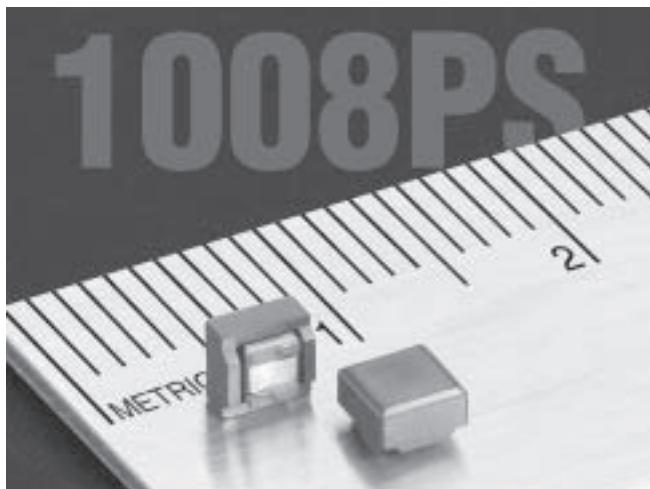




# 1008PS Inductors for xDSL Filters



Coilcraft's new 1008PS Series is ideal for use in a variety of filters, including the data separation filters used in VDSL and ISDN/ADSL implementations.

They measure just 2.74 mm high and have very low DC resistance to reduce insertion loss. The specially designed ferrite cover provides magnetic shielding and the best possible surface for pick and place handling.

Coilcraft offers reference designs for various xDSL filters using these and other surface mount components. We can also provide several complete low pass and band pass filter modules in space-saving SIP configurations.

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

1. Specify **packaging** code:

**1008PS-105K 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 +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 240-1 Revised 03/27/03

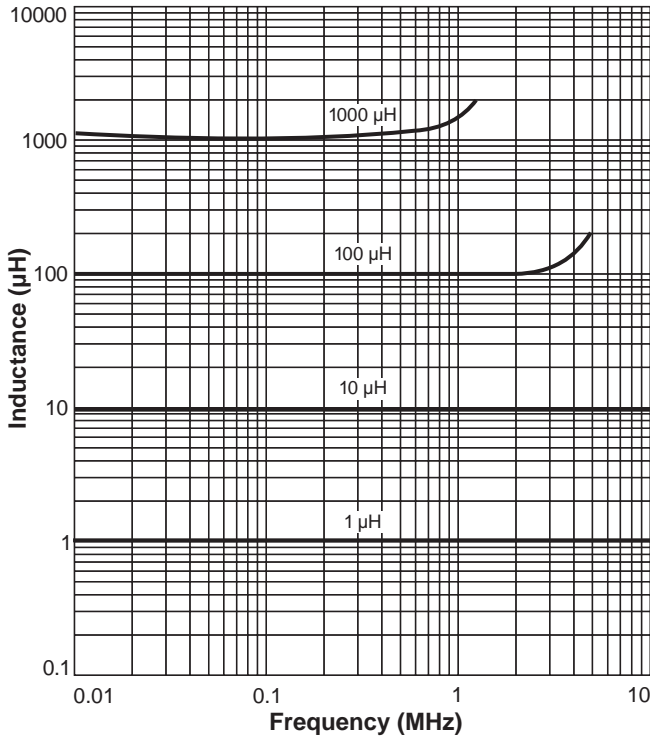
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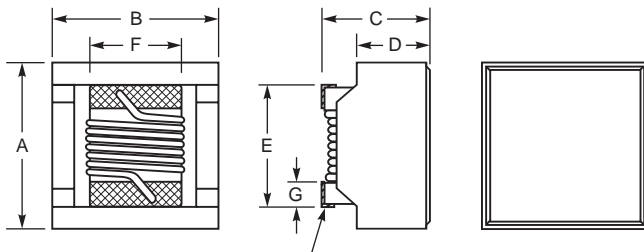
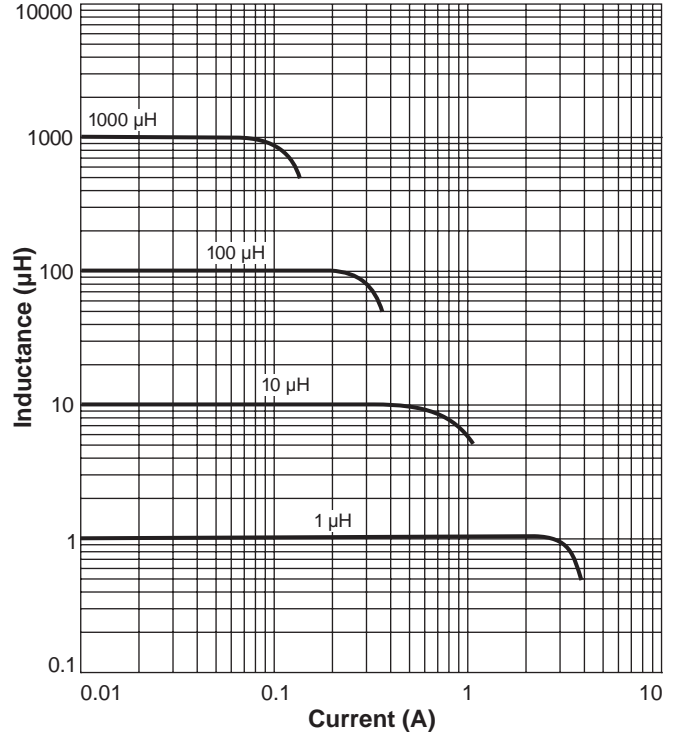


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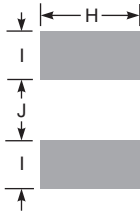
## Typical L vs Frequency



## 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

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



Specifications subject to change without notice. Document 240-2 Revised 03/06/03

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