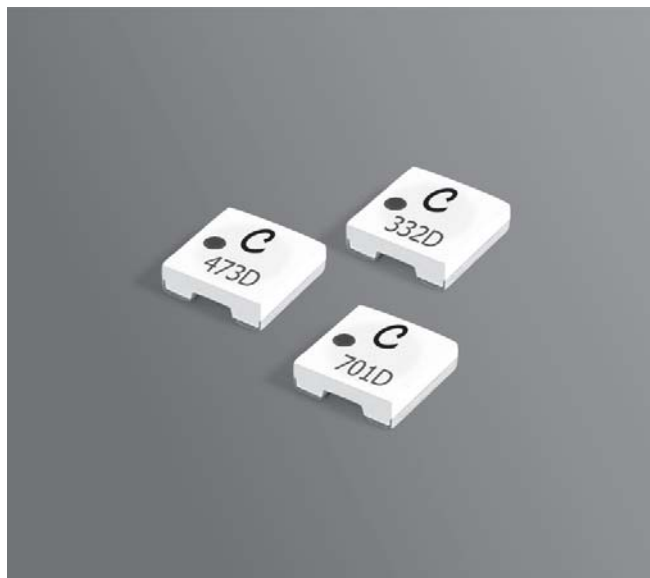




# SMT Power Inductors - LPO3310 Series



- Only 1.0 mm high, 3.3 mm square
- Handles current up to 2.8 Amps

**Designer's Kit C375** 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** 28.0 – 31.3 mg

**Ambient temperature** –40°C to +85°C with I<sub>rms</sub> current, +85°C to +110°C with derated current

**Storage temperature** Component: –40°C to +110°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, 1.37 mm pocket depth

**Recommended pick and place nozzle** OD: 3.3 mm; ID: ≤1.65 mm

**PCB washing** Only pure water or alcohol recommended

Part number <sup>1</sup>	L <sup>2</sup> ±20% (µH)	DCR <sup>3</sup> max (Ohms)	SRF <sup>4</sup> typ (MHz)	Isat <sup>5</sup> (A)	I <sub>rms</sub> <sup>6</sup> (A)
LPO3310-301ML_	0.30	0.040	420	2.8	2.8
LPO3310-471ML_	0.47	0.042	310	2.3	2.3
LPO3310-701ML_	0.70	0.068	200	1.9	1.9
LPO3310-102ML_	1.0	0.076	180	1.6	1.6
LPO3310-152ML_	1.5	0.12	153	1.4	1.4
LPO3310-222ML_	2.2	0.15	112	1.1	1.1
LPO3310-332ML_	3.3	0.20	91	0.95	0.95
LPO3310-472ML_	4.7	0.28	80	0.80	0.80
LPO3310-682ML_	6.8	0.36	68	0.66	0.66
LPO3310-822ML_	8.2	0.50	58	0.65	0.65
LPO3310-103ML_	10	0.52	52	0.57	0.57
LPO3310-153ML_	15	0.80	36	0.45	0.45
LPO3310-223ML_	22	1.20	34	0.37	0.37
LPO3310-333ML_	33	1.78	27	0.30	0.30
LPO3310-473ML_	47	2.15	22	0.25	0.25

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

LPO3310-473M 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 V<sub>rms</sub> using an Agilent/HP 4192A.
  3. DCR measured on a micro-ohmmeter.
  4. SRF measured using Agilent/HP 8753ES or equivalent.
  5. DC current at which the inductance drops 10% (typ) from its value without current.
  6. Current that causes a 25°C temperature rise from 25°C ambient.
  7. Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

**SPICE models** ON OUR WEB SITE OR CD

**Coilcraft**<sup>®</sup>

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

Document 352-1 Revised 10/14/08

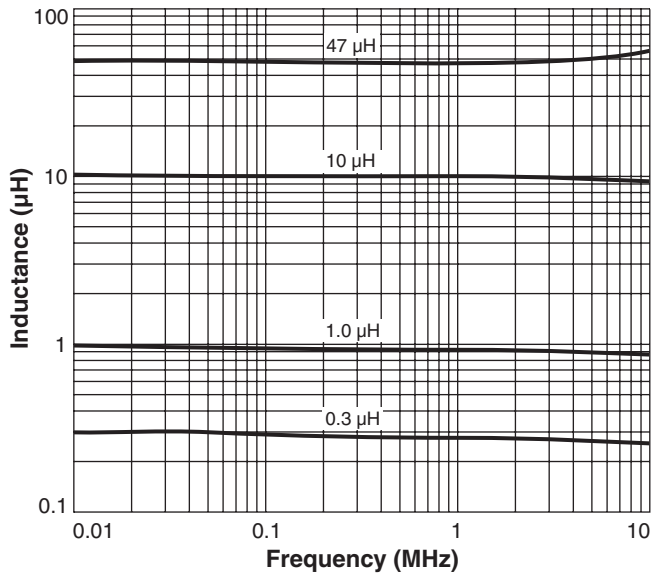
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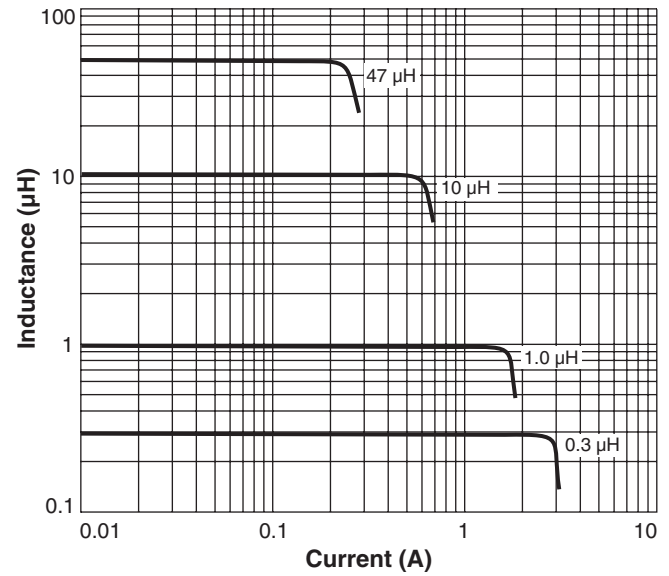


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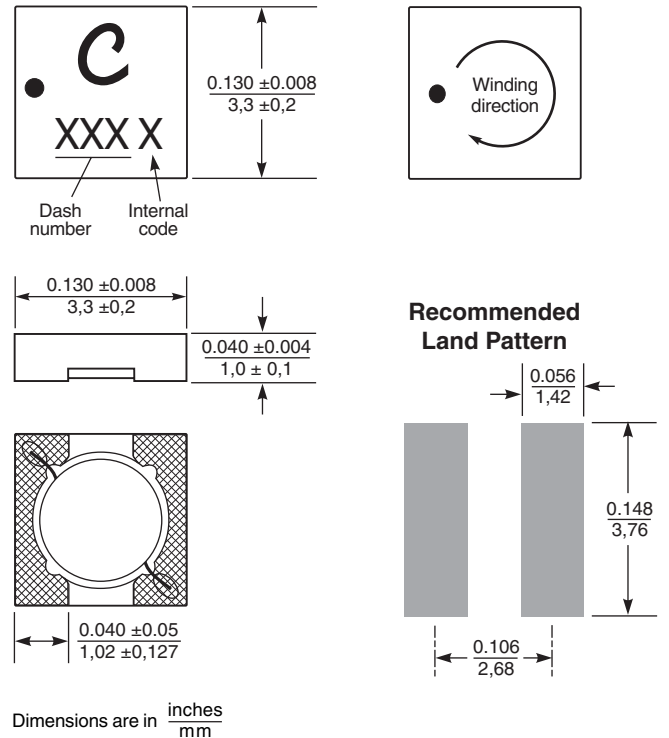
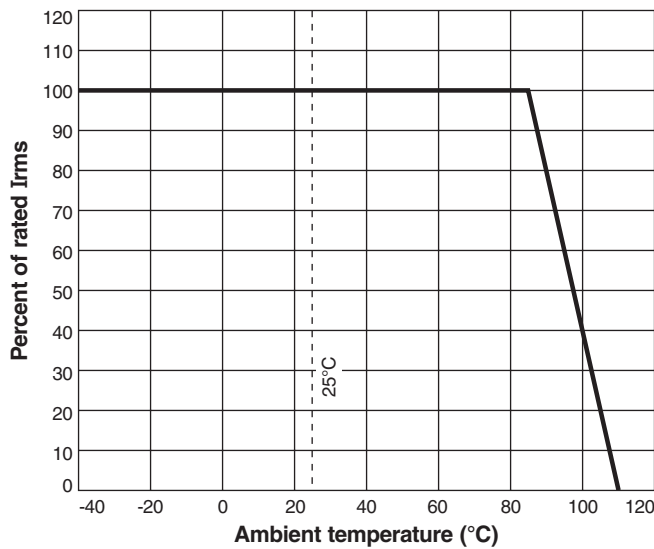
## Typical L vs Frequency



## Typical L vs Current



## Irms Derating



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Please check our website for latest information.

Document 352-2 Revised 10/14/08

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