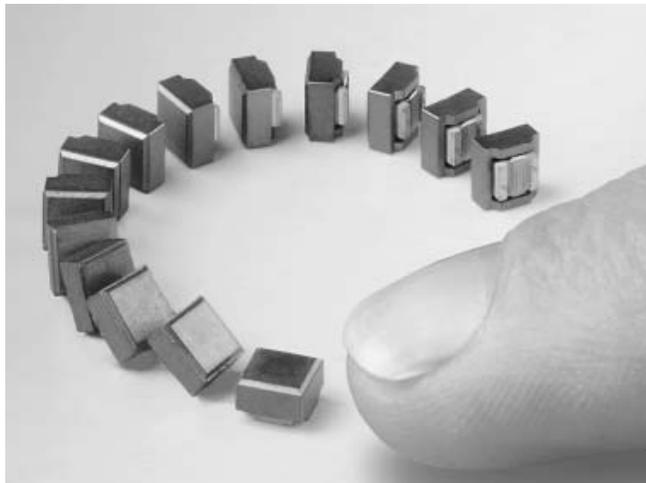


# Power Chip Inductors - 1008PS Series



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 <sup>1</sup>	L ±20% <sup>2</sup> (μH)	Q min <sup>3</sup> @ 1 MHz	DCR <sup>4</sup> max (Ohms)	SRF <sup>5</sup> typ (MHz)	Isat <sup>6</sup> (A)	Irms <sup>7</sup> (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**<sup>®</sup>

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

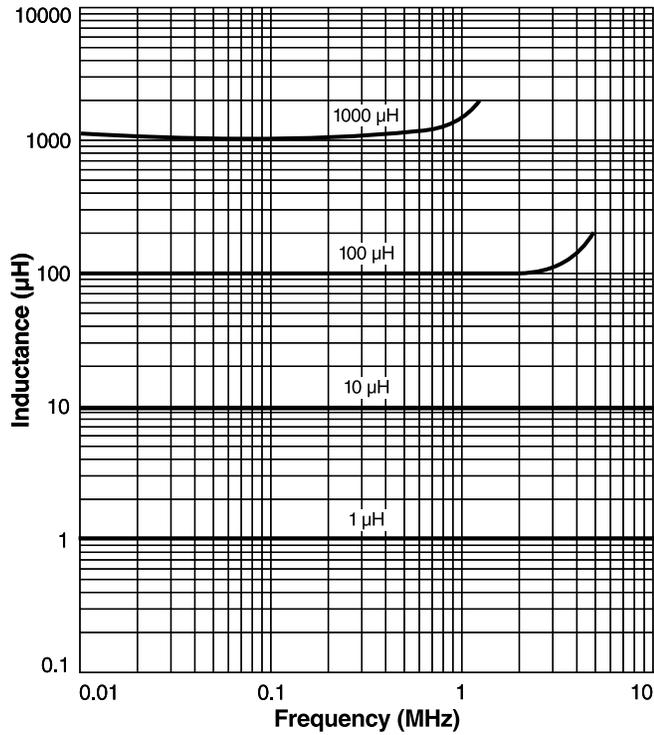
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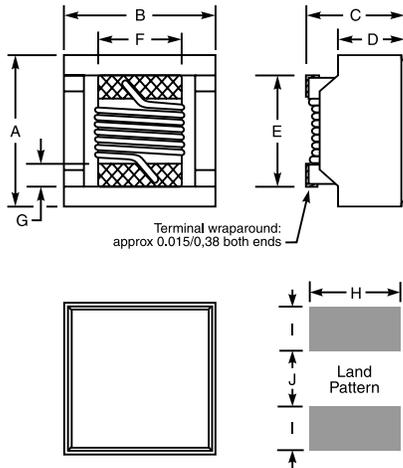
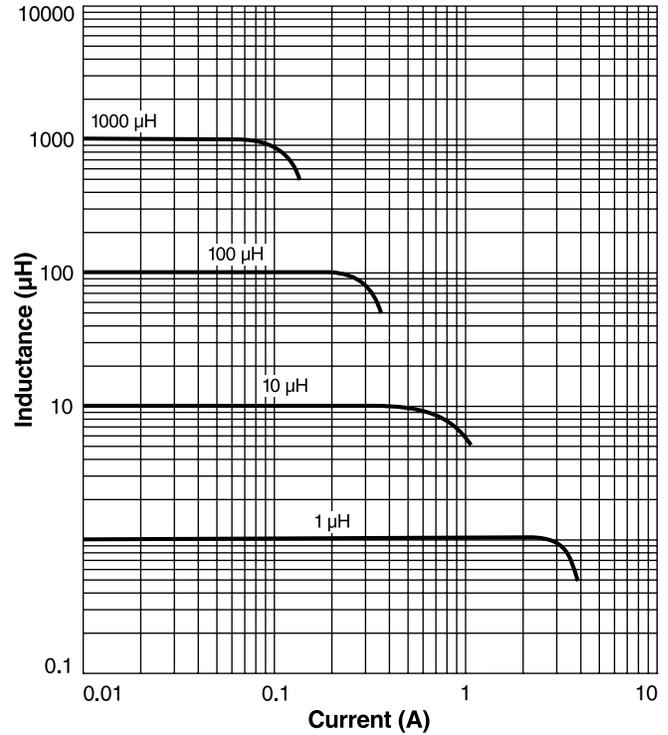
**S-Parameter files**  
ON OUR WEB SITE OR CD  
**SPICE models**  
ON OUR WEB SITE OR CD

# 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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