



SMT Power Inductors - LPO6013



- Very low profile – only 1.3 mm high!
- Handles saturating current up to 1.9 Amps

Designer's Kit C352 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 111 – 122 mg

Ambient temperature –40°C to +85°C with Irms current, +85°C to +125°C with derated current

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, 1.4 mm pocket depth

Recommended pick and place nozzle OD: 5.6 mm; ID: ≤ 2.8 mm

PCB washing Only pure water or alcohol recommended

Part number ¹	L ² (μH)	DCR max (Ohms)	SRF typ (MHz)	Isat ³ (A)	Irms ⁴ (A)
LPO6013-102ML_	1.0 ±20%	0.06	200	1.9	1.5
LPO6013-152ML_	1.5 ±20%	0.07	200	1.6	1.4
LPO6013-222ML_	2.2 ±20%	0.08	150	1.3	1.3
LPO6013-332ML_	3.3 ±20%	0.11	110	1.1	1.3
LPO6013-392ML_	3.9 ±20%	0.13	100	1.0	1.2
LPO6013-472ML_	4.7 ±20%	0.15	90	0.90	1.2
LPO6013-682ML_	6.8 ±20%	0.20	70	0.70	1.2
LPO6013-822ML_	8.2 ±20%	0.22	65	0.70	1.0
LPO6013-103KL_	10 ±10%	0.30	60	0.60	1.0
LPO6013-153KL_	15 ±10%	0.38	47	0.55	0.85
LPO6013-223KL_	22 ±10%	0.52	37	0.45	0.80
LPO6013-333KL_	33 ±10%	0.73	30	0.40	0.74
LPO6013-393KL_	39 ±10%	0.96	28	0.35	0.67
LPO6013-473KL_	47 ±10%	1.0	25	0.30	0.60
LPO6013-683KL_	68 ±10%	1.7	21	0.28	0.49
LPO6013-104KL_	100 ±10%	3.2	17	0.22	0.35
LPO6013-154KL_	150 ±10%	4.3	14	0.19	0.30
LPO6013-224KL_	220 ±10%	5.8	10	0.15	0.26
LPO6013-334KL_	330 ±10%	7	8	0.13	0.23
LPO6013-474KL_	470 ±10%	10	7	0.10	0.20
LPO6013-684KL_	680 ±10%	14	5.6	0.09	0.18
LPO6013-105KL_	1000 ±10%	21	4.7	0.07	0.13

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

LPO6013-473KLC

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, 0 Adc.
- DC current at which the inductance drops 10% (typ) from its value without current.
- Current that causes a 40°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



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 286-1 Revised 10/15/08

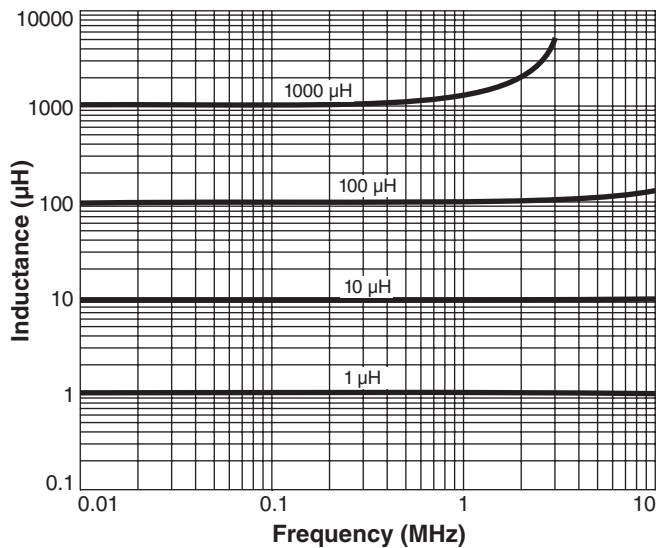
© Coilcraft Inc. 2011

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

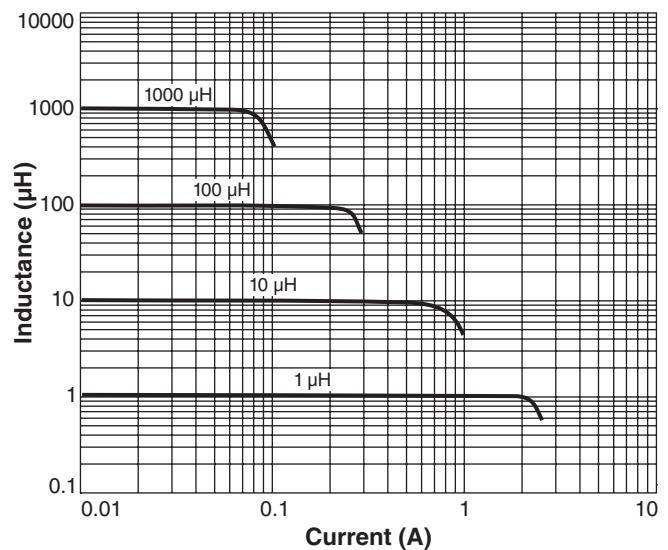


SMT Power Inductors - LPO6013 Series

Typical L vs Frequency



Typical L vs Current



Irms Derating

