

# 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](http://www.coilcraft.com/coreloss)

**Terminations** RoHS compliant electroplated gold (<50 μm) 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)

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

- 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.

- Inductance tested at 100 kHz, 0.1 Vrms, 0 A dc.
- Tolerances in bold are stocked for immediate shipment
- DC current at which inductance drops 10% (typ) from its value without current.
- Current that causes a 40°C temperature rise from 25°C ambient.
- 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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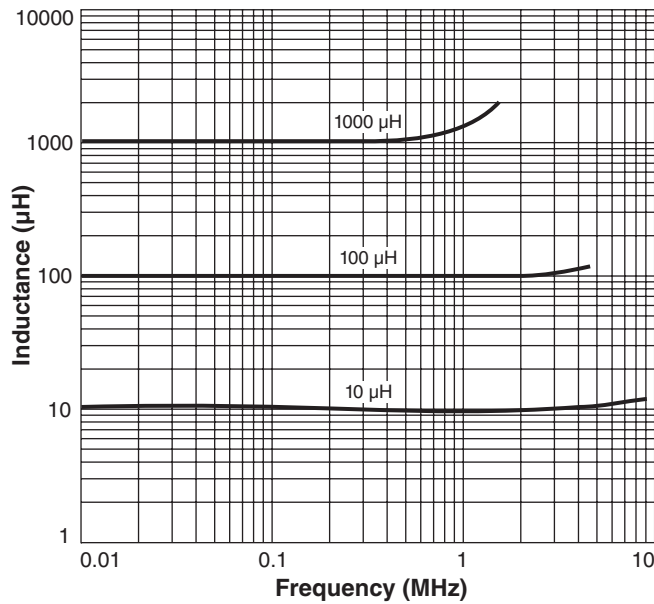
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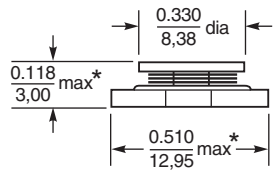
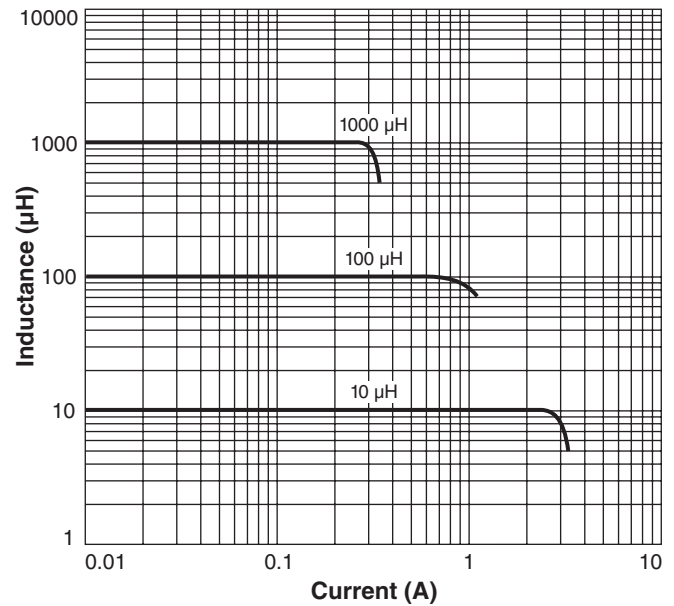


# SMT Power Inductors – DO3308P Series

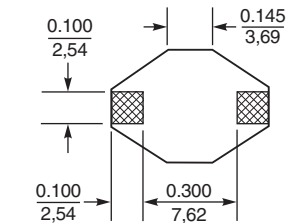
## Typical L vs Frequency



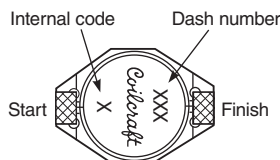
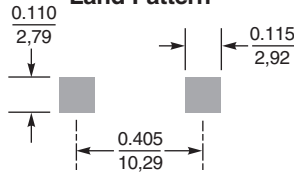
## Typical L vs Current



\* 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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