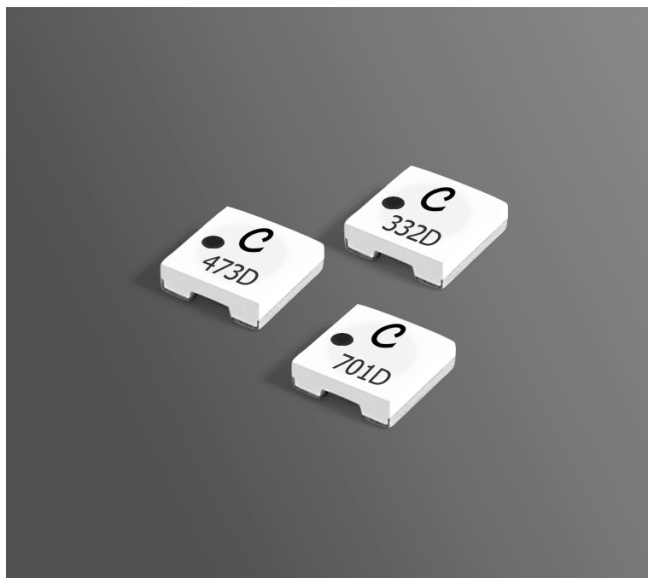




SMT Power Inductors - LPO3310



- 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

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_{rms} current, +85°C to +110°C with derated current

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

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

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

Part number ¹	L^2 ±20% (µH)	DCR ³ max (Ohms)	SRF ⁴ typ (MHz)	Isat ⁵ (A)	I_{rms}^6 (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

- When ordering, please specify **termination** and **packaging** codes:

LPO3310-473MLC

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).

- Inductance tested at 100 kHz, 0.1 Vrms using an Agilent/HP 4192A.
- DCR measured on a micro-ohmmeter.
- SRF measured using Agilent/HP 8753ES or equivalent.
- DC current at which the inductance drops 10% (typ) from its value without current.
- Current that causes a 25°C temperature rise from 25°C ambient.
- 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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Document 352-1 Revised 10/14/08

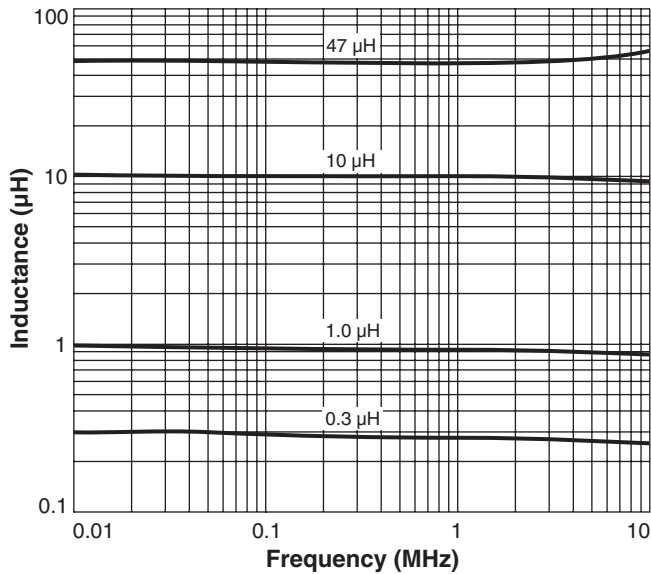
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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

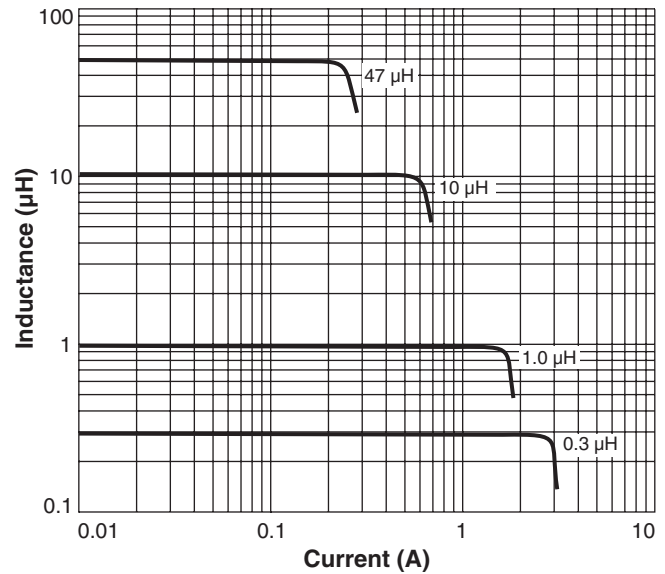


SMT Power Inductors - LPO3310 Series

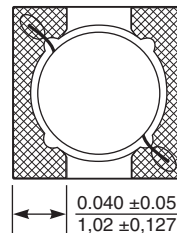
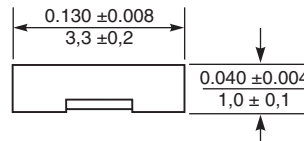
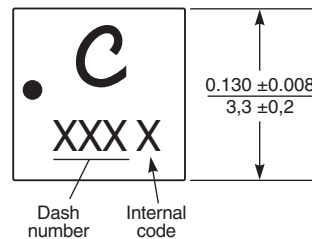
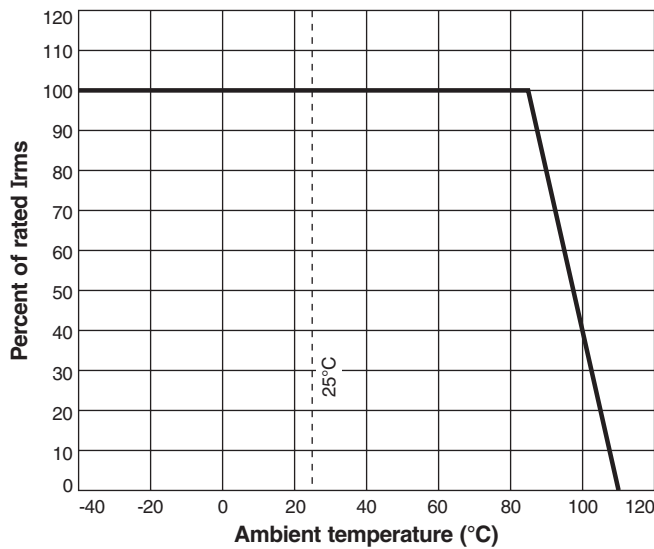
Typical L vs Frequency



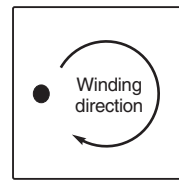
Typical L vs Current



Irms Derating



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



Recommended Land Pattern

