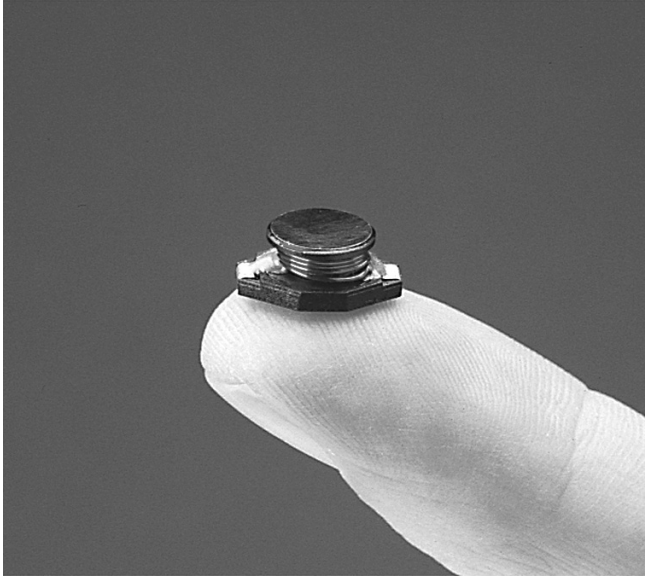




SMT Power Inductors—DO3316P Series



- High energy storage and very low resistance
- Most values available with 10% tolerance
- High inductance values are perfect for EL driver applications.

Designer's Kit C378 contains 3 of each 20% 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 0.92– 1.23 g

Ambient temperature –40°C to +85°C with Irms current, +85°C to +125°C with derated current

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 per 13" reel Plastic tape: 24 mm wide, 0.33 mm thick, 12 mm pocket spacing, 5.8 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number ¹	L ² (µH)	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-222_L_	2.2	20,10	0.012	80	7.0	6.1
DO3316P-332_L_	3.3	20,10	0.015	65	6.4	5.4
DO3316P-472_L_	4.7	20,10	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	0.80	0.80
DO3316P-334_L_	330	20,10	1.02	4.5	0.60	0.60
DO3316P-474_L_	470	20,10	1.27	3.5	0.50	0.50
DO3316P-684_L_	680	20,10	2.02	2.5	0.40	0.40
DO3316P-105_L_	1000	20,10	3.00	2.0	0.30	0.30
DO3316P-155_L_	1500	20,10	4.49	1.7	0.29	0.27
DO3316P-335_L_	3300	20,10	8.97	1.1	0.19	0.17

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

DO3316P-105MLD

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

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 (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 using an Agilent/HP 4263B LCR meter or equivalent.
 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. 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



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com

UK +44-1236-730595 sales@coilcraft-europe.com

Taiwan +886-2-2264 3646 sales@coilcraft.com.tw

China +86-21-6218 8074 sales@coilcraft.com.cn

Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 179-1 Revised 09/25/12

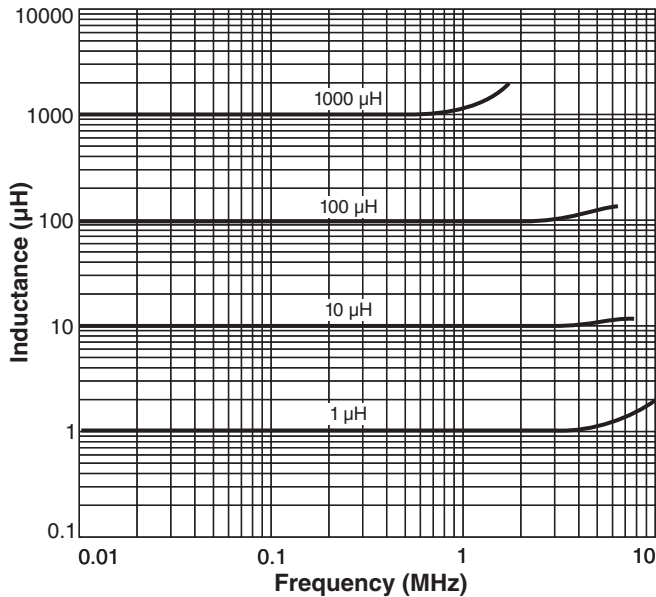
© Coilcraft Inc. 2012

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

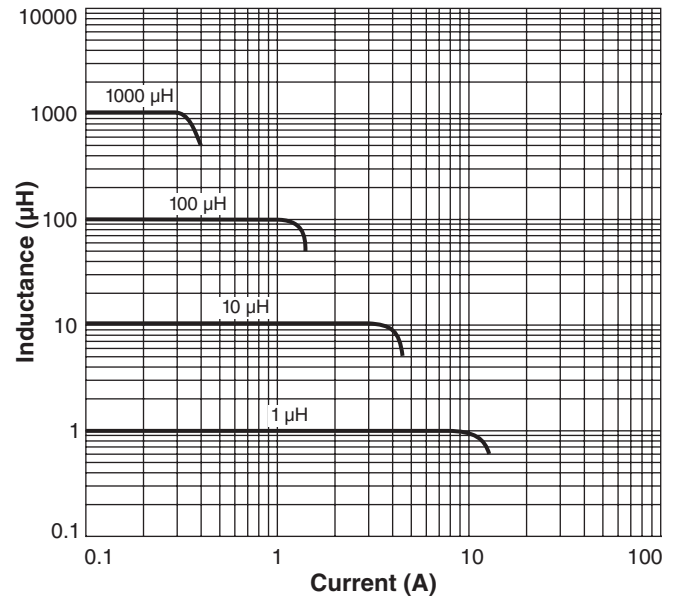


SMT Power Inductors – DO3316P Series

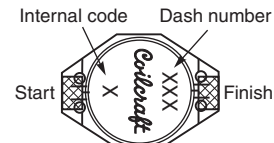
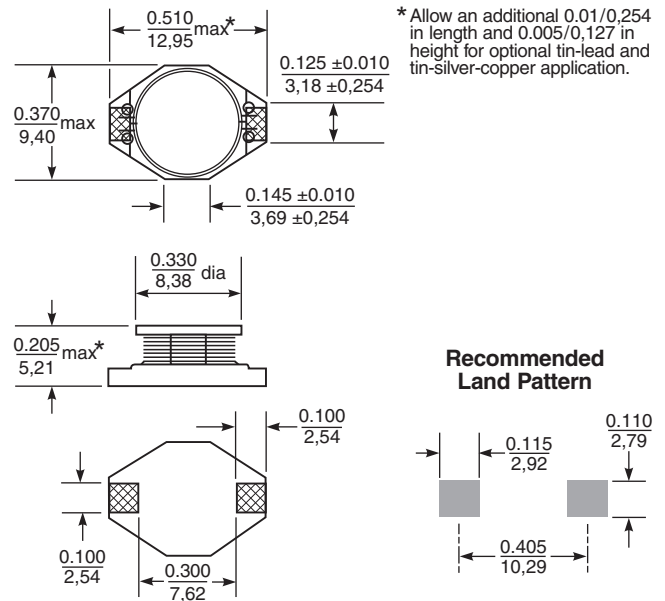
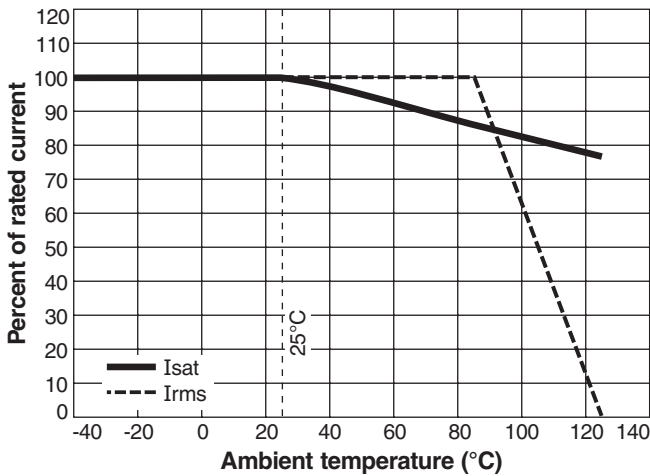
Typical L vs Frequency



Typical L vs Current



Current Derating



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

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



US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 179-2 Revised 09/25/12
 © Coilcraft Inc. 2012
 This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check out web site for latest information.