



SMT Power Inductors – DO3316 Series



The DO3316 Series of surface mount inductors is designed for highest performance at a very economical price. 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.

They are available in 19 inductance values, most at 10% tolerance. 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 20% tolerance parts. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

SPICE models ON OUR WEB SITE OR CD

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

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

DO3316P-105 **M** **L** **D**

Tolerance: **M** = 20%, **K** = 10% (Table shows stock tolerances in bold.)

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. Tolerances in bold are stocked for immediate shipment.
4. SRF >13 MHz measured using Agilent/HP 8753D network analyzer; <13 MHz using Agilent/HP 4192A.
5. DC current at which inductance drops 10% (typ) from its value without current.
6. Average current for 40°C temperature rise from 25°C.
7. Operating temperature range -40°C to +85°C.
8. Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

See Color Coding section for color dot part marking data.

Coilcraft[®]

Specifications subject to change without notice.

Please check our website for latest information.

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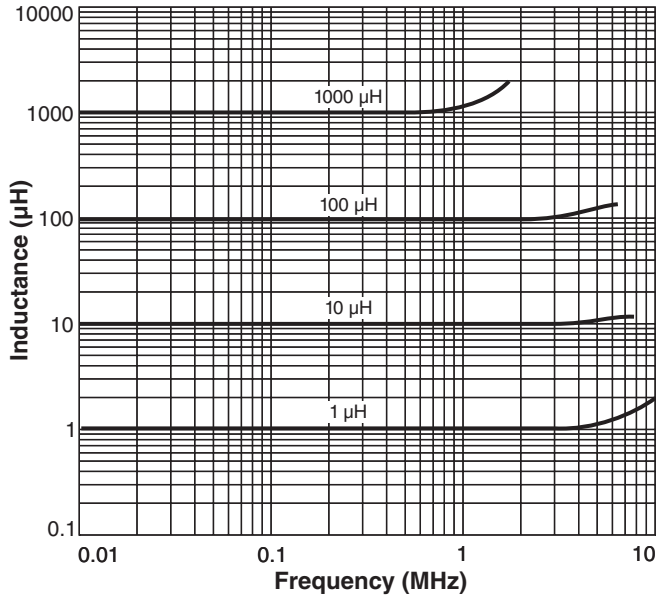
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

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

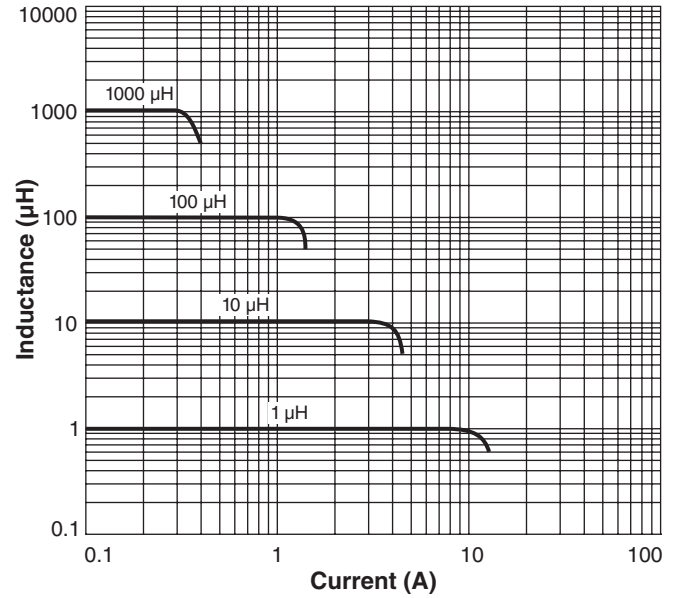


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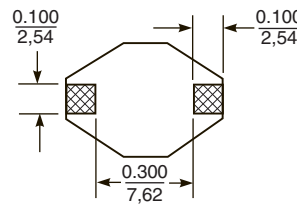
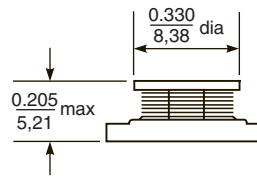
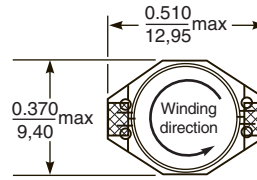
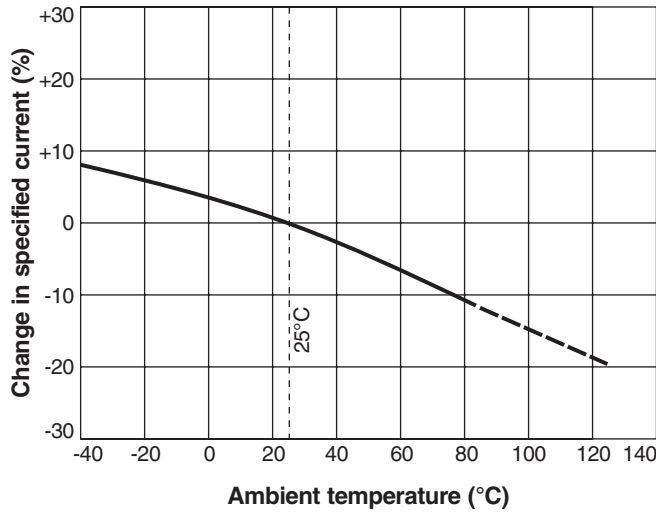
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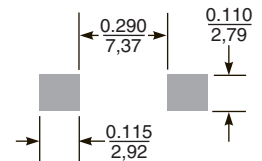
Typical L vs Current



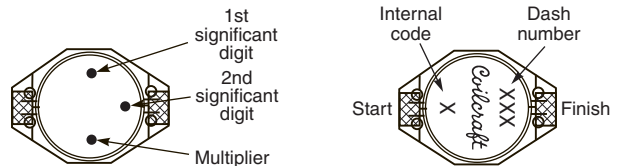
Current Derating



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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