

# SMT Power Inductors - DO5022HC Series

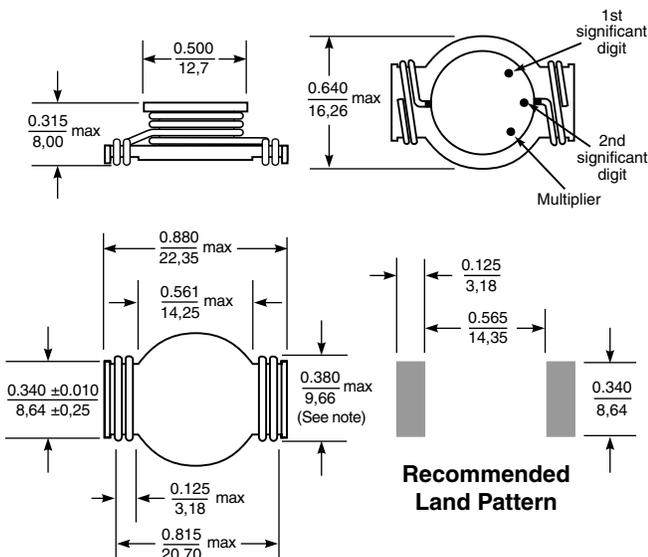


## We now offer an improved version of this series: DO5010HC.

It is electrically equivalent, has a smaller footprint and comes in more inductance values. We will, however, continue to produce the DO5022HC indefinitely.

This family of inductors was designed for high current, low-voltage DC-DC converter applications, especially the latest generation of 3.3 V microprocessors. Current ratings up to 15 A rms and saturation currents up to 30 A are available.

These parts are only 8,0 mm high and have exceptionally low DC resistance thanks to the use of heavier gauge wire. The DO5022HC Series has 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.



Note: Based on 781HC.

Parts/reel: 13" 250 Tape width: 44 mm  
For packaging data see Tape and Reel Specifications section.

Part Number <sup>1</sup>	Inductance <sup>2</sup> ( $\mu\text{H} \pm 20\%$ )	DCR max (m $\Omega$ )	SRF <sup>3</sup> typ (MHz)	Isat <sup>4</sup> (A)	I <sub>rms</sub> <sup>5</sup> (A)
DO5022P-781HC	0.78	2.6	156	30	15
DO5022P-152HC	1.5	4.0	100	25	15
DO5022P-222HC	2.2	6.1	75	20	12
DO5022P-332HC	3.3	8.6	60	17	10
DO5022P-392HC	3.9	10	55	15	9.0
DO5022P-472HC	4.7	14	40	13	8.4
DO5022P-602HC	6.0	17	35	12	7.5
DO5022P-782HC	7.8	18	35	11	7.5
DO5022P-103HC	10	26	28	10	6.0
DO5022P-153HC	15	32	20	8	4.4

- 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.
  - SRF measured using Agilent/HP8753D 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.

**S-Parameter files**  
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**SPICE models**  
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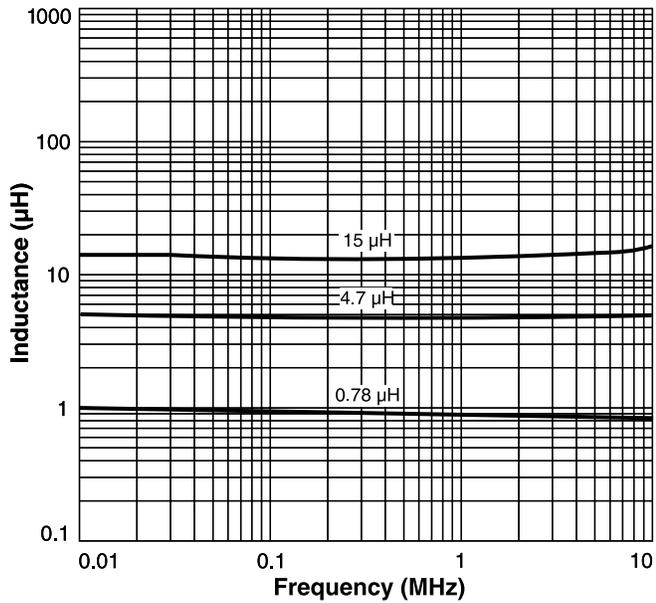
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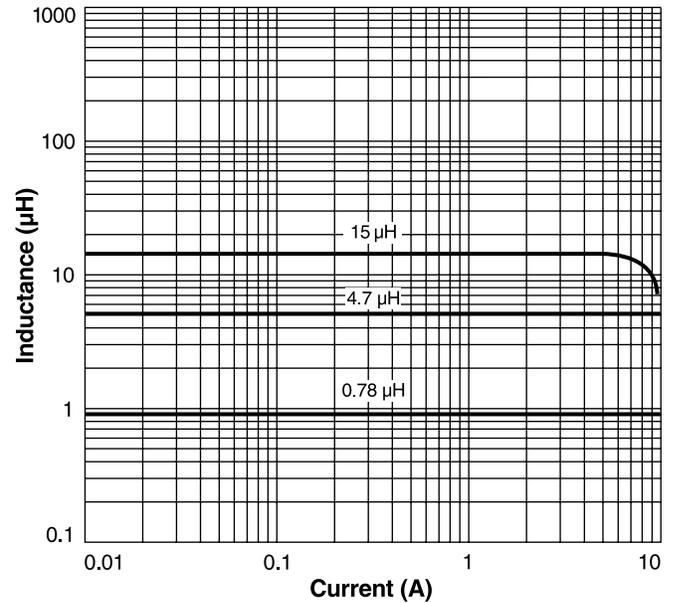
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# SMT Power Inductors - DO5022HC Series

## Typical L vs Frequency



## Typical L vs Current



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