



SMT Power Inductors – DO3316 Series



The DO3316 Series of surface mount inductors is designed for the smallest possible size, lowest cost and highest performance. Their high energy storage and very low resistance make them the ideal inductors for DC-DC conversion in notebook computers, PDAs, step-up or step-down converters, flash memory programmers, etc.

For reliable surface mounting, we've designed the DO Series with a flat top and robust temperature deflection to prevent damage during solder reflow.

In addition to the standard versions shown here, custom inductors are available to meet your exact requirements.

Coilcraft **Designer's Kit C378** contains three samples each of the parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

SPICE models ON OUR WEB SITE OR CD

Part number ¹	L ±20% ² (µH)	DCR max (Ohms)	SRF typ ³ (MHz)	Isat ⁴ (A)	Irms ⁵ (A)
DO3316P-102ML_	1.0	0.009	100	9.0	6.8
DO3316P-152ML_	1.5	0.010	90	8.0	6.4
DO3316P-222ML_	2.2	0.012	80	7.0	6.1
DO3316P-332ML_	3.3	0.015	65	6.4	5.4
DO3316P-472ML_	4.7	0.018	45	5.4	4.8
DO3316P-682ML_	6.8	0.027	38	4.6	4.4
DO3316P-103ML_	10	0.038	30	3.8	3.9
DO3316P-153ML_	15	0.046	27	3.0	3.1
DO3316P-223ML_	22	0.085	19	2.3	2.7
DO3316P-333ML_	33	0.10	15	2.0	2.1
DO3316P-473ML_	47	0.14	12	1.6	1.8
DO3316P-683ML_	68	0.20	10	1.4	1.5
DO3316P-104ML_	100	0.28	9	1.2	1.3
DO3316P-154ML_	150	0.40	6	1.0	1.0
DO3316P-224ML_	220	0.61	5	0.8	0.8
DO3316P-334ML_	330	1.02	4.5	0.6	0.6
DO3316P-474ML_	470	1.27	3.5	0.5	0.5
DO3316P-684ML_	680	2.02	2.5	0.4	0.4
DO3316P-105ML_	1000	3.00	2.0	0.3	0.3

1. When ordering, please specify **packaging** code:

DO3316P-105ML D

Packaging: **D** = 13" 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 D instead.

2. Tested at 100 kHz, 0.1 Vrms, 0 Adc.

3. SRF >13 MHz measured using Agilent/HP 8753D network analyzer; <13 MHz using Agilent/HP 4192A.

4. DC current at which inductance drops 10% (typ) from its value without current.

5. Average current for 40°C temperature rise from 25°C.

6. Operating temperature range -40°C to +85°C.

7. Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

See Color Coding section for color dot part marking data.

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Specifications subject to change without notice.

Please check our website for latest information.

Document 179-1 Revised 10/24/05

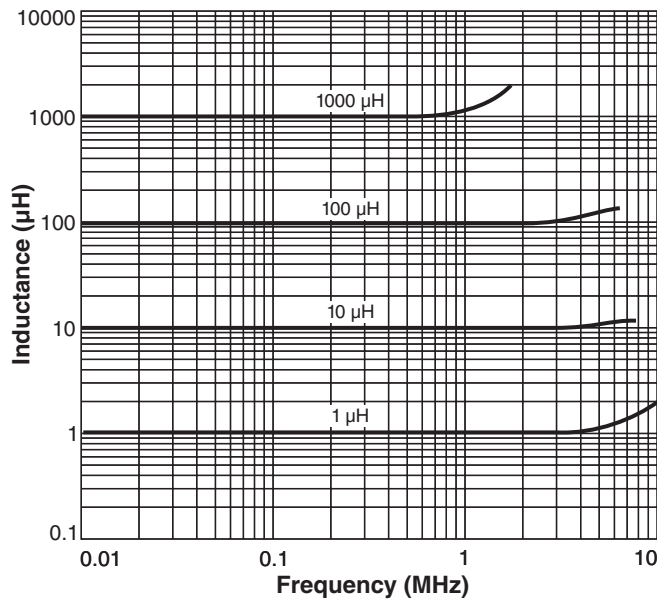
1102 Silver Lake Road Cary, Illinois 60013 **Phone** 847/639-6400 **Fax** 847/639-1469

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

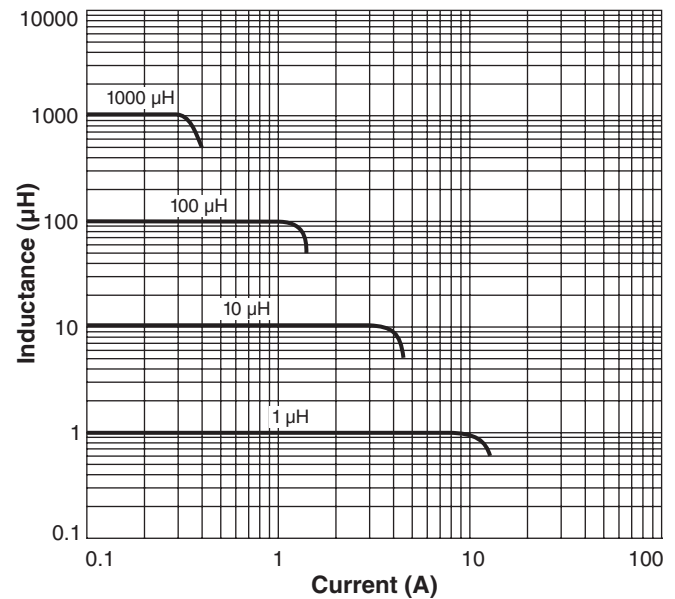


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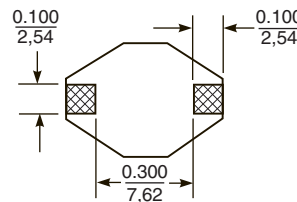
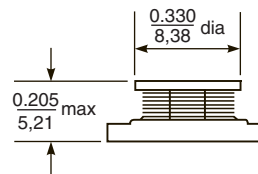
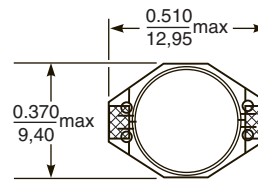
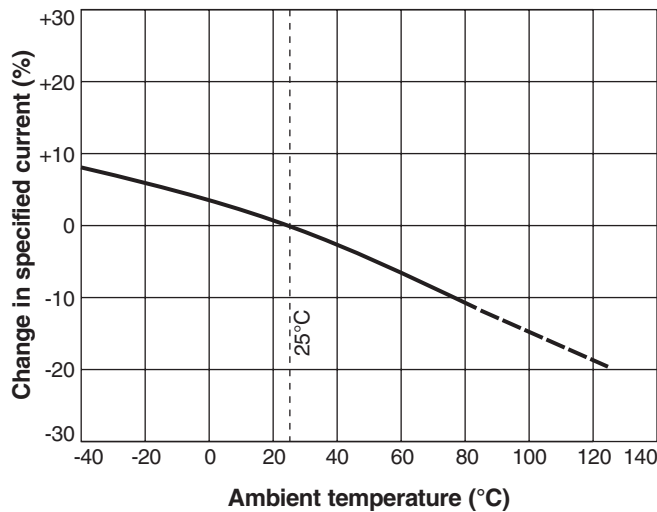
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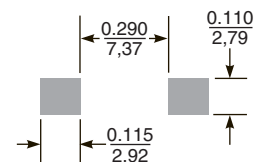
Typical L vs Current



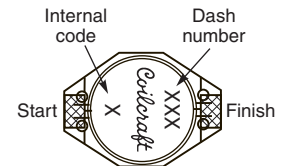
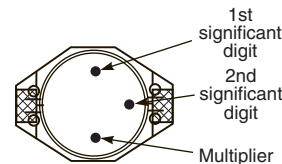
Current Derating



Recommended Land Pattern



Part Marking



Weight: 0.92 – 1.23 g

Terminations: Nickel/gold over phos bronze

Tape and reel: 1000/13" reel 24 mm tape width

For packaging data see Tape and Reel Specifications section.

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Please check our website for latest information.

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