



# SMT Power Inductors - DO5010H Series



- Irms ratings up to 15 A; saturation currents up to 30 A
- Heavy gauge wire for low DC resistance

**Designer's Kit C355** 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 over copper. Other terminations available at additional cost.

**Weight** 3.2 – 4.0 g

**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)

**Packaging** 250 per 13" reel Plastic tape: 32 mm wide, 0.38 mm thick, 24 mm pocket spacing, 7.8 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>	Inductance <sup>2</sup> ±20% (µH)	DCR max (mOhm)	SRF typ <sup>3</sup> (MHz)	Isat <sup>4</sup> (A)	Irms <sup>5</sup> (A)
DO5010H-781ML_	0.78	2.6	156	30	15
DO5010H-152ML_	1.5	4.0	100	25	15
DO5010H-222ML_	2.2	6.1	75	20	12
DO5010H-332ML_	3.3	8.6	60	17	10
DO5010H-392ML_	3.9	10	55	15	9.0
DO5010H-472ML_	4.7	14	40	13	8.4
DO5010H-602ML_	6.0	17	35	12	7.5
DO5010H-782ML_	7.8	18	35	11	7.5
DO5010H-103ML_	10	26	28	10	6.0
DO5010H-123ML_	12	28	26	8.5	5.2
DO5010H-153ML_	15	32	20	8.0	4.4
DO5010H-223ML_	22	47	20	7.0	3.5
DO5010H-333ML_	33	66	15	5.5	3.0
DO5010H-473ML_	47	86	9	4.5	2.6
DO5010H-683ML_	68	130	8	3.5	2.3
DO5010H-104ML_	100	190	7	3.0	1.8
DO5010H-154ML_	150	250	6	2.6	1.5
DO5010H-224ML_	220	380	5	2.4	1.2
DO5010H-334ML_	330	560	4	1.9	1.0
DO5010H-474ML_	470	850	3	1.4	0.82
DO5010H-684ML_	680	1100	2.5	1.2	0.72
DO5010H-105ML_	1000	1800	2.0	1.0	0.56

- When ordering, please specify **termination** and **packaging** codes:

DO5010H-105MLD

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

**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. 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 using an Agilent/HP 4284A LCR meter or equivalent.
  - SRF measured using Agilent/HP 8753D network analyzer.
  - DC current at which the 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.



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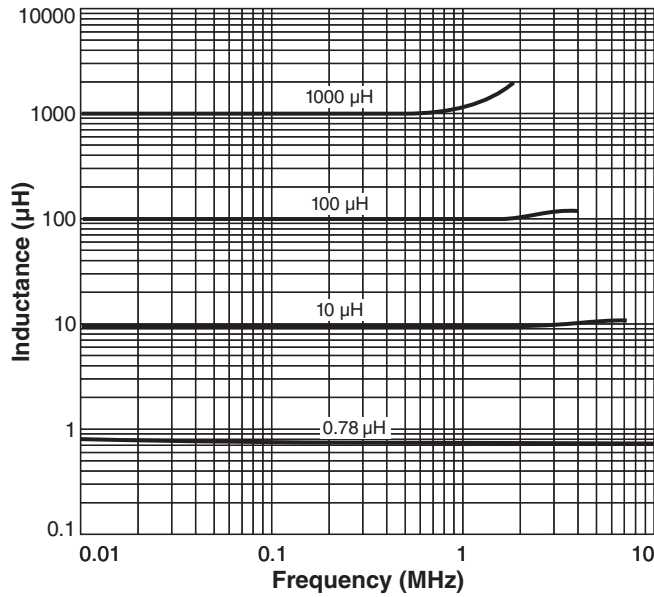
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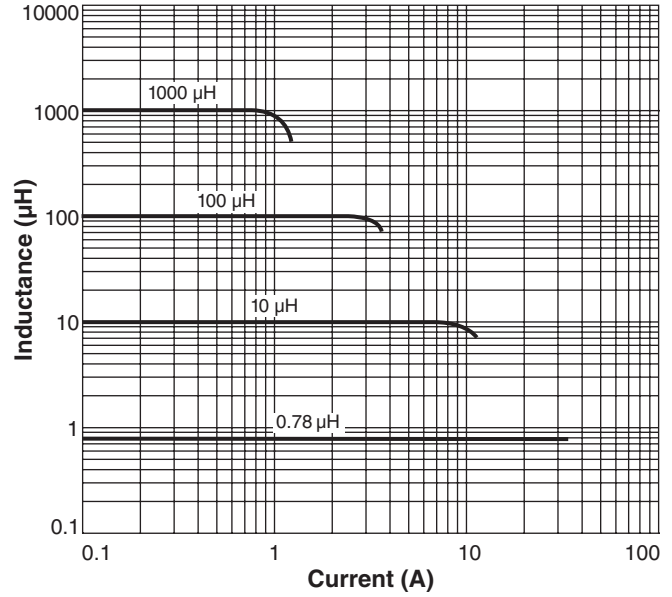


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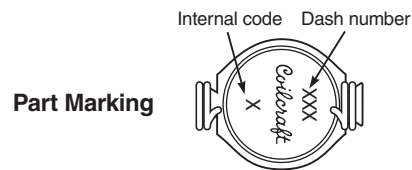
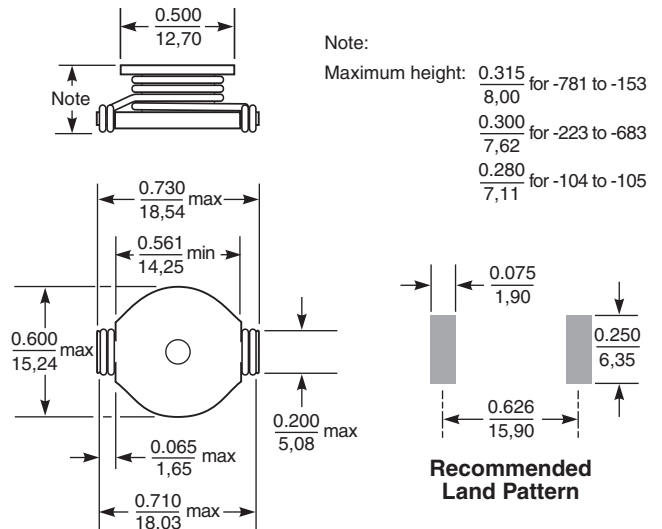
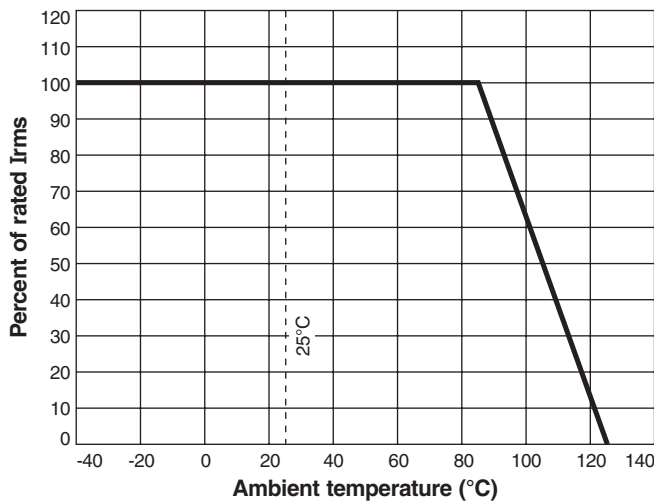
## Typical L vs Frequency



## Typical L vs Current



## Irms Derating



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



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