

# SMT Power Inductors - DO5010HC Series



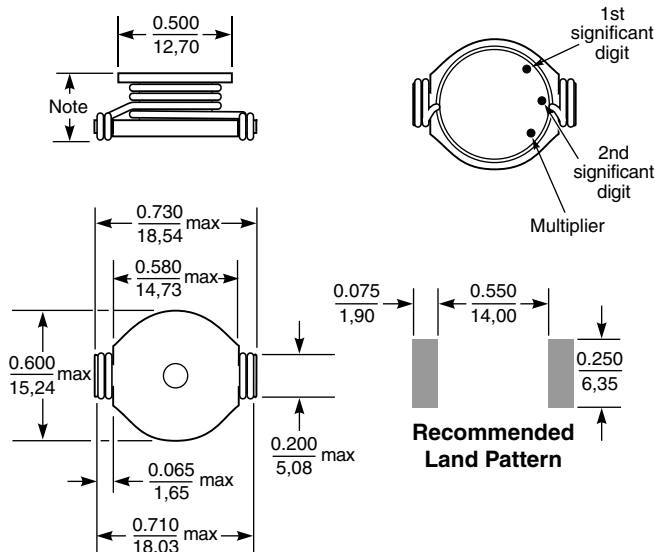
This family of inductors was designed for high current, low-voltage DC-DC converter applications, especially the latest generation of low voltage microprocessors. Current ratings up to 15 A rms and saturation currents up to 30 A are available.

The DO5010HC is designed for applications requiring the smallest possible size in a low-profile part. They are only 8 mm high and have exceptionally low DC resistance thanks to the use of heavier gauge wire. These parts have been optimized for reliable surface mounting with a large flat top and self-leaded design.

In addition to the standard parts shown, custom values are available.

Coilcraft **Designer's Kit C155** contains three samples each of all the parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com> to order on-line.

## SPICE models ON OUR WEB SITE OR CD



Note: Maximum height:  $\frac{0.315}{8,00}$  for -781HC to -153HC  
 $\frac{0.300}{7,62}$  for -223HC to -683HC  
 $\frac{0.280}{7,11}$  for -104HC to -105HC

**Weight:** 3.2 – 4.0 g  
**Tape and reel:** 250/13" reel 32 mm tape width  
 For packaging data see Tape and Reel Specifications section.

Part Number <sup>1</sup>	Inductance <sup>2</sup> ±20% (µH)	DCR max (mΩ)	SRF <sup>3</sup> (MHz)	Isat <sup>4</sup> (A)	Irms <sup>5</sup> (A)
DO5010P-781HC	0.78	2.6	156	30	15.0
DO5010P-152HC	1.5	4.0	100	25	15.0
DO5010P-222HC	2.2	6.1	75	20	12.0
DO5010P-332HC	3.3	8.6	60	17	10.0
DO5010P-392HC	3.9	10	55	15	9.0
DO5010P-472HC	4.7	14	40	13	8.4
DO5010P-602HC	6.0	17	35	12	7.5
DO5010P-782HC	7.8	18	35	11	7.5
DO5010P-103HC	10.0	26	28	10	6.0
DO5010P-123HC	12.0	28	26	8.5	5.2
DO5010P-153HC	15.0	32	20	8	4.4
DO5010P-223HC	22	47	20	7.0	3.5
DO5010P-333HC	33	66	15	5.5	3.0
DO5010P-473HC	47	86	9	4.5	2.6
DO5010P-683HC	68	130	8	3.5	2.3
DO5010P-104HC	100	190	7	3.0	1.8
DO5010P-154HC	150	250	6	2.6	1.5
DO5010P-224HC	220	380	5	2.4	1.2
DO5010P-334HC	330	560	4	1.9	1.0
DO5010P-474HC	470	850	3	1.4	0.82
DO5010P-684HC	680	1100	2.5	1.2	0.72
DO5010P-105HC	1000	1800	2	1.0	0.56

- Part number on reel label may have a B suffix to indicate packaging.
- Inductance tested at 100 kHz, 0.1 Vrms.
- SRF measured using Agilent/HP 8753D network analyzer.
- DC current at which the inductance drops 10% (typ) from its value without current.
- Average current for a 40°C rise above 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.  
 For part marking data, see Color Coding section.

# Coilcraft®

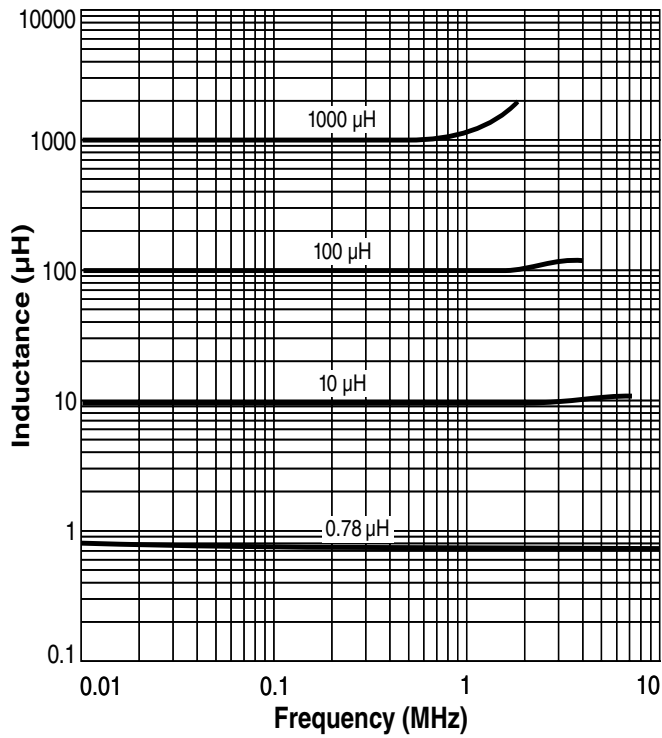
Specifications subject to change without notice. Document 284-1 Revised 03/06/03

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

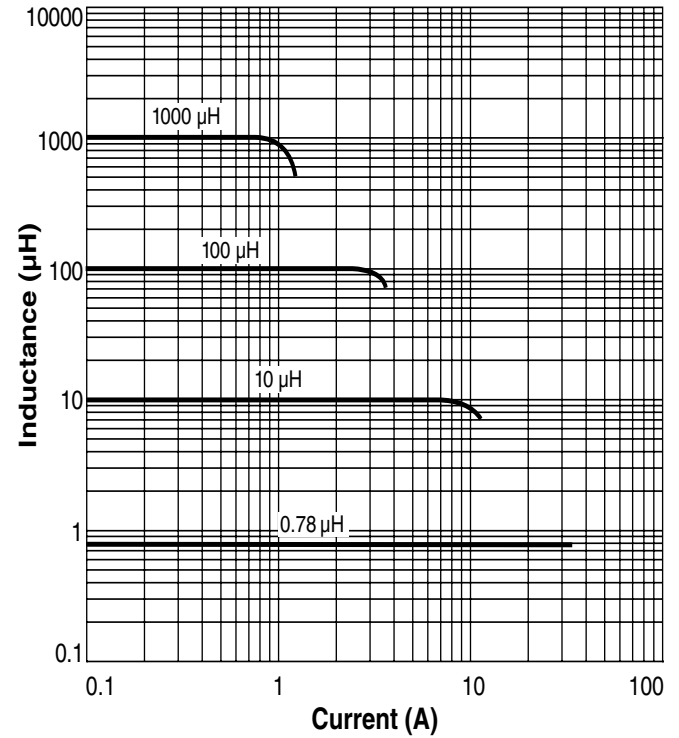
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

# SMT Power Inductors - DO5010HC Series

## Typical L vs Frequency



## Typical L vs Current



Specifications subject to change without notice. Document 284-2 Revised 01/19/04

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>