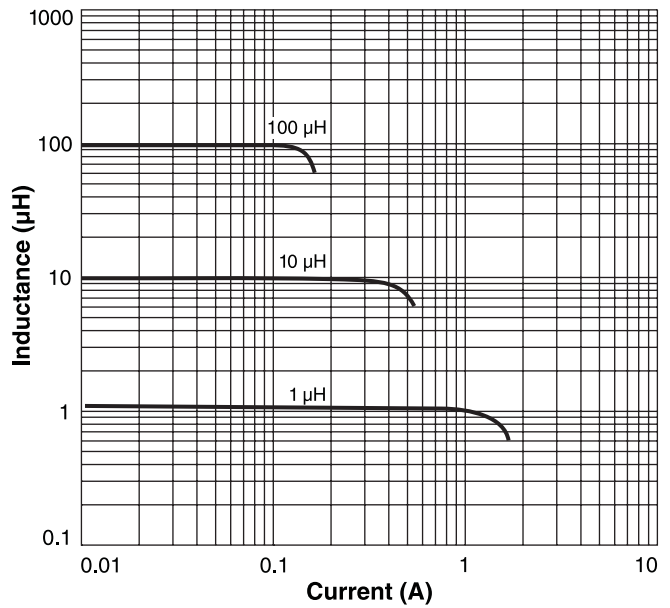


SMT Power Inductors - LPO4812 Series

Typical L vs Frequency



Typical L vs Current



Dimensions are in $\frac{\text{inches}}{\text{mm}}$