



SMT Power Inductors – DO5022P Series



This series of surface mount power inductors is designed for the higher current requirements of notebook computers and other portable and handheld devices.

The 1 μ H inductor is rated at 8.6 Arms and has a saturation current rating of 20 Amps. Exceptionally low dc resistance (as low as 0.009 Ohm) keeps power losses to a minimum.

The DO5022 Series was designed specifically for surface mounting. It has a flat top for reliable pick-and place operations and features robust temperature deflection.

In addition to the standard versions shown here, custom inductors are available to meet your exact requirements.

Coilcraft **Designer's Kit C311** contains three samples each of the standard parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

SPICE models ON OUR WEB SITE OR CD

Part number ¹	L \pm 20% ² (μ H)	DCR max (Ohms)	SRF typ ³ (MHz)	Isat ⁴ (A)	Irms ⁵ (A)
DO5022P-102ML_	1.0	0.009	80	20	8.6
DO5022P-222ML_	2.2	0.014	80	16	7.1
DO5022P-332ML_	3.3	0.018	60	14	6.2
DO5022P-562ML_	5.6	0.020	40	12	5.3
DO5022P-822ML_	8.2	0.029	30	10	4.8
DO5022P-103ML_	10	0.031	30	10	4.3
DO5022P-153ML_	15	0.036	22	8.0	4.0
DO5022P-223ML_	22	0.047	20	7.0	3.5
DO5022P-333ML_	33	0.066	15	5.5	3.0
DO5022P-473ML_	47	0.086	9	4.5	2.6
DO5022P-683ML_	68	0.13	8	3.5	2.3
DO5022P-104ML_	100	0.19	7	3.0	1.8
DO5022P-154ML_	150	0.25	6	2.6	1.5
DO5022P-224ML_	220	0.38	5	2.4	1.2
DO5022P-334ML_	330	0.56	4	1.9	1.0
DO5022P-474ML_	470	0.85	3	1.4	0.82
DO5022P-684ML_	680	1.1	2.5	1.2	0.72
DO5022P-105ML_	1000	1.8	2	1.0	0.56

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

DO5022P-105ML D

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 (250 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.

- Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.
 - SRF >13 MHz measured using Agilent/HP 8753D network analyzer; <13 MHz using Agilent/HP 4192A.
 - DC current at which inductance drops 10% (typ) from its value without current.
 - Average current for 40°C temperature rise from 25°C ambient.
 - Operating temperature range -40°C to +85°C.
 - Electrical specifications at 25°C.
- See Qualification Standards section for environmental and test data.
 See Color Coding section for color dot part marking data.

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Specifications subject to change without notice.
 Please check our website for latest information.

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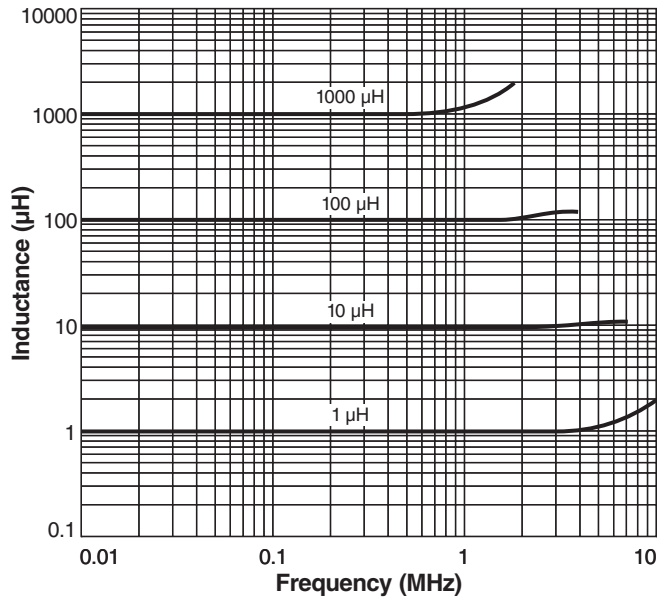
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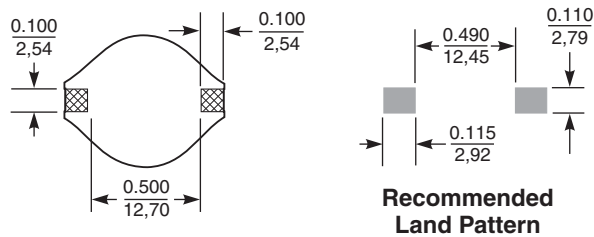
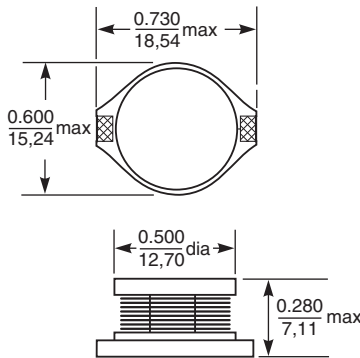
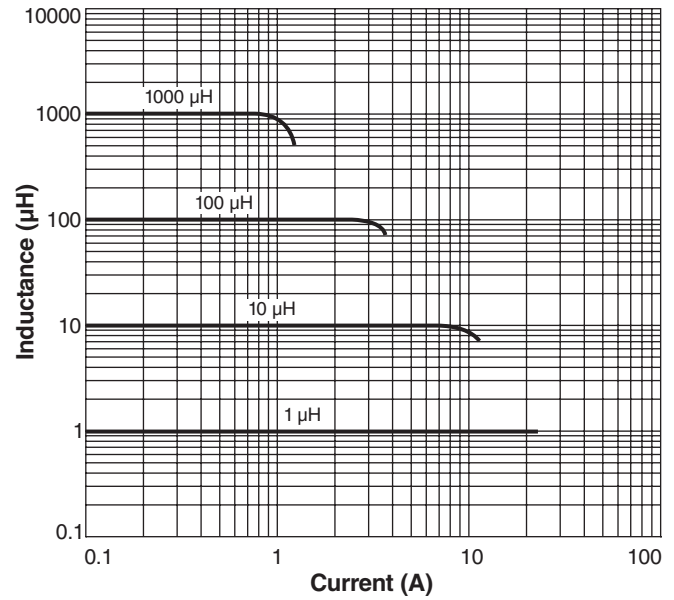


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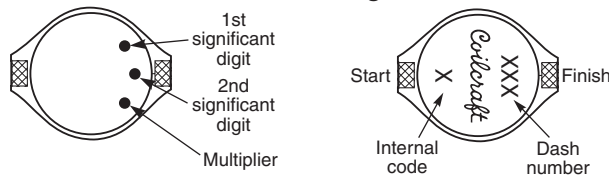
Typical L vs Frequency



Typical L vs Current



Part Marking



Weight: 2.8 – 3.9 g
Terminations: Gold over nickel over phos bronze
Tape and reel: 250/13" reel 32 mm tape width
 For packaging data see Tape and Reel Specifications section.



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