



SMT Power Inductors – DO3308P Series



- Handle saturating currents up to 4.2 Amps
- Defense Supply Center CID: A-A-59738

Designer's Kit C309 contains 3 each of all values

Core material Ferrite

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

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

Weight 594 – 640 mg

Ambient temperature –40°C to +85°C with I_{rms} current, +85°C to +125°C with derated current

Storage temperature Component: –40°C to +125°C.

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 1000/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 12 mm pocket spacing, 3.7 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)	I _{rms} ⁴ (A)
DO3308P-472ML_	4.7	0.036	50	4.2	3.2
DO3308P-682ML_	6.8	0.060	47	3.9	2.6
DO3308P-103ML_	10	0.085	37	2.7	2.3
DO3308P-153ML_	15	0.12	35	2.3	1.9
DO3308P-223ML_	22	0.18	26	1.8	1.5
DO3308P-333ML_	33	0.25	19	1.6	1.2
DO3308P-473ML_	47	0.32	14	1.3	1.0
DO3308P-683ML_	68	0.54	12	1.1	0.9
DO3308P-104ML_	100	0.69	11	0.87	0.73
DO3308P-154ML_	150	0.94	9.0	0.74	0.62
DO3308P-224ML_	220	1.60	6.0	0.56	0.51
DO3308P-334ML_	330	2.15	5.5	0.50	0.40
DO3308P-474ML_	470	3.30	4.5	0.40	0.33
DO3308P-684ML_	680	4.40	3.5	0.33	0.28
DO3308P-105ML_	1000	7.00	2.5	0.29	0.23

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

DO3308P-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 (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. Inductance tested at 100 kHz, 0.1 V_{rms}, 0 Adc.
3. DC current at which inductance drops 10% (typ) from its value without current.
4. Current that causes a 40°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.

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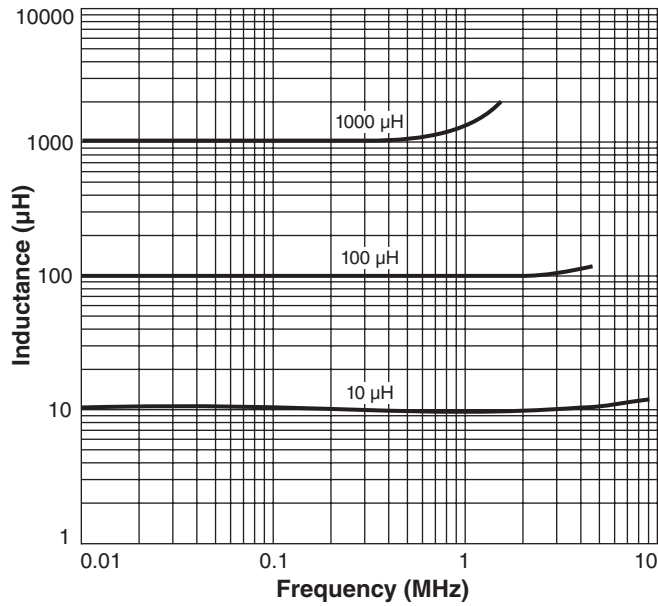
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

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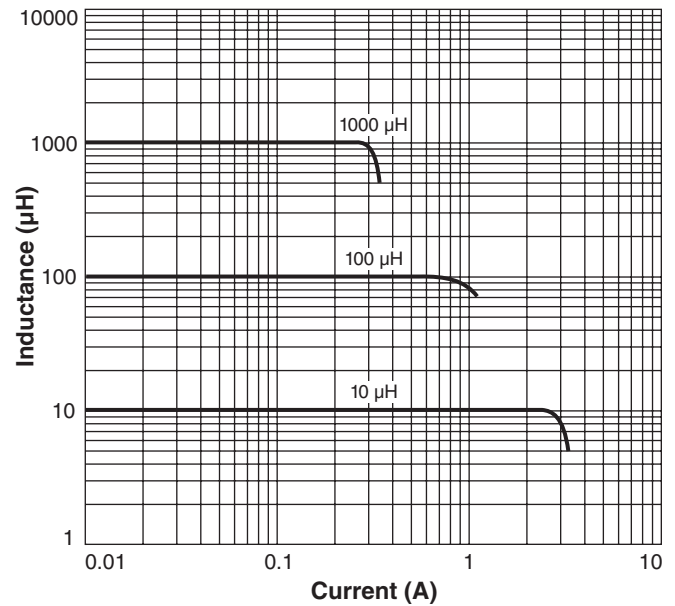


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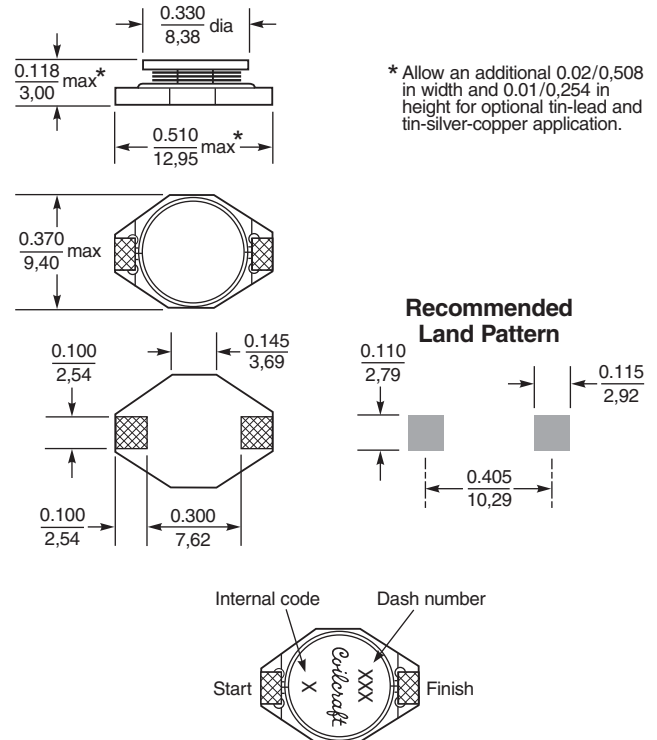
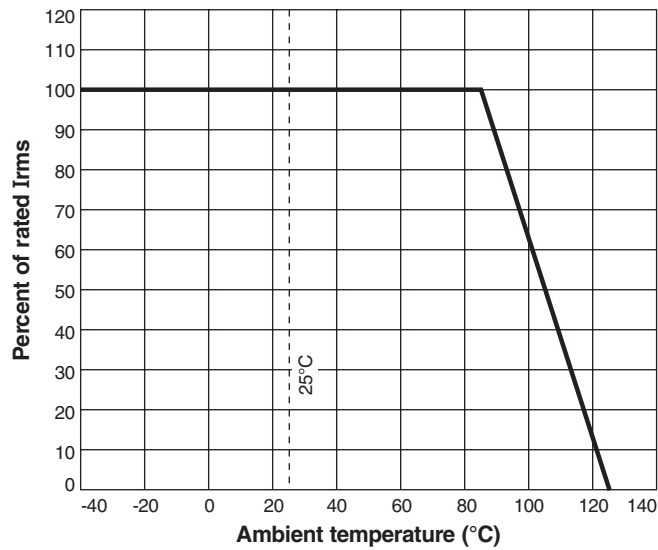
Typical L vs Frequency



Typical L vs Current



Irms Derating



* 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.

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

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



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