



SMT Power Inductors - DS5022 Series



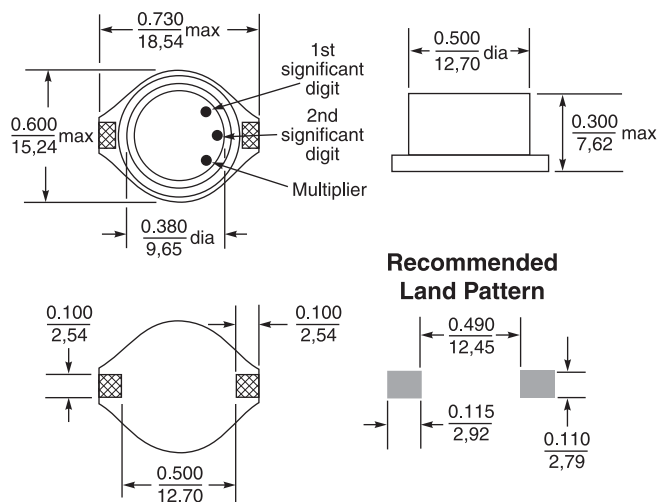
The DS5022 Series is a family of magnetically shielded power inductors designed for the higher current requirements of portable computers, video recorders and other DC-DC conversion applications.

They feature saturation current ratings as high as 8 Amps and rms current ratings up to 3.9 Amps. Low DC resistance (as low as 0.040 Ohms) keeps power losses to a minimum.

Designed specifically for surface mounting, the DS5022 has a flat top for reliable pick and place operations. The terminals wrap around the end of the base to ensure a sound solder fillet and simplify inspection.

Coilcraft **Designer's Kit C117** contains samples of each of the standard parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

SPICE models
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Weight: 2.6 – 3.0 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.

Part Number ¹	L ± 20% ² (μH)	DCR max (Ohms)	SRF typ (MHz)	Isat ³ (A)	Irms ⁴ (A)
DS5022P-103	10	0.040	30	8.0	3.9
DS5022P-153	15	0.048	20	7.0	3.4
DS5022P-223	22	0.059	18	6.0	3.1
DS5022P-333	33	0.075	14	5.0	2.8
DS5022P-473	47	0.097	10	4.0	2.4
DS5022P-683	68	0.138	9	3.0	2.0
DS5022P-104	100	0.207	7	2.4	1.7
DS5022P-154	150	0.293	6	2.1	1.3
DS5022P-224	220	0.47	5	1.9	1.1
DS5022P-334	330	0.78	4	1.1	0.86
DS5022P-474	470	1.08	3	1.1	0.73
DS5022P-684	680	1.40	2.5	0.96	0.64
DS5022P-105	1000	2.01	2.0	0.80	0.53

- Part number on reel label may have a B suffix to indicate that the reel is not machine ready.
 - Inductance tested at 0.1 Vrms, 100 kHz, 0 Adc.
 - 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.

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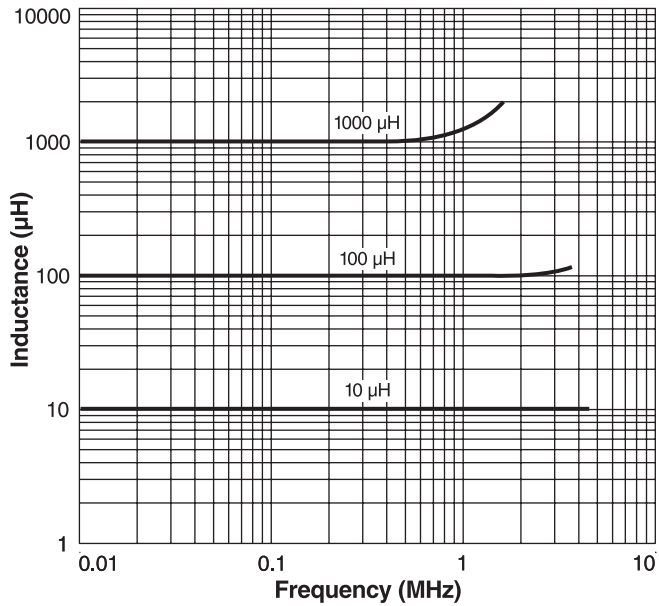
Specifications subject to change without notice.
 Please check our website for latest information. Document 188-1 Revised 12/20/04

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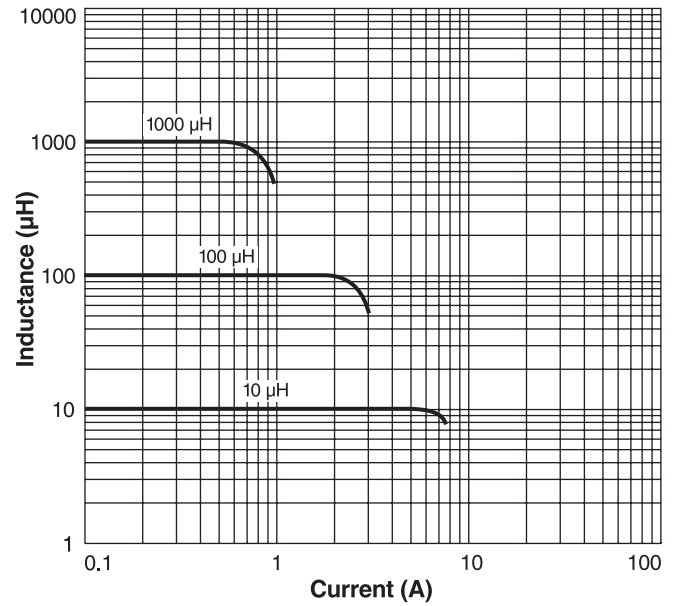


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Typical L vs Frequency



Typical L vs Current



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