



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.

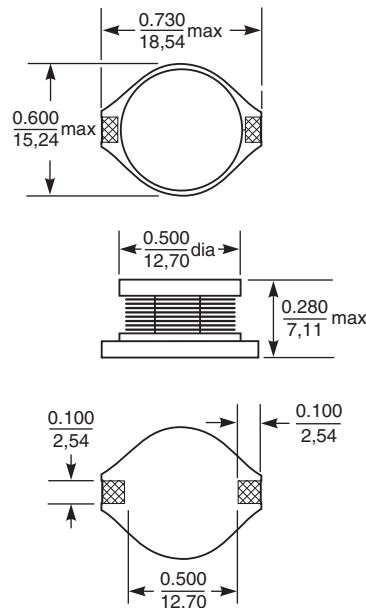
In addition to the standard versions shown here, custom inductors are available to meet your exact requirements.

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

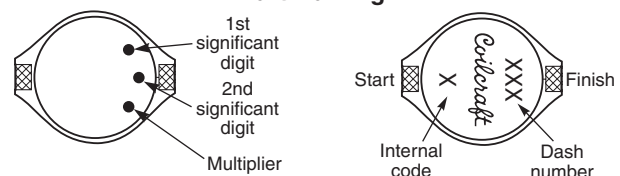
| Part number ¹ | L $\pm 20\%$ ² (μH) | DCR max (Ohms) | SRF typ ³ (MHz) | Isat ⁴ (A) | Irms ⁵ (A) |
|--------------------------|--|-------------------|-------------------------------|--------------------------|--------------------------|
| DO5022P-102 | 1.0 | 0.009 | 80 | 20 | 8.6 |
| DO5022P-222 | 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 |

- 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.



Recommended Land Pattern

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.

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

Document 172-1 Revised 12/11/04

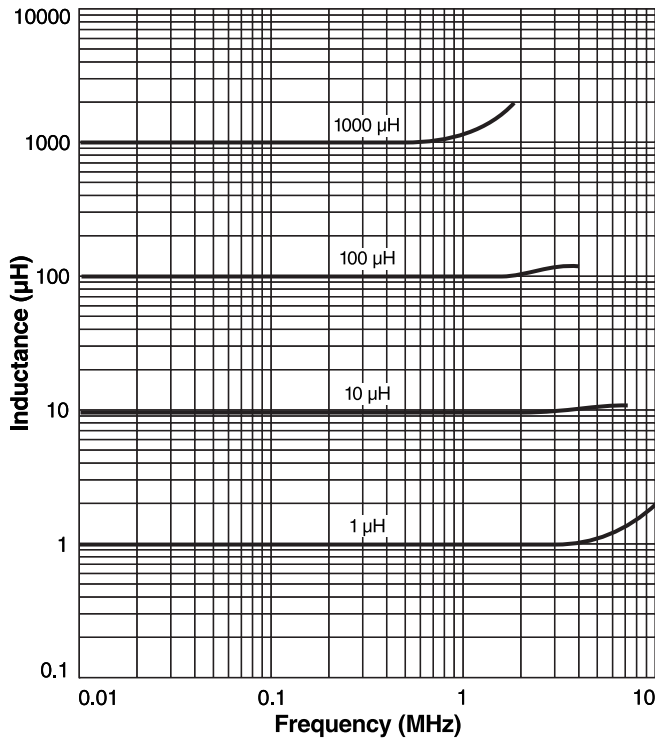
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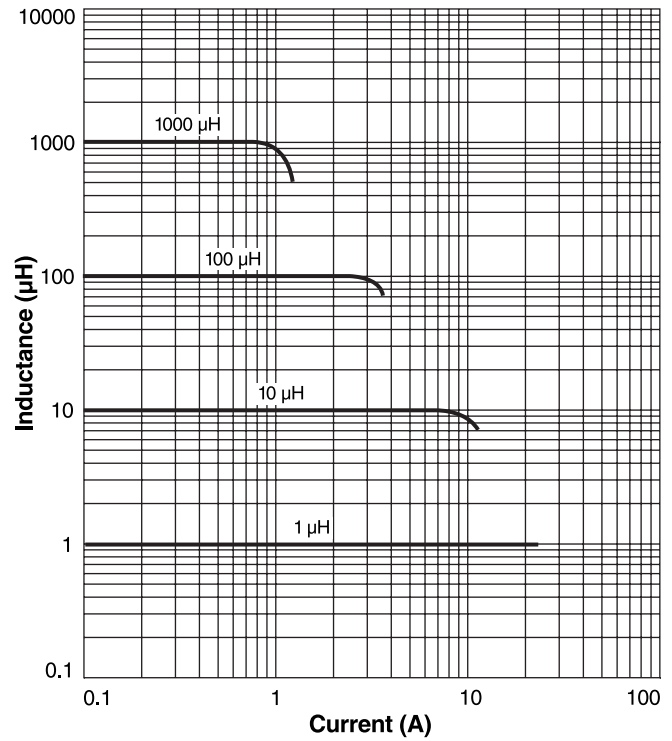


SMT Power Inductors – DO5022 Series

Typical L vs Frequency



Typical L vs Current



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Please check our website for latest information.

Document 172-2 Revised 10/31/03

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