



SMT Power Inductors-LPO4812 Series



- 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, +85°C to +125°C with derated current

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

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 Only pure water or alcohol recommended

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

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

LPO4812-473M L C

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).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter C instead.

D = 13" machine-ready reel. EIA-481 embossed plastic tape (3500 parts per full reel).

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 OR CD

Coilcraft®

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

Document 276-1 Revised 10/14/08

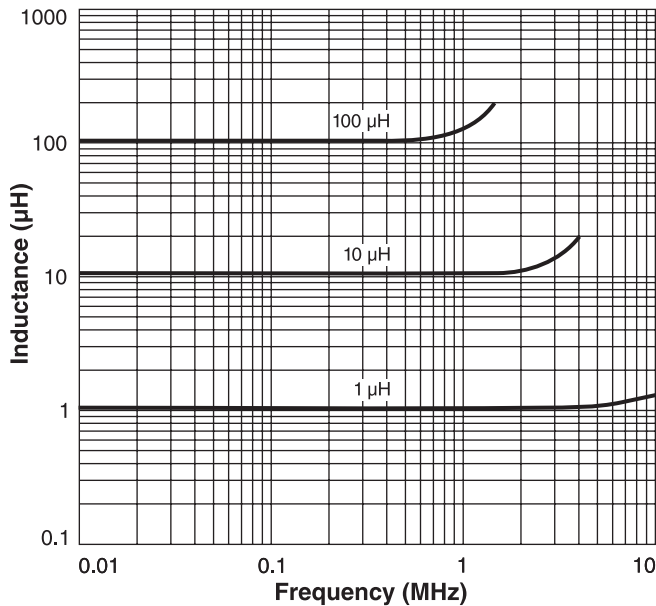
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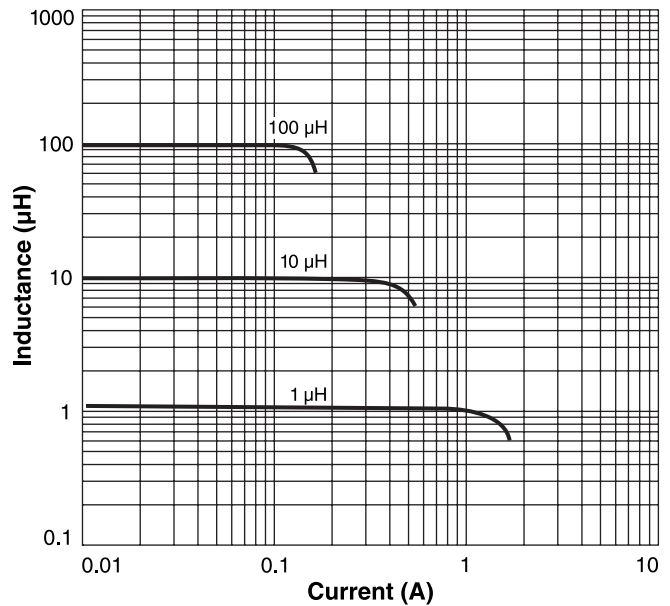


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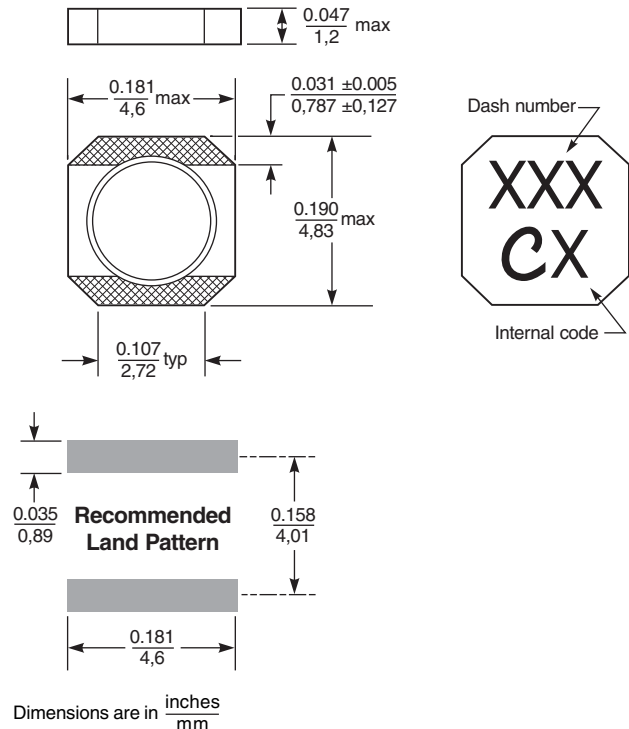
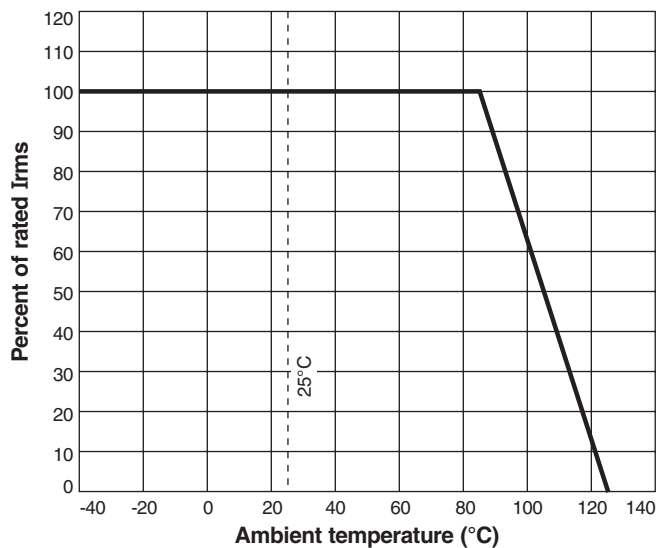
Typical L vs Frequency



Typical L vs Current



Irms Derating



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