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

PCB washing Tested with pure water or alcohol only. For other solvents, 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).

   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.
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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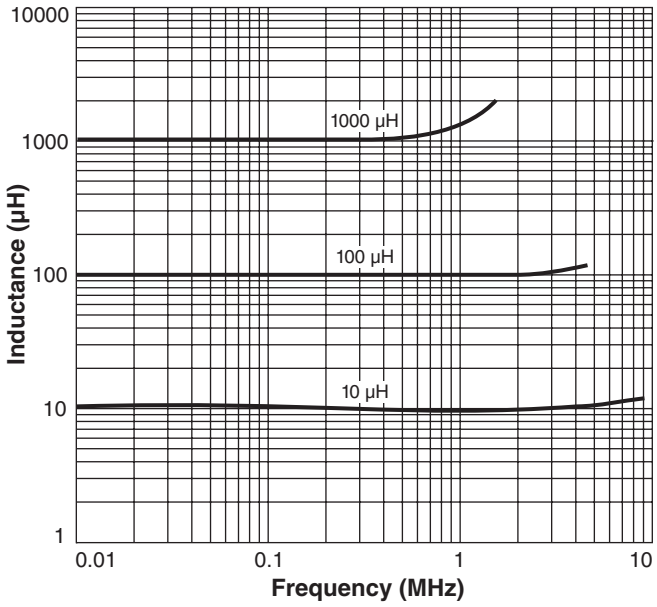
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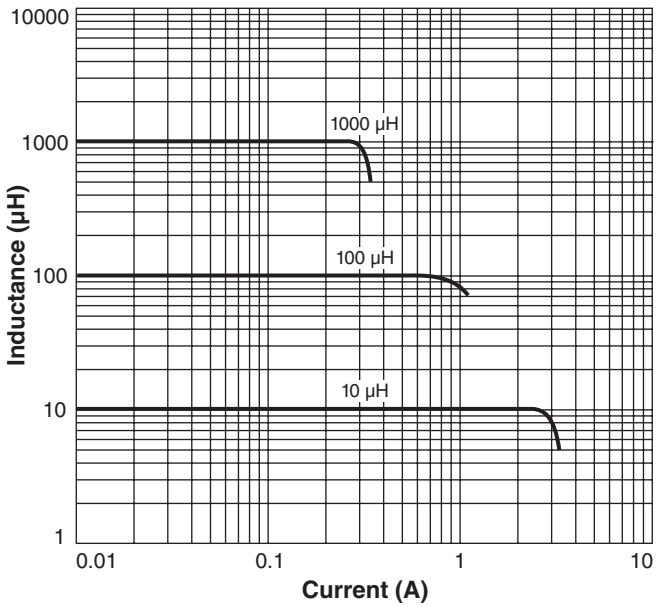
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SMT Power Inductors – DO3308P Series

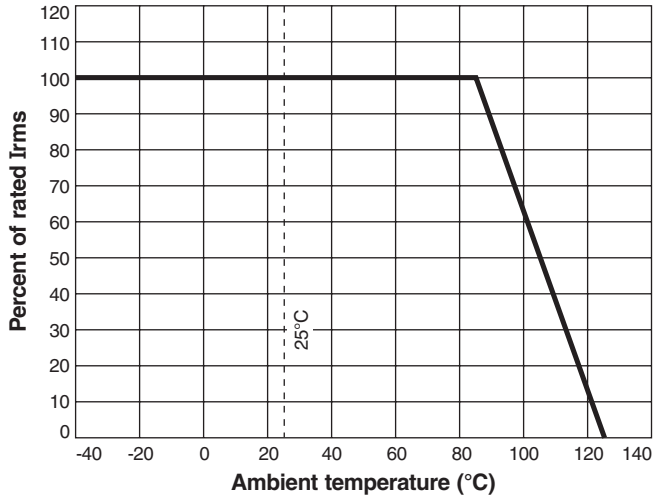
Typical L vs Frequency

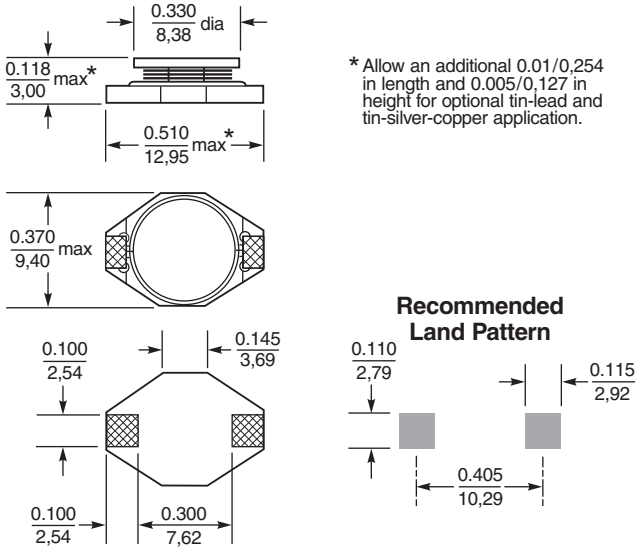


Typical L vs Current



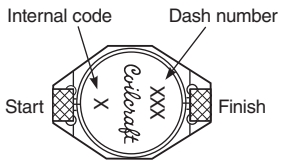
Irms Derating





* 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



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 inches / mm

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