



# SMT Power Inductors - DO3316H Series



- Soldered self-leaded construction for excellent solderability.
- Very low DCR values and excellent current handling

**Designer's Kit C326** contains 3 of each part

**Core material** Ferrite

**Core and winding loss** See [www.coilcraft.com/coreloss](http://www.coilcraft.com/coreloss)

**Terminations** RoHS compliant tin-silver-copper over copper. Other terminations available at additional cost.

**Weight** 0.95– 1.25 g

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

**Maximum part temperature** +125°C (ambient + temp rise). [Derating](#).

**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** 750 per 13" reel Plastic tape: 24 mm wide, 0.35 mm thick, 12 mm pocket spacing, 6.4 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 <sup>2</sup> (μH)	% tol <sup>3</sup>	DCR max (Ohms)	SRF <sup>4</sup> typ (MHz)	Isat <sup>5</sup> (A)	Irms <sup>6</sup> (A)
DO3316H-121ML_	0.12	<b>20</b>	0.0015	200	28	17
DO3316H-331ML_	0.33	<b>20</b>	0.002	200	20	16
DO3316H-681ML_	0.68	<b>20</b>	0.005	200	13	12
DO3316H-102ML_	1.0	<b>20</b>	0.006	100	11	10
DO3316H-152ML_	1.5	<b>20</b>	0.008	90	9.0	9.0
DO3316H-222_L_	2.2	<b>20,10</b>	0.011	80	7.8	7.4
DO3316H-272_L_	2.7	<b>20,10</b>	0.012	65	7.0	6.6
DO3316H-332_L_	3.3	<b>20,10</b>	0.014	60	6.4	5.9
DO3316H-392_L_	3.9	<b>20,10</b>	0.015	50	5.9	5.3
DO3316H-472_L_	4.7	<b>20,10</b>	0.018	45	5.4	4.8

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

**DO3316H-472MLD**

**Tolerance:** **M** = 20%, **K** = 10% (Table shows stock tolerances in bold.)

**Termination:** **L** = RoHS compliant tin-silver-copper over copper.

**Special order:** **S** = non-RoHS tin-lead (63/37).

**Packaging:** **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (750 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 **C** instead.

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.

3. Tolerances in bold are stocked for immediate shipment.

4. SRF measured using Agilent/HP 8753D network analyzer.

5. DC current at 25°C that causes an inductance drop of 10% (typ) from its value without current. [Click for temperature derating information](#).

6. Current that causes a 40°C temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. [Click for temperature derating information](#)

7. 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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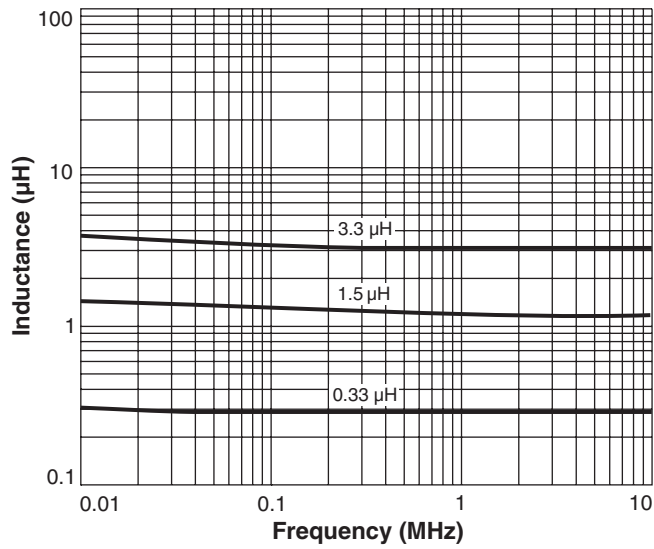
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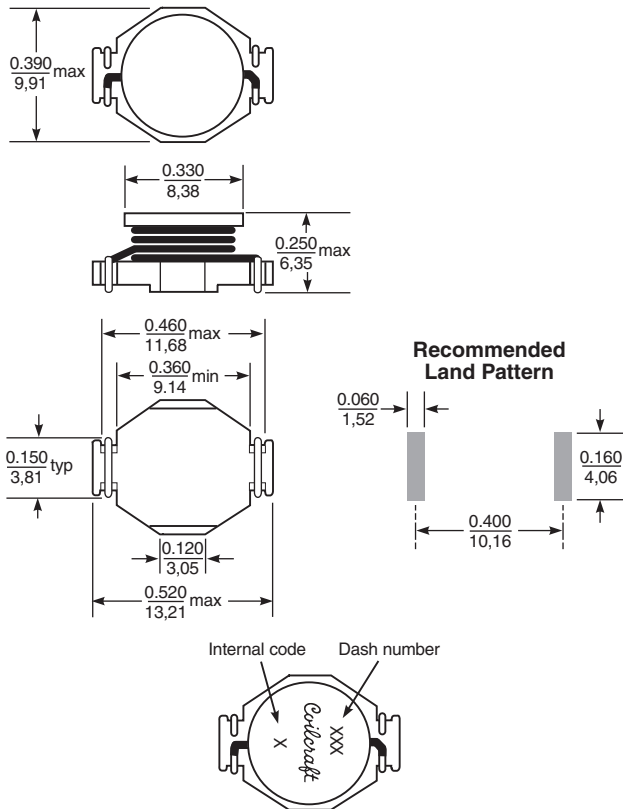
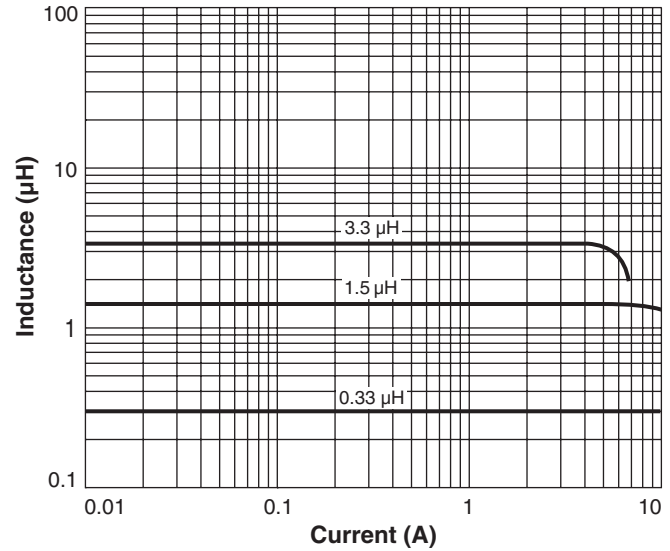


# SMT Power Inductors - DO3316H Series

## Typical L vs Frequency



## Typical L vs Current



Dimensions are in inches/mm



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