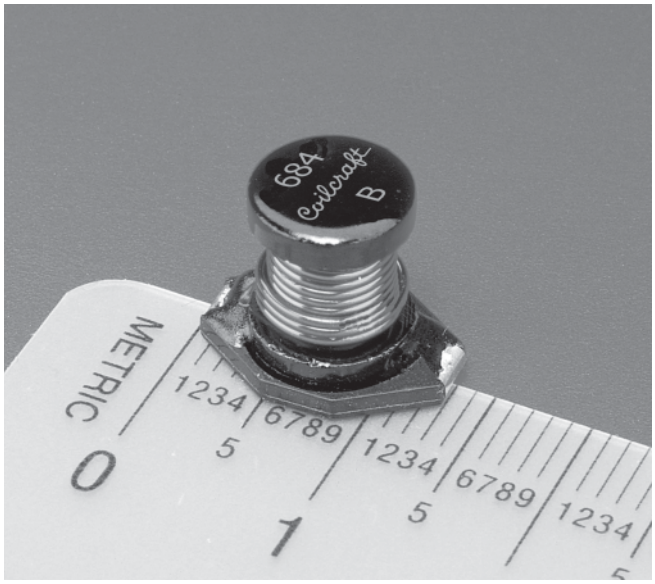
SMT Power Inductors – DO3340P Series



- Excellent current handling – up to 3.5 Arms with an 8 A saturation current rating for a 10 µH 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°C with Irms current, +85°C to +105°C with derated current
Storage temperature Component: –40°C to +105°C. Packaging: –55°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)
Mean Time Between Failures (MTBF) 26,315,789 hours
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 ±20%[2] (µH)	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-105M L 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.

See Qualification Standards section for environmental and test data.
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

SPICE models
ON OUR WEB SITE OR CD

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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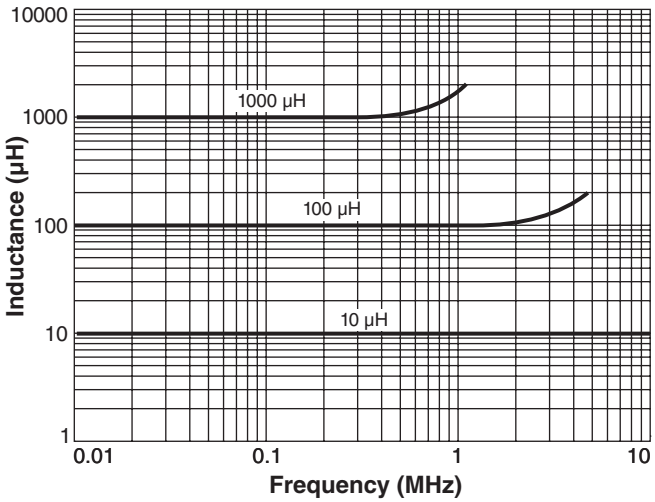
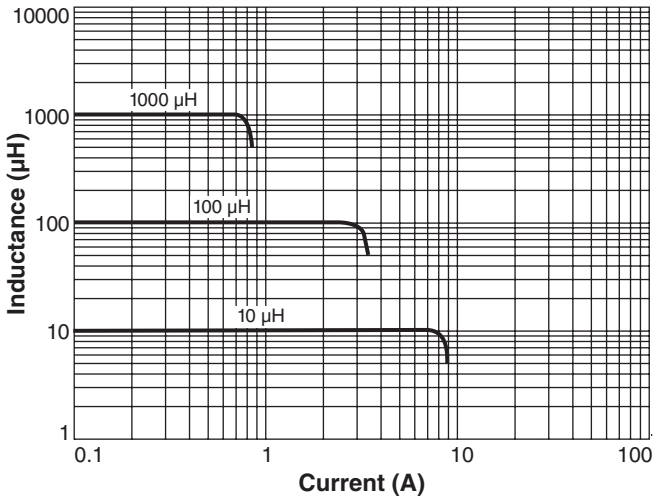
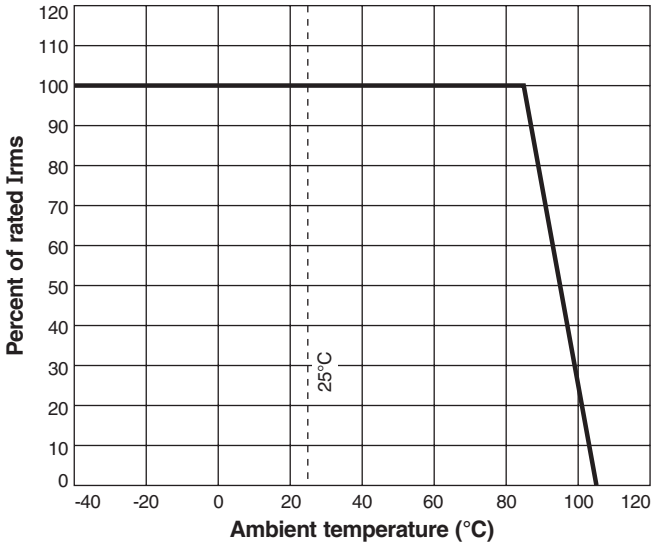
Typical L vs Frequency

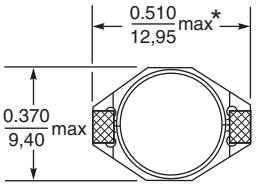


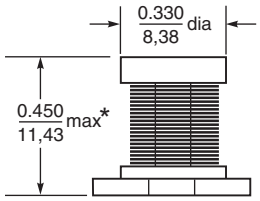
Typical L vs Current

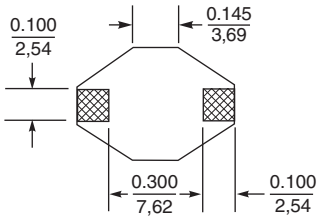


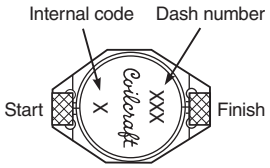
Irms Derating







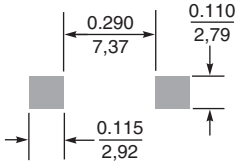




Part marking since Feb. 2005. Parts manufactured prior to that date may have color dots. Visit www.coilcraft.com/colrpowr.cfm for details.

* 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 inches / mm

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