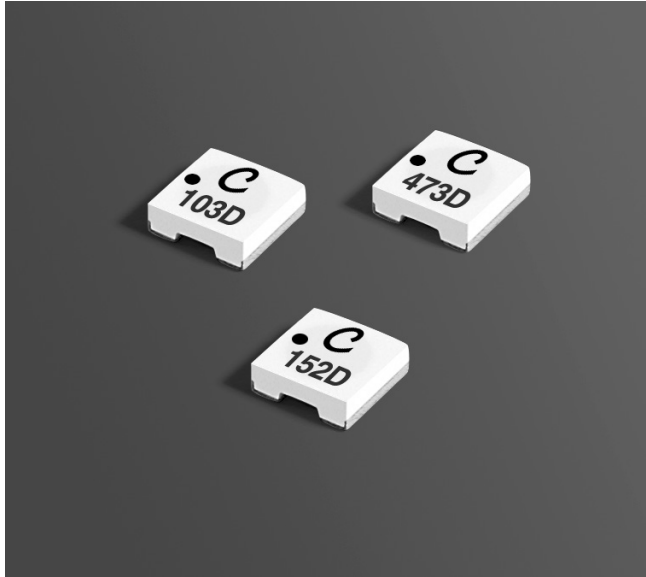




# SMT Power Inductors - LPO3010



- Miniature power inductors – 3 × 3 mm, only 1.0 mm tall
- Low DCR; excellent current handling

**Designer's Kit C388** contains 3 of each part

**Core material** Ferrite

**Terminations** RoHS compliant silver-palladium-platinum-glass frit. Other terminations available at additional cost.

**Weight** 20 – 22 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)

**Packaging** 1000/7" reel; 3500/13" reel Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.14 mm pocket depth

**Recommended pick and place nozzle** OD: 3 mm; ID: ≤1.5 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>	Inductance <sup>2</sup> (μH)	DCR max <sup>3</sup> (Ohms)	SRF typ <sup>4</sup> (MHz)	Isat <sup>5</sup> (A)	Irms <sup>6</sup> (A)
LPO3010-102NL_	1.0 ±30%	0.140	200	1.7	1.4
LPO3010-122NL_	1.2 ±30%	0.160	190	1.6	1.4
LPO3010-152NL_	1.5 ±30%	0.200	150	1.3	1.0
LPO3010-222NL_	2.2 ±30%	0.265	140	1.2	0.90
LPO3010-332NL_	3.3 ±30%	0.335	100	0.96	0.60
LPO3010-472NL_	4.7 ±30%	0.570	80	0.76	0.50
LPO3010-682NL_	6.8 ±30%	0.650	68	0.68	0.47
LPO3010-822NL_	8.2 ±30%	1.00	60	0.64	0.45
LPO3010-103ML_	10 ±20%	1.15	50	0.50	0.45
LPO3010-153ML_	15 ±20%	1.57	35	0.42	0.40
LPO3010-223ML_	22 ±20%	2.20	30	0.37	0.35
LPO3010-333ML_	33 ±20%	2.80	14	0.31	0.29
LPO3010-473ML_	47 ±20%	4.60	12	0.30	0.28

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

**LPO3010-473MLC**

**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). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

D = 13" machine-ready reel. EIA-481 embossed plastic tape (3500 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms using an Agilent/HP 4192A.
  3. DCR measured on a micro-ohmmeter.
  4. SRF measured using an 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 40°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



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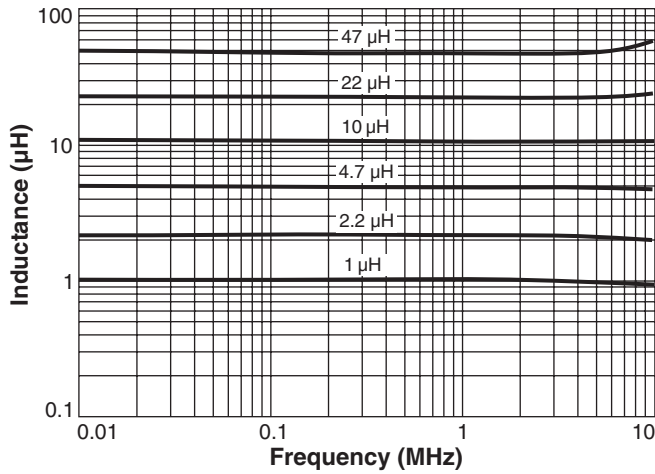
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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

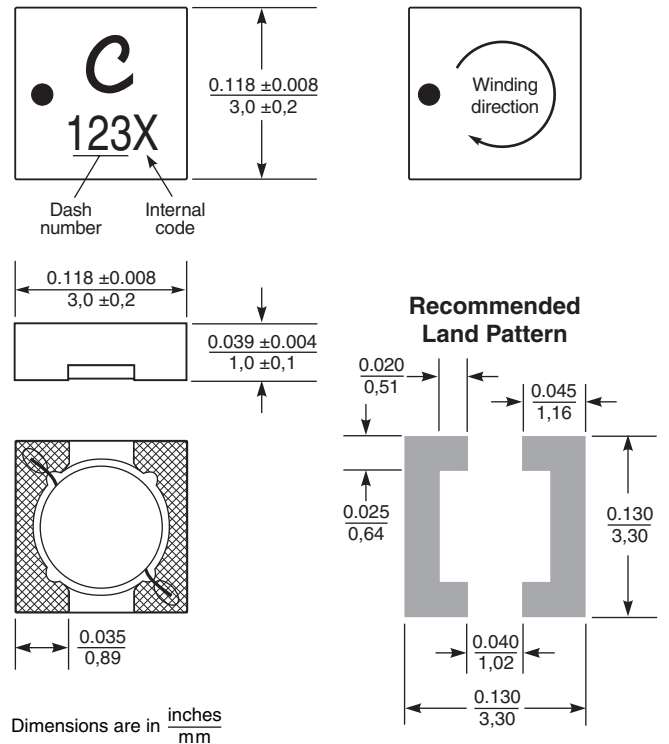
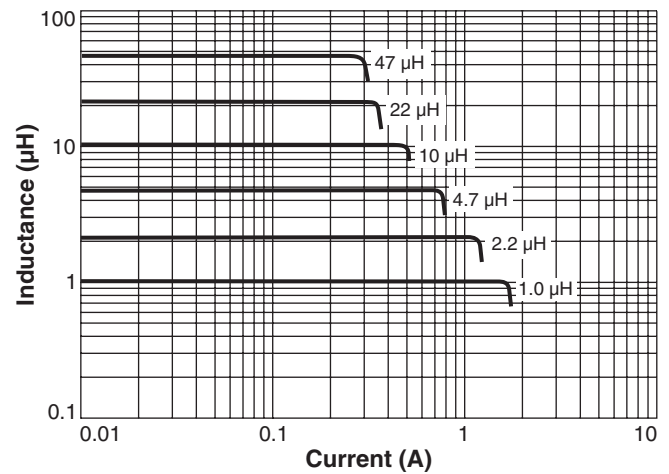


# SMT Power Inductors - LPO3010 Series

## Typical L vs Frequency



## Typical L vs Current



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