



SMT Power Inductors – DO5022 Series



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

A 1 μH inductor is rated at 8.6 Arms with a saturation current of 20 Amps. Exceptionally low dc resistance (as low as 0.009 Ohm) keeps power losses to a minimum.

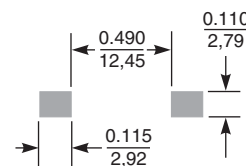
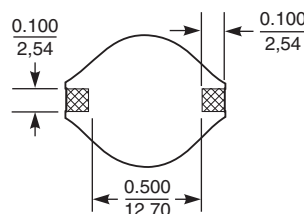
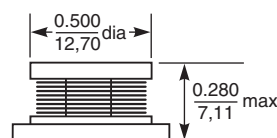
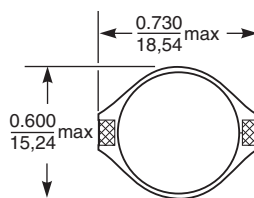
The DO5022 Series was designed specifically for surface mounting. It has a flat top for reliable pick-and place operations and features robust temperature deflection.

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

Coilcraft **Designer's Kit C111** 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 (μH)	DCR max (Ohms)	SRF typ ³ (MHz)	Isat ⁴ (A)	Irms ⁵ (A)
DO5022P-102	1.0	0.009	80	20	8.6
DO5022P-222	2.2	0.014	80	16	7.1
DO5022P-332	3.3	0.018	60	14	6.2
DO5022P-562	5.6	0.020	40	12	5.3
DO5022P-103	10	0.031	30	10	4.3
DO5022P-153	15	0.036	22	8.0	4.0
DO5022P-223	22	0.047	20	7.0	3.5
DO5022P-333	33	0.066	15	5.5	3.0
DO5022P-473	47	0.086	9	4.5	2.6
DO5022P-683	68	0.13	8	3.5	2.3
DO5022P-104	100	0.19	7	3.0	1.8
DO5022P-154	150	0.25	6	2.6	1.5
DO5022P-224	220	0.38	5	2.4	1.2
DO5022P-334	330	0.56	4	1.9	1.0
DO5022P-474	470	0.85	3	1.4	0.82
DO5022P-684	680	1.1	2.5	1.2	0.72
DO5022P-105	1000	1.8	2	1.0	0.56



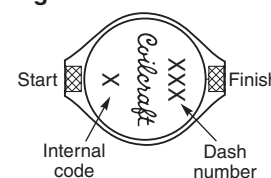
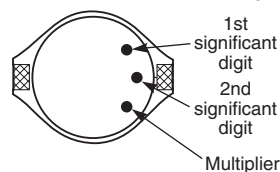
Recommended Land Pattern

- Part number on reel label may have a B suffix to indicate that the reel is not machine ready.
- 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.

Part Marking



Weight: 2.8 – 3.9 g

Terminations: Nickel/gold over phos bronze

Tape and reel: 250/13" reel 32 mm tape width

For packaging data see Tape and Reel Specifications section.

Coilcraft[®]

Specifications subject to change without notice.

Please check our website for latest information.

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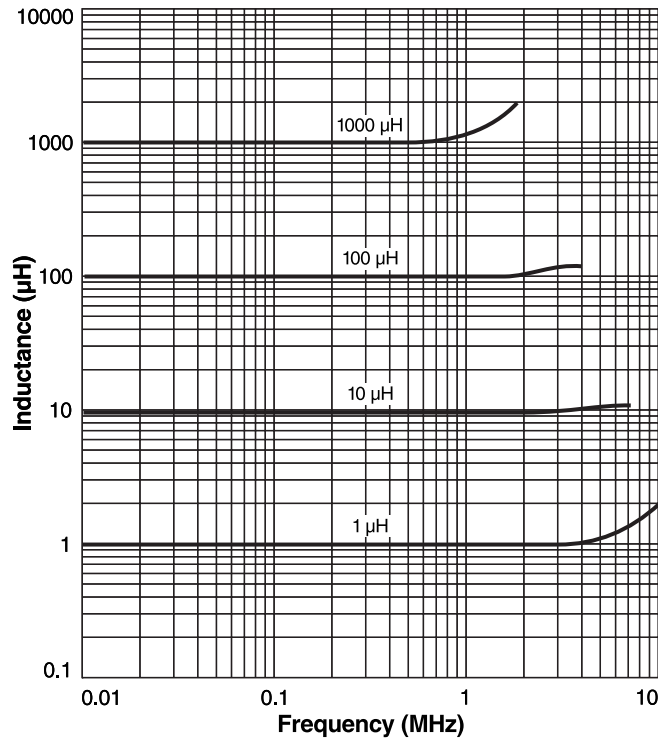
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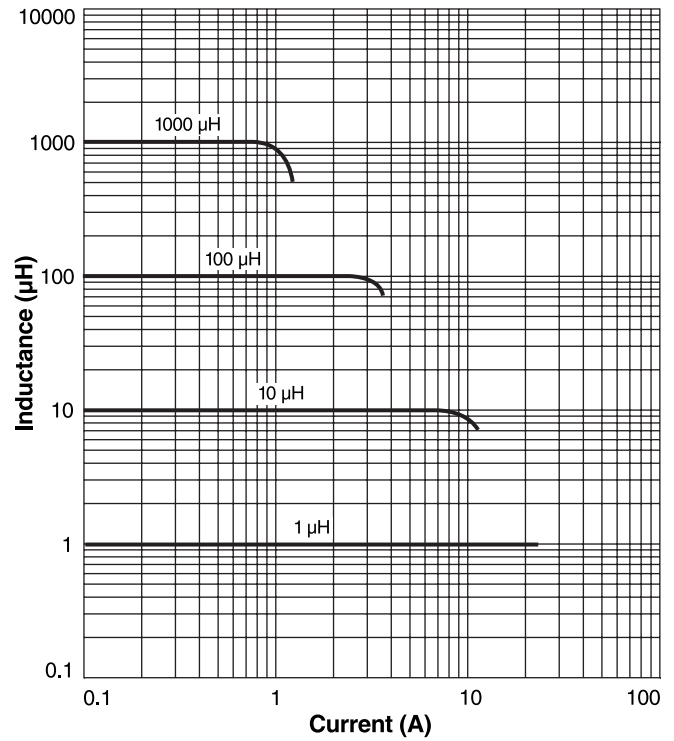


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Typical L vs Frequency



Typical L vs Current



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Please check our website for latest information.

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