



# SMT Power Inductors – DO3340H



- Isat ratings up to 56 A; Irms ratings to 30 A
- Self-lead construction for excellent solderability
- 37 inductance values from 0.27 to 1000  $\mu$ H
- AEC-Q200 Grade 1 qualified ( $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  ambient)

**Core material** Ferrite

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

**Weight** 1.907 – 2.856 g

**Ambient temperature**  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  with ( $40^{\circ}\text{C}$  rise) Irms current

**Maximum part temperature**  $+125^{\circ}\text{C}$  (ambient + temp rise).

**Storage temperature** Component:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .

Tape and reel packaging:  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$

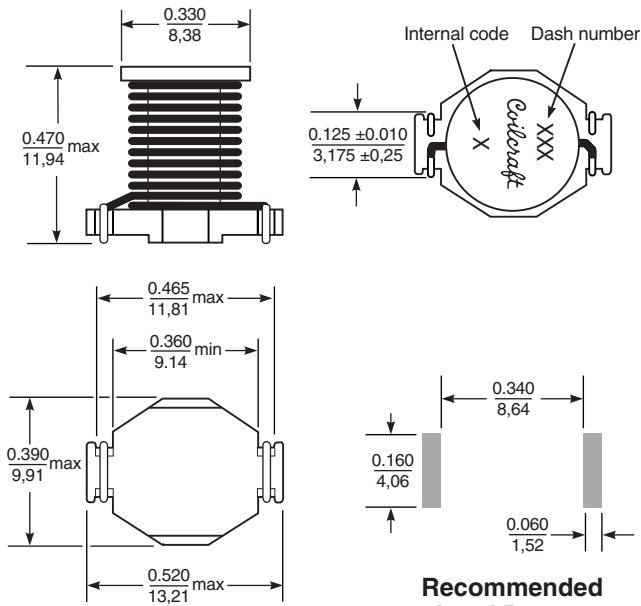
**Resistance to soldering heat** Max three 40 second reflows at  $+260^{\circ}\text{C}$ , parts cooled to room temperature between cycles

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at  $<30^{\circ}\text{C}$  / 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

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).



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

**Packaging** 350 per 13" reel; Plastic tape: 24 mm wide, 0.5 mm thick, 16 mm pocket spacing, 11.7 mm pocket depth



# SMT Power Inductors – DO3340H Series

Part number <sup>1</sup>	Inductance <sup>2</sup> ( $\mu$ H)	DCR (mOhms)		SRF typ <sup>3</sup> (MHz)	Isat (A) <sup>4</sup>			Irms (A) <sup>5</sup>	
		typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
DO3340H-271NLD	0.27 $\pm$ 30%	1.3	2.5	410	54.0	55.0	56.0	20.0	30.0
DO3340H-471NLD	0.47 $\pm$ 30%	1.8	3.0	210	43.0	44.0	44.0	15.0	22.5
DO3340H-102MLD	1.0 $\pm$ 20%	5.0	6.5	130	25.0	25.5	25.5	10.7	16.0
DO3340H-152MLD	1.5 $\pm$ 20%	5.9	7.0	100	21.5	22.0	22.2	9.70	14.5
DO3340H-222MLD	2.2 $\pm$ 20%	6.9	8.0	82	19.0	19.3	19.4	8.80	13.2
DO3340H-272MLD	2.7 $\pm$ 20%	9.4	12	68	16.4	16.6	16.7	7.40	11.1
DO3340H-332MLD	3.3 $\pm$ 20%	11	15	60	15.3	15.5	15.6	6.20	9.30
DO3340H-392MLD	3.9 $\pm$ 20%	12	17	57	14.1	14.4	14.5	5.60	8.40
DO3340H-472MLD	4.7 $\pm$ 20%	13	19	47	13.1	13.3	13.4	5.10	7.60
DO3340H-562MLD	5.6 $\pm$ 20%	14	22	42	12.3	12.5	12.6	4.60	6.90
DO3340H-682MLD	6.8 $\pm$ 20%	19	24	37	11.2	11.3	11.4	3.85	5.77
DO3340H-822MLD	8.2 $\pm$ 20%	22	26	28	10.0	10.2	10.3	3.50	5.25
DO3340H-103MLD	10 $\pm$ 20%	28	31	24	9.20	9.30	9.40	3.20	4.80
DO3340H-123MLD	12 $\pm$ 20%	32	36	19	8.20	8.50	8.60	2.90	4.35
DO3340H-153MLD	15 $\pm$ 20%	36	41	15.0	7.80	7.90	8.00	2.70	4.05
DO3340H-183MLD	18 $\pm$ 20%	40	44	15.0	7.30	7.40	7.50	2.60	3.90
DO3340H-223MLD	22 $\pm$ 20%	46	52	14.0	6.50	6.70	6.70	2.40	3.60
DO3340H-273MLD	27 $\pm$ 20%	67	73	12.6	5.80	5.90	5.90	2.30	3.45
DO3340H-333KLD	33 $\pm$ 10%	72	80	12.4	5.50	5.60	5.60	2.00	3.00
DO3340H-393KLD	39 $\pm$ 10%	80	95	9.8	5.00	5.10	5.20	1.80	2.70
DO3340H-473KLD	47 $\pm$ 10%	93	100	9.0	4.60	4.70	4.70	1.50	2.25
DO3340H-563KLD	56 $\pm$ 10%	120	135	7.8	4.20	4.30	4.30	1.40	2.10
DO3340H-683KLD	68 $\pm$ 10%	135	145	7.4	3.90	4.00	4.00	1.20	1.80
DO3340H-823KLD	82 $\pm$ 10%	152	162	5.9	3.50	3.60	3.60	1.20	1.80
DO3340H-104KLD	100 $\pm$ 10%	177	187	6.0	3.20	3.30	3.30	1.20	1.80
DO3340H-124KLD	120 $\pm$ 10%	225	240	5.0	2.90	3.00	3.00	1.00	1.50
DO3340H-154KLD	150 $\pm$ 10%	259	280	4.7	2.60	2.70	2.70	0.90	1.35
DO3340H-184KLD	180 $\pm$ 10%	289	320	4.5	2.50	2.60	2.60	0.80	1.20
DO3340H-224KLD	220 $\pm$ 10%	330	375	4.0	2.30	2.40	2.40	0.70	1.05
DO3340H-274KLD	270 $\pm$ 10%	439	475	3.7	2.00	2.10	2.10	0.65	0.97
DO3340H-334KLD	330 $\pm$ 10%	507	570	3.2	1.80	1.90	1.90	0.60	0.90
DO3340H-394KLD	390 $\pm$ 10%	658	685	2.9	1.70	1.80	1.80	0.55	0.82
DO3340H-474KLD	470 $\pm$ 10%	751	795	2.6	1.50	1.60	1.60	0.30	0.45
DO3340H-564KLD	560 $\pm$ 10%	856	910	2.3	1.40	1.50	1.50	0.30	0.45
DO3340H-684KLD	680 $\pm$ 10%	1125	1200	2.0	1.25	1.30	1.30	0.30	0.45
DO3340H-824KLD	820 $\pm$ 10%	1252	1350	1.8	1.15	1.20	1.20	0.25	0.37
DO3340H-105KLD	1000 $\pm$ 10%	1489	1620	1.5	1.00	1.10	1.10	0.20	0.30

1. When ordering, please specify **termination** code:

DO3340H-105KLD

**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 (350 parts per full reel).

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

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

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

4. DC current at which inductance drops 30% (typ) from its value without current.

5. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

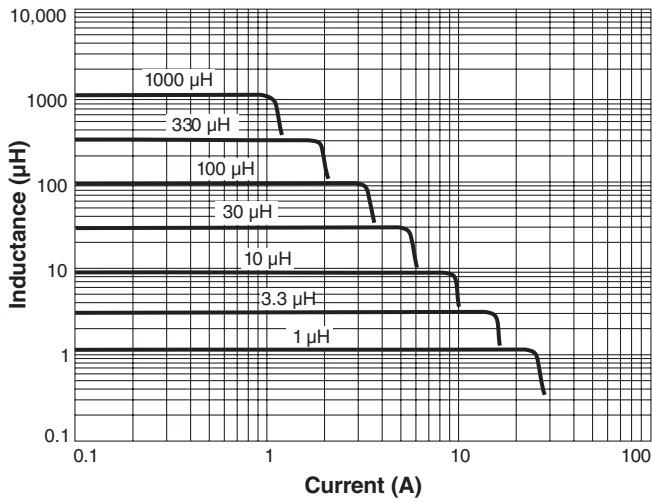
6. Electrical specifications at 25°C.

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



# SMT Power Inductors – DO3340H Series

## Typical L vs Current



## Typical L vs Frequency

