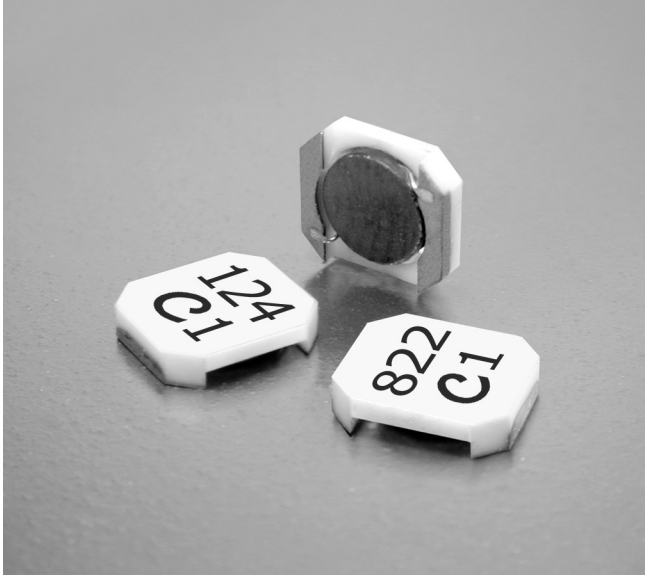




SMT Power Inductors - LPO4815



- Very low profile - only 1.5 mm high!
- Handles current up to 1.9 Amps rms

Designer's Kit C376 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 70.0 – 78.5 mg

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

Maximum temperature +125°C (ambient + temp rise). [Derating](#).

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, 0.3 mm thick, 8 mm pocket spacing, 1.6 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 ¹	Inductance ² (μH)	DCR ³ max (Ohms)	SRF ⁴ typ (MHz)	Isat ⁵ (A)	Irms ⁶ (A)
LPO4815-102ML_	1.0 ±20%	0.036	230	1.6	1.9
LPO4815-152ML_	1.5 ±20%	0.085	200	1.5	1.7
LPO4815-222ML_	2.2 ±20%	0.088	150	1.1	1.5
LPO4815-332ML_	3.3 ±20%	0.12	115	0.90	1.3
LPO4815-392ML_	3.9 ±20%	0.13	105	0.86	1.2
LPO4815-472ML_	4.7 ±20%	0.15	95	0.77	1.1
LPO4815-682ML_	6.8 ±20%	0.18	72	0.65	1.0
LPO4815-822ML_	8.2 ±20%	0.22	65	0.58	0.90
LPO4815-103KL_	10 ±10%	0.23	60	0.50	0.85
LPO4815-123KL_	12 ±10%	0.31	50	0.45	0.80
LPO4815-153KL_	15 ±10%	0.36	45	0.42	0.75
LPO4815-223KL_	22 ±10%	0.48	35	0.36	0.70
LPO4815-333KL_	33 ±10%	0.71	30	0.28	0.65
LPO4815-393KL_	39 ±10%	0.83	25	0.26	0.60
LPO4815-473KL_	47 ±10%	1.20	25	0.22	0.55
LPO4815-683KL_	68 ±10%	1.40	20	0.20	0.45
LPO4815-104KL_	100 ±10%	2.15	15	0.15	0.36
LPO4815-154KL_	150 ±10%	3.15	12	0.13	0.30
LPO4815-224KL_	220 ±10%	4.30	10	0.11	0.27

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

LPO4815-224KLC

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.
- DCR measured on a micro-ohmmeter.
- SRF measured using Agilent/HP 4191A or equivalent.
- 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. This information is for reference only and does not represent absolute maximum ratings. [Click for temperature derating information](#).
- 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 354-1 Revised 11/24/15

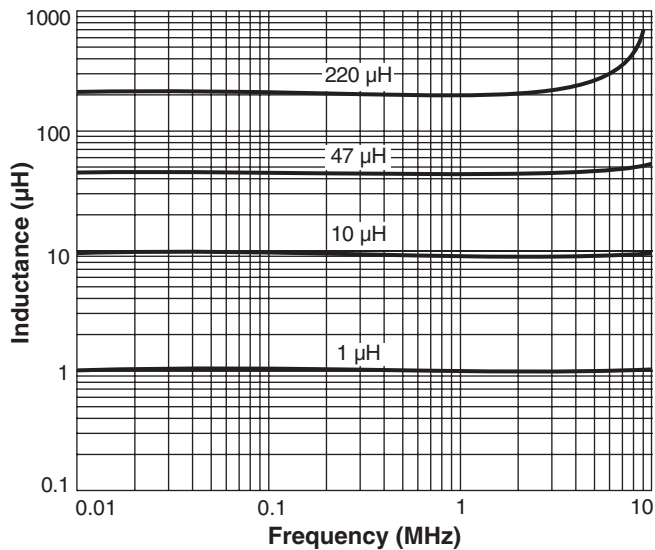
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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

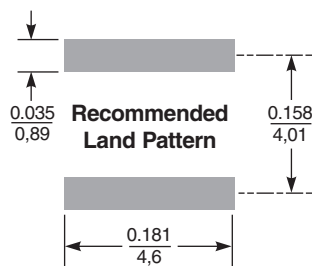
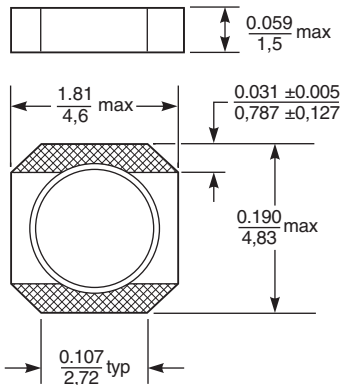
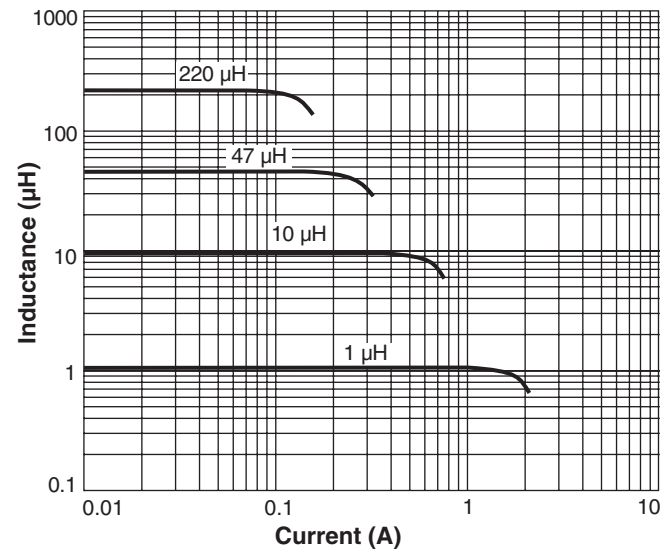


SMT Power Inductors - LPO4815 Series

Typical L vs Frequency



Typical L vs Current



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