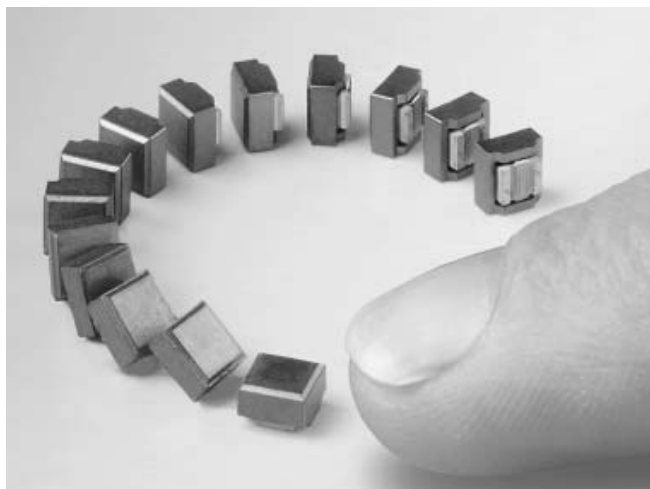


Power Chip Inductors - 1008PS Series



Coilcraft's 1008PS Series is designed to be an economical alternative to larger and more costly shielded power inductors.

Only 2.74 mm high, they are ideal for applications requiring magnetic shielding, the smallest possible size and lowest cost. Typical uses include notebook computers, PC cards, wireless communication and handheld devices.

The specially designed ferrite cover provides magnetic shielding and the best possible surface for pick and place handling.

Coilcraft **Designer's Kit C141** contains six samples each of the standard parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

Part number ¹	L $\pm 20\%$ ² (μ H)	Q min ³ @ 1 MHz	DCR ⁴ max (Ohms)	SRF ⁵ typ (MHz)	Isat ⁶ (A)	Irms ⁷ (A)
1008PS-102M	1.0	35	0.05	344	3.0	2.00
1008PS-152M	1.5	35	0.06	260	2.8	2.00
1008PS-182M	1.8	35	0.09	225	2.1	1.90
1008PS-272M	2.7	38	0.14	185	1.3	1.60
1008PS-392M	3.9	38	0.26	175	1.2	1.20
1008PS-472M	4.7	38	0.35	160	1.0	1.10
1008PS-562M	5.6	38	0.36	150	1.0	0.90
1008PS-682M	6.8	38	0.58	120	0.84	0.80
1008PS-103M	10	38	0.92	105	0.78	0.72
1008PS-153M	15	38	1.15	35	0.70	0.60
1008PS-223M	22	40	1.40	26	0.65	0.55
1008PS-333M	33	45	1.61	20	0.51	0.50
1008PS-393M	39	45	1.85	16	0.45	0.47
1008PS-473M	47	45	2.5	19	0.40	0.42
1008PS-683M	68	45	3.8	12	0.31	0.32
1008PS-823M	82	45	4.3	9.0	0.30	0.30
1008PS-104M	100	45	5.8	7.0	0.30	0.30
1008PS-124M	120	50	6.3	7.0	0.25	0.28
1008PS-154M	150	50	7.5	5.8	0.22	0.26
1008PS-224M	220	55	10.0	10.0	0.22	0.21
1008PS-334M	330	55	11.5	3.8	0.20	0.19
1008PS-474M	470	55	16.3	3.1	0.16	0.18
1008PS-564M	560	55	18.1	2.8	0.13	0.15
1008PS-684M	680	55	24.0	2.5	0.12	0.14
1008PS-824M	820	45	26.0	1.5	0.10	0.12
1008PS-105M	1000	45	29.0	2.0	0.10	0.11

1. Specify **packaging** code:

1008PS-105M C

Packaging: **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (750 parts per full reel).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter C instead.

D = 13" machine-ready reel. EIA-481 embossed plastic tape (2500 parts per full reel).

- Inductance measured at 100 kHz, 0.1 Vrms, using Coilcraft SMD-A fixture in Agilent/HP 4263B impedance analyzer.
- Q measured on Agilent/HP 4291 with Agilent/HP 16193 test fixture.
- DCR measured on micro-ohmmeter and Coilcraft CCF840 test fixture.
- SRF measured using Agilent/HP 8753D network analyzer and Coilcraft SMD-D test fixture.
- 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.

COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
SEE INDEX **TEST FIXTURES**

Coilcraft®

Specifications subject to change without notice. Document 219-1 Revised 10/4/02

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S-Parameter files

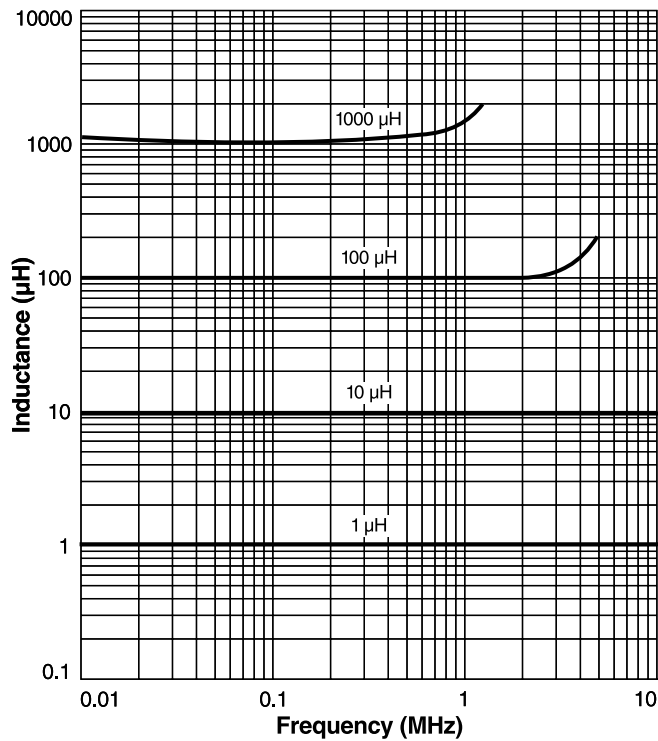
ON OUR WEB SITE OR CD

SPICE models

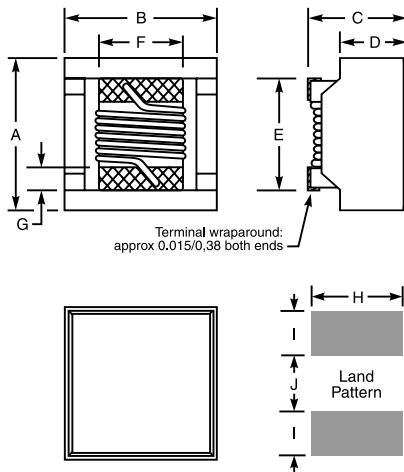
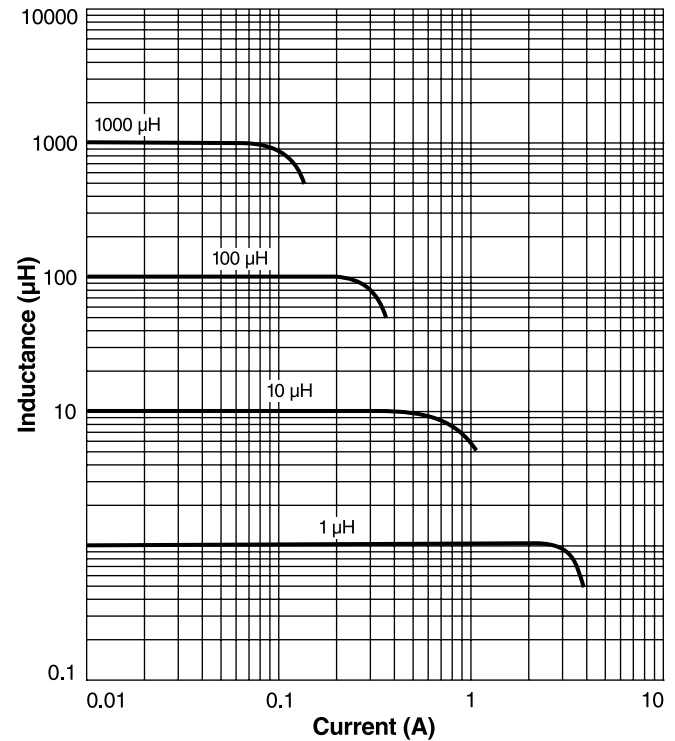
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Power Chip Inductors - 1008PS Series

Typical L vs Frequency



Typical L vs Current



A max	B max	C max	D max	E max	F max	G max	H	I	J
0.150	0.150	0.108	0.070	0.100	0.083	0.020	0.100	0.040	0.050
3,81	3,81	2,74	1,78	2,54	2,11	0,51	2,54	1,02	1,27

Parts/reel: 7" 750; 13" 2500 Tape width: 12 mm
For packaging data see Tape and Reel Specifications section.

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