

SMT Power Inductors – DO3308P



- 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 compliant electroplated gold (<50 µin) over nickel over phos bronze. Other terminations available at additional cost.

Weight 594 – 640 mg

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

Maximum part temperature +125°C (ambient + temp rise)

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 1000/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 12 mm pocket spacing, 3.7 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Part number ¹	L ±20% ² (µH)	Percent tol ³	DCR max (Ohms)	SRF typ (MHz)	Isat ⁴ (A)	Irms ⁵ (A)
DO3308P-472_L_	4.7	20 ,10	0.036	50	4.2	3.2
DO3308P-682_L_	6.8	20 ,10	0.060	47	3.9	2.6
DO3308P-103_L_	10	20 ,10	0.085	37	2.7	2.3
DO3308P-153_L_	15	20 ,10	0.12	35	2.3	1.9
DO3308P-223_L_	22	20 ,10	0.18	26	1.8	1.5
DO3308P-333_L_	33	20 ,10	0.25	19	1.6	1.2
DO3308P-473_L_	47	20 ,10	0.32	14	1.3	1.0
DO3308P-683_L_	68	20 ,10	0.54	12	1.1	0.9
DO3308P-104_L_	100	20 ,10	0.69	11	0.87	0.73
DO3308P-154_L_	150	20 ,10	0.94	9.0	0.74	0.62
DO3308P-224_L_	220	20 ,10	1.60	6.0	0.56	0.51
DO3308P-334_L_	330	20 ,10	2.15	5.5	0.50	0.40
DO3308P-474_L_	470	20 ,10	3.30	4.5	0.40	0.33
DO3308P-684_L_	680	20 ,10	4.40	3.5	0.33	0.28
DO3308P-105_L_	1000	20 ,10	7.00	2.5	0.29	0.23

1. Please specify **tolerance, termination and packaging** codes:

DO3308P-105MLD

Tolerance: M = 20% K = 10%

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). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.

3. Tolerances in bold are stocked for immediate shipment

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

5. Current that causes a 40°C temperature rise from 25°C ambient.

6. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

SPICE models ON OUR WEB SITE



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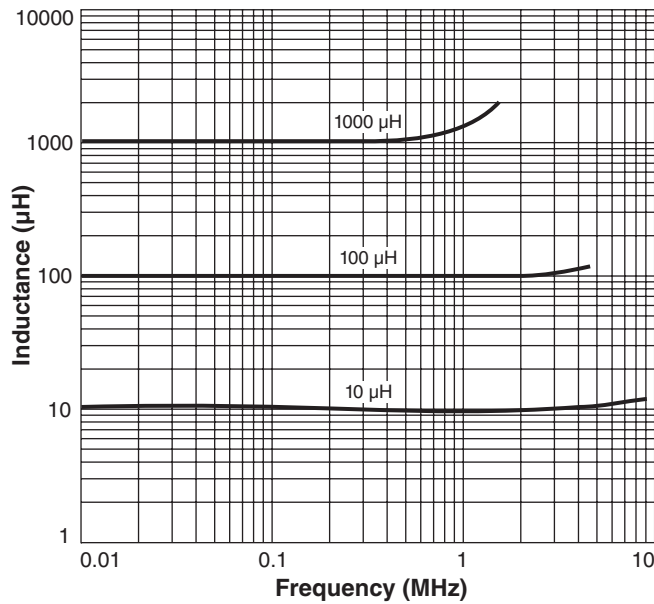
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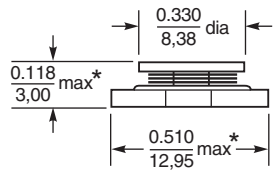
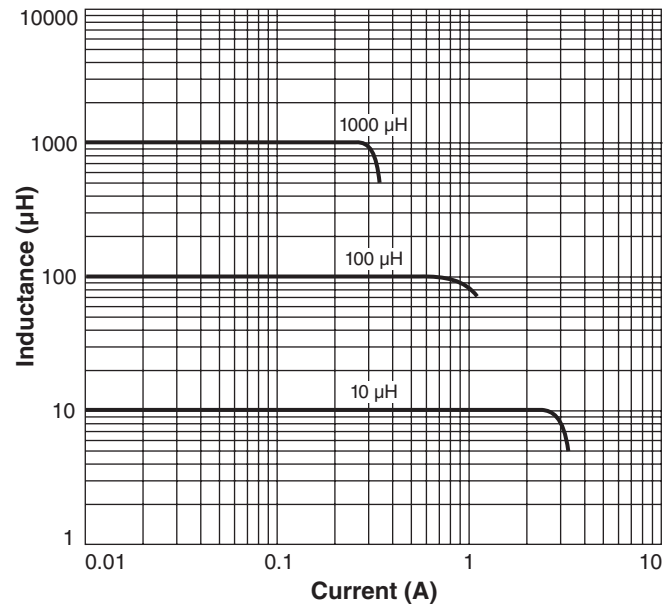


SMT Power Inductors – DO3308P Series

Typical L vs Frequency



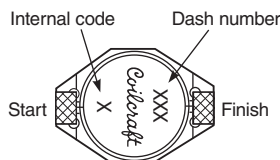
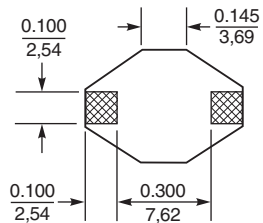
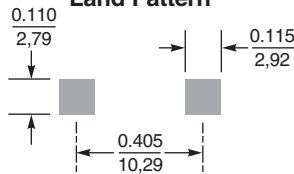
Typical L vs Current



* Allow an additional 0.01/0,254 in length and 0.005/0,127 in height for optional tin-lead and tin-silver-copper application.



Recommended Land Pattern



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



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