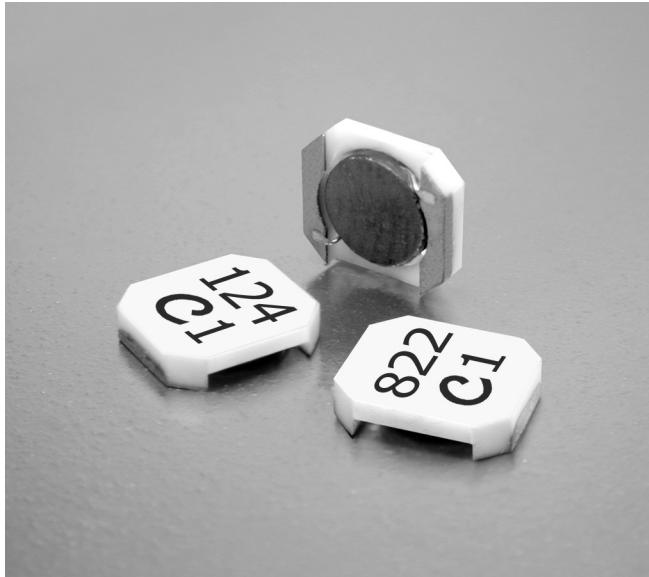


# SMT Power Inductors - LPO4812



- 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](http://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 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** 1000/7" 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 <sup>1</sup>	L <sup>2</sup> (µH)	DCR max (Ohms)	SRF typ (MHz)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (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).

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



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**Taiwan** +886-2-2264 3646 [sales@coilcraft.com.tw](mailto:sales@coilcraft.com.tw)  
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**Singapore** + 65-6484 8412 [sales@coilcraft.com.sg](mailto:sales@coilcraft.com.sg)

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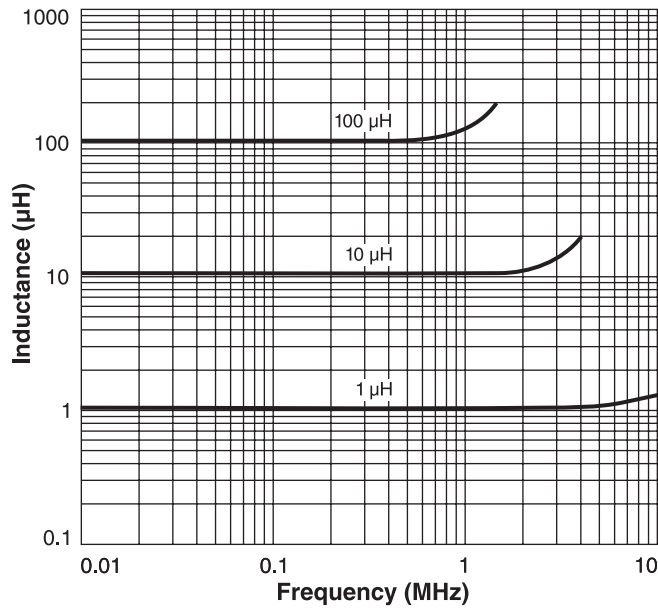
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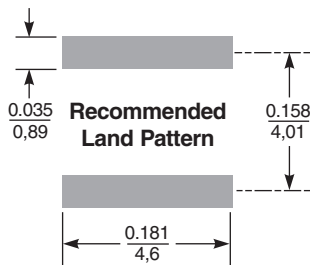
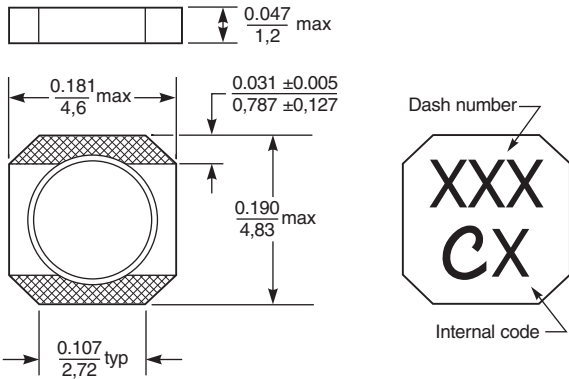
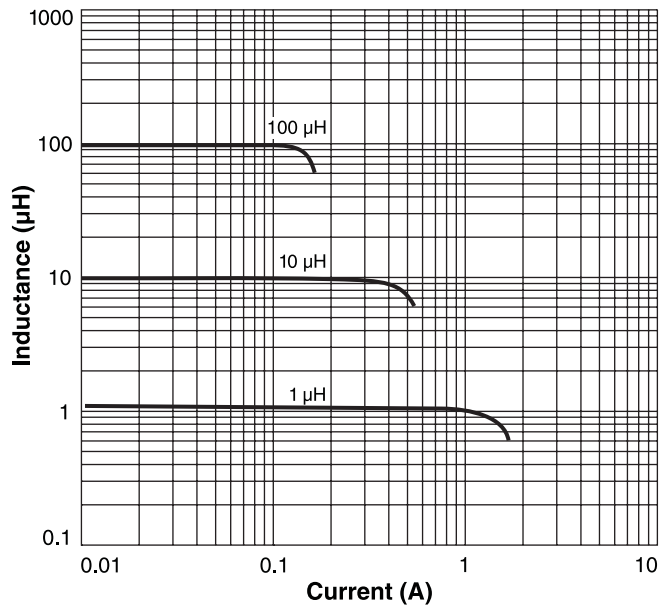


# SMT Power Inductors - LPO4812 Series

## Typical L vs Frequency



## Typical L vs Current



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