



SMT Power Inductors – DO3340P Series



- Excellent current handling – up to 3.5 Arms with an 8 A saturation current rating for a 10 μ H part.

Designer's Kit C310 contains 3 of each part

Core material Ferrite

Core and winding loss See www.coilcraft.com/coreloss

Terminations RoHS compliant gold over nickel over phos bronze. Other terminations available at additional cost.

Weight 1.8 – 2.8 g

Ambient temperature -40°C to $+85^{\circ}\text{C}$ with I_{rms} current, $+85^{\circ}\text{C}$ to $+105^{\circ}\text{C}$ with derated current

Storage temperature Component: -40°C to $+105^{\circ}\text{C}$.
Packaging: -40°C to $+80^{\circ}\text{C}$

Resistance to soldering heat Max three 40 second reflows at $+260^{\circ}\text{C}$, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at $<30^{\circ}\text{C}$ / 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 225 per 13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 24 mm pocket spacing, 11.4 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number ¹	L $\pm 20\%$ ² (μ H)	DCR max (Ohms)	SRF typ (MHz)	Isat ³ (A)	Irms ⁴ (A)
DO3340P-103ML_	10	0.040	35	8.0	3.5
DO3340P-153ML_	15	0.050	18	7.0	3.0
DO3340P-223ML_	22	0.066	13	5.5	2.5
DO3340P-333ML_	33	0.080	11	4.0	2.0
DO3340P-473ML_	47	0.110	9.0	3.8	1.6
DO3340P-683ML_	68	0.17	7.0	3.0	1.2
DO3340P-104ML_	100	0.22	5.5	2.5	1.2
DO3340P-154ML_	150	0.34	4.5	2.0	0.9
DO3340P-224ML_	220	0.44	3.5	1.6	0.7
DO3340P-334ML_	330	0.70	3.0	1.2	0.6
DO3340P-474ML_	470	0.95	2.5	1.0	0.3
DO3340P-684ML_	680	1.15	2.0	1.0	0.2
DO3340P-105ML_	1000	2.0	1.5	0.8	0.1

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

DO3316P-105ML D

Termination: L = RoHS compliant gold over nickel over phos bronze.
Special order: T = RoHS tin-silver-copper (95.5/4/0.5)
or S = non-RoHS tin-lead (63/37).

Packaging: D = 13" machine-ready reel. EIA-481 embossed plastic tape (225 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 D instead.

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
 3. DC current at which inductance drops 10% (typ) from its value without current.
 4. Current that causes a 20°C temperature rise from 25°C ambient
 5. Electrical specifications at 25°C .
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

SPICE models
ON OUR WEB SITE OR CD

Coilcraft[®]

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

Document 171-1 Revised 010/14/08

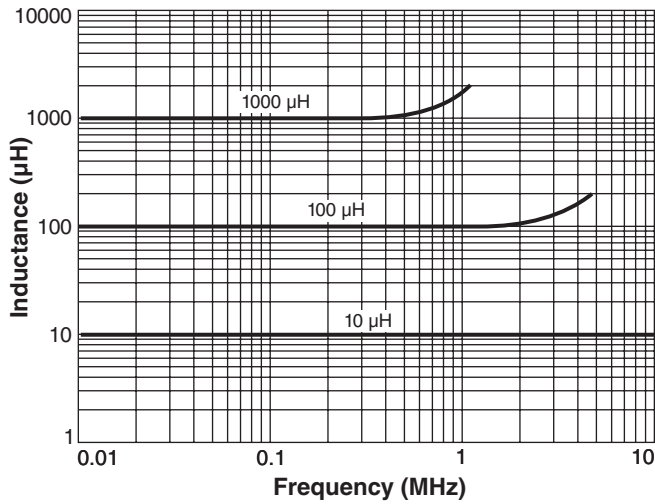
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail info@coilcraft.com Web <http://www.coilcraft.com>

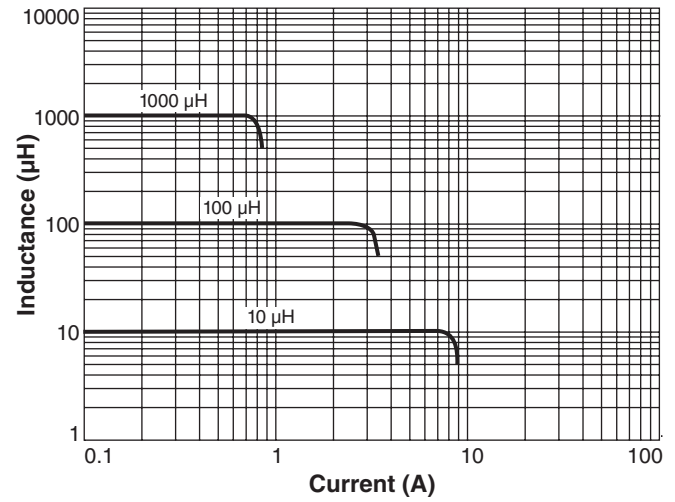


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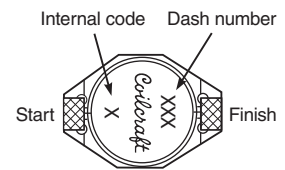
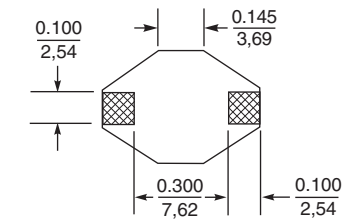
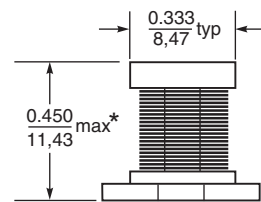
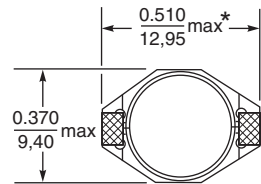
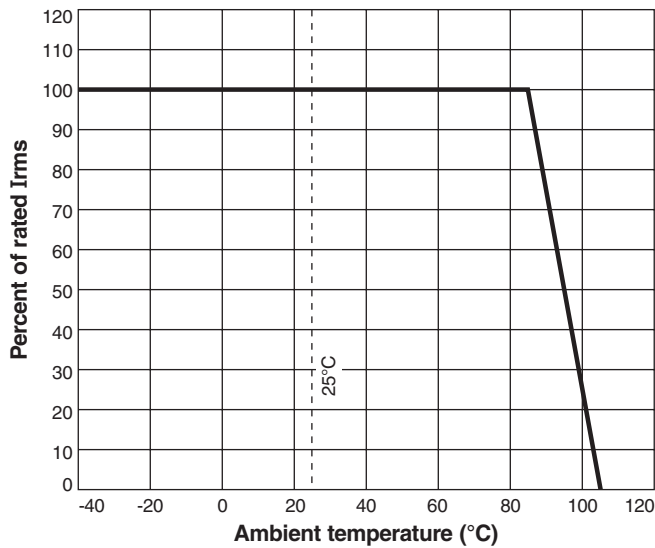
Typical L vs Frequency



Typical L vs Current



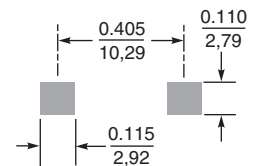
Irms Derating



Part marking since Feb. 2005. Parts manufactured prior to that date may have color dots. Visit www.coilcraft.com/coilpowr.cfm for details.

* Allow an additional 0.02/0.508 in width and 0.01/0.254 in height for optional tin-lead and tin-silver-copper application.

Recommended Land Pattern



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



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