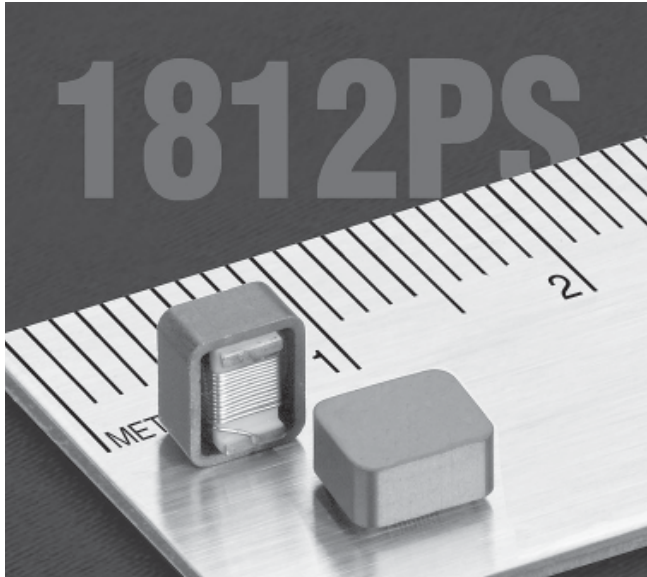


Power Chip Inductors - 1812PS Series



Coilcraft's new 1812PS Series is designed to be an economical alternative to larger and more costly shielded power inductors.

Only 3,81 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 C143** contains six samples each of the standard parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

Part number ¹	L ± 10% ² (μH)	Q min ³ @ 1 MHz	DCR ⁴ max (Ohms)	SRF ⁵ typ (MHz)	Isat ⁶ (A)	Irms ⁷ (A)
1812PS-102K_	1.0	35	0.05	685	2.50	2.70
1812PS-152K_	1.5	38	0.06	460	2.00	2.60
1812PS-222K_	2.2	38	0.07	270	1.70	2.40
1812PS-272K_	2.7	40	0.08	265	1.40	2.30
1812PS-332K_	3.3	40	0.09	225	1.40	2.30
1812PS-392K_	3.9	40	0.11	170	1.20	2.20
1812PS-472K_	4.7	40	0.11	165	1.15	2.10
1812PS-562K_	5.6	40	0.12	155	1.10	2.10
1812PS-682K_	6.8	40	0.13	140	1.00	1.90
1812PS-103K_	10	40	0.17	120	0.90	1.70
1812PS-153K_	15	40	0.26	100	0.70	1.45
1812PS-223K_	22	40	0.33	45	0.54	1.20
1812PS-333K_	33	40	0.40	30	0.46	1.10
1812PS-393K_	39	48	0.56	30	0.40	1.00
1812PS-473K_	47	50	0.87	28	0.35	0.80
1812PS-683K_	68	50	1.08	17	0.32	0.67
1812PS-823K_	82	55	1.25	17	0.28	0.65
1812PS-104K_	100	60	1.32	14	0.27	0.65
1812PS-124K_	120	60	1.45	12	0.23	0.60
1812PS-154K_	150	60	2.20	11	0.20	0.51
1812PS-224K_	220	60	2.65	7	0.17	0.47
1812PS-334K_	330	60	4.85	5.5	0.15	0.31
1812PS-474K_	470	50	5.85	4.0	0.12	0.31
1812PS-564K_	560	40	6.10	2.6	0.11	0.28
1812PS-684K_	680	40	6.60	2.3	0.10	0.28
1812PS-824K_	820	30	7.35	1.8	0.09	0.25
1812PS-105K_	1000	28	10.00	1.8	0.08	0.22

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

1812PS-105K C

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (600 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 (2200 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 252-1 Revised 03/31/03

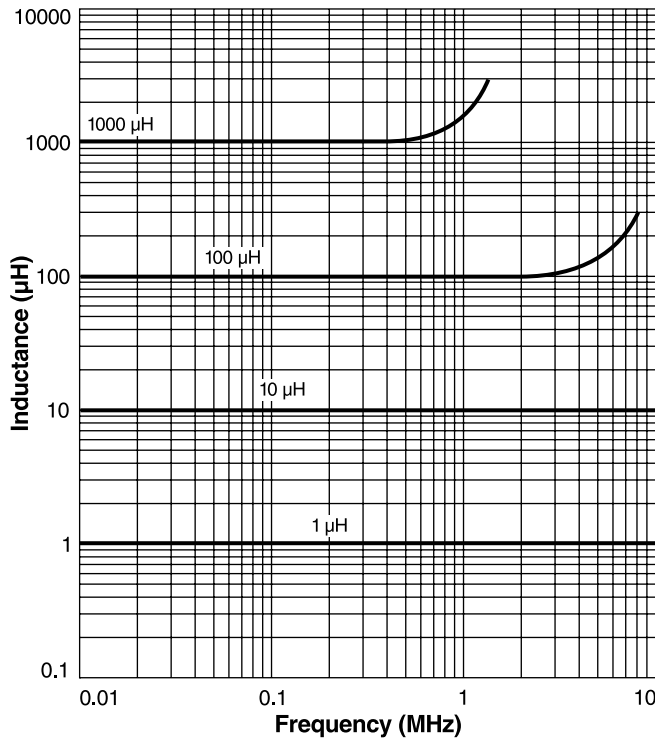
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail info@coilcraft.com Web <http://www.coilcraft.com>

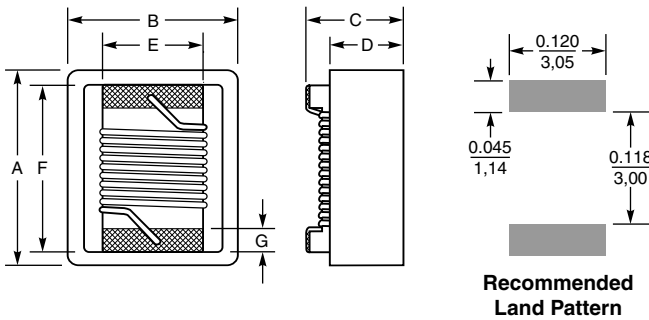
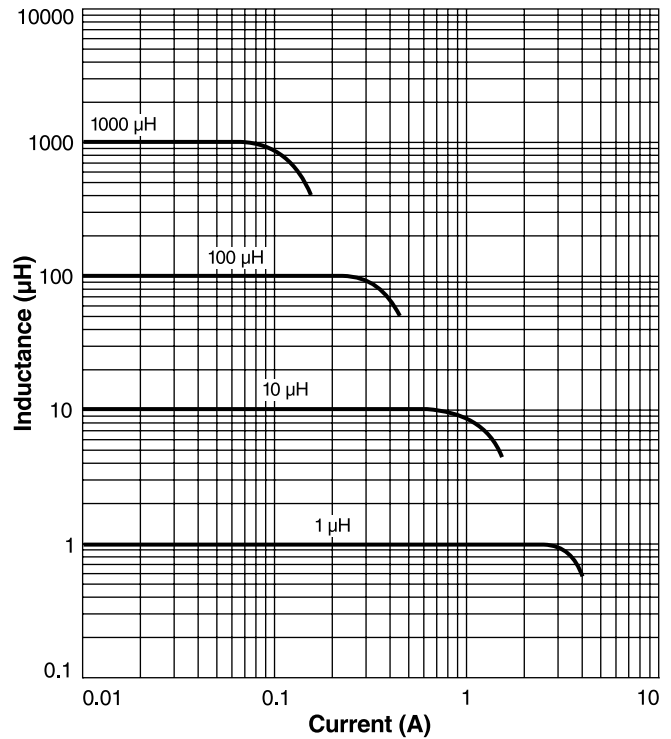
S-Parameter files
ON OUR WEB SITE OR CD
SPICE models
ON OUR WEB SITE OR CD

Power Chip Inductors - 1812PS Series

Typical L vs Frequency



Typical L vs Current



A max	B max	C max	D ref	E ref	F ref	G
0.231	0.196	0.150	0.107	0.100	0.178	0.025
5,87	4,98	3,81	2,72	2,54	4,52	0,64

Weight: 286 – 323 mg
Tape and reel: 600/7" reel; 2200/13" reel 12 mm tape width
For packaging data see Tape and Reel Specifications section.



Specifications subject to change without notice. Document 252-2 Revised 10/13/03

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469
E-mail info@coilcraft.com Web http://www.coilcraft.com