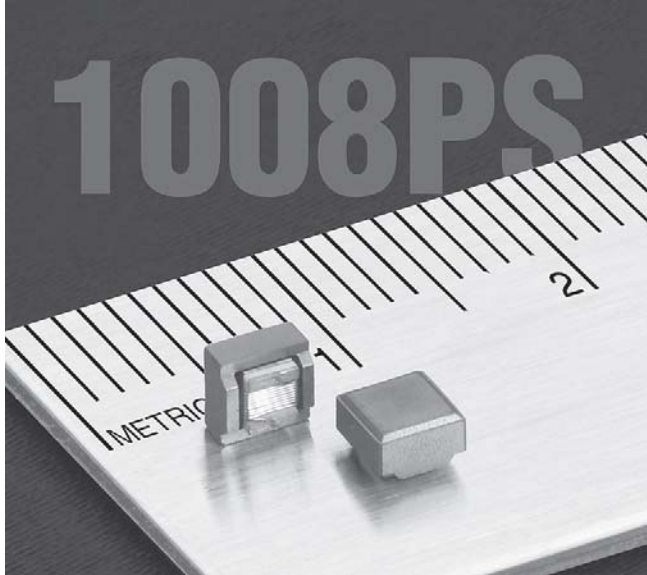




Power Chip Inductors - 1008PS Series



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.

They are available in 26 inductance values from 1 μH to 1000 μH , all at 10% tolerance.

Coilcraft **Designer's Kit C341** contains six samples each of the standard parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

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

1. When ordering, please specify **packaging** code:

1008PS-105KL 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. Factory order only, not stocked (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 +105°C.
 - Electrical specifications at 25°C.
- See Chip Inductors Qualification Standards section for environmental and test data.

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

Coilcraft[®]

Specifications subject to change without notice.

Please check our website for latest information. Document 219-1 Revised 10/14/05

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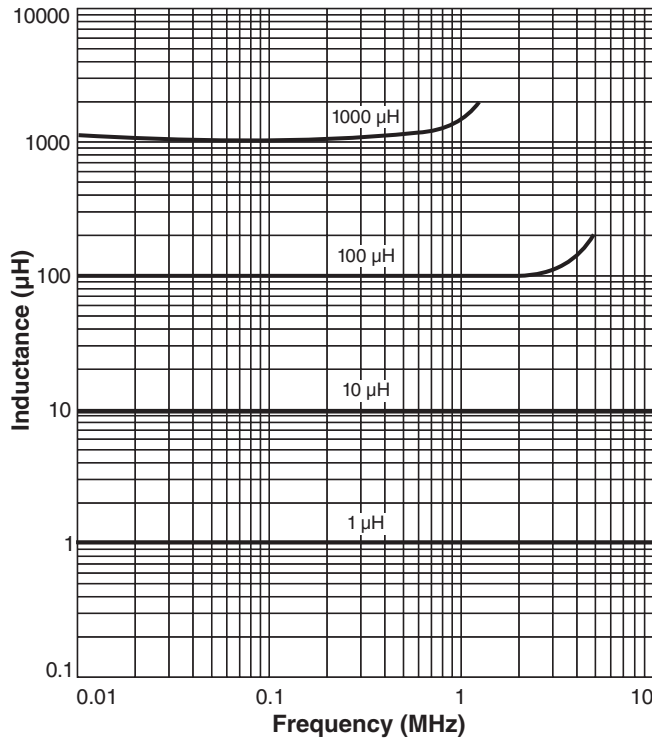
S-Parameter files

ON OUR WEB SITE OR CD

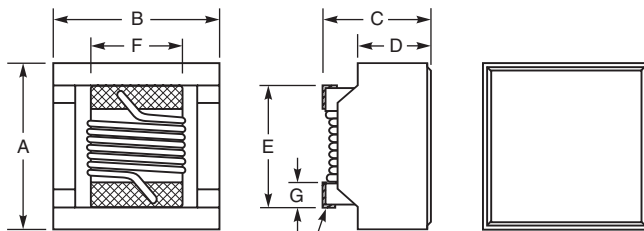
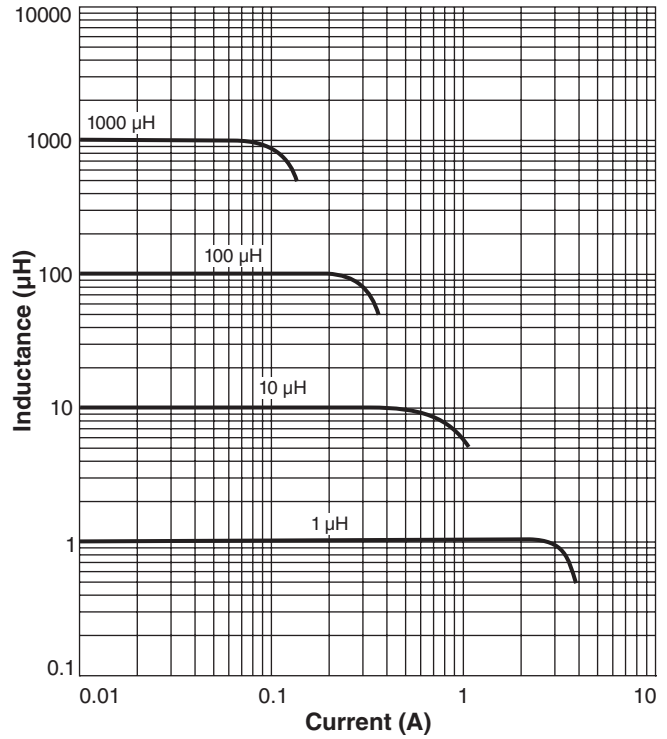
SPICE models

ON OUR WEB SITE OR CD

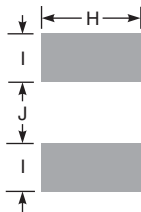
Typical L vs Frequency



Typical L vs Current



Terminal wraparound:
approx 0.015/0,38 both ends



Recommended Land Pattern

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

Weight: 122 – 132 mg
Terminations: Silver-palladium-platinum-glass frit
Tape and reel: 750/7" reel; 2500/13" reel 12 mm tape width
 For packaging data see Tape and Reel Specifications section.



Specifications subject to change without notice.
 Please check our website for latest information. Document 219-2 Revised 01/24/05

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