



1812LS Chip Inductors for xDSL Filters

The 0.055" profile makes these parts ideal for low clearance applications. Simple construction ensures high reliability and stability.

Coilcraft offers a library of 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 C314** contains samples of all 5% tolerance parts. To order, contact Coilcraft or purchase online at <http://order.coilcraft.com>.

Part number ¹	Inductance ² (μ H)	Percent tolerance	Q min ³	Test freq (MHz)	SRF typ ⁴ (MHz)	DCR max ⁵ (Ohms)	I _{rms} ⁶ (mA)
1812LS-123XJL_	12	5	42	2.5	85	2.0	310
1812LS-153XJL_	15	5	42	2.5	70	2.5	290
1812LS-183XJL_	18	5	45	2.5	52	2.8	270
1812LS-223XJL_	22	5	45	2.5	58	3.2	260
1812LS-273XJL_	27	5	45	2.5	46	3.6	240
1812LS-333XJL_	33	5	45	2.5	40	4.0	230
1812LS-393XJL_	39	5	45	2.5	30	4.5	210
1812LS-473XJL_	47	5	42	2.5	24	5.0	200
1812LS-563XJL_	56	5	42	2.5	20	5.5	190
1812LS-683XJL_	68	5	40	2.5	16	6.0	180
1812LS-823XJL_	82	5	40	2.5	13.5	7.0	170
1812LS-104XJL_	100	5	40	2.5	12.0	8.0	150
1812LS-124XJL_	120	5	33	0.79	14.5	11.5	135
1812LS-154XJL_	150	5	36	0.79	11.5	13.0	125
1812LS-184XJL_	180	5	36	0.79	9.3	14.2	120
1812LS-224XJL_	220	5	38	0.79	7.6	16.2	115
1812LS-274XJL_	270	5	38	0.79	8.3	20.5	105
1812LS-334XJL_	330	5	38	0.79	7.0	22.5	100
1812LS-394XJL_	390	5	38	0.79	5.2	24.5	90
1812LS-474XJL_	470	5	38	0.79	4.4	26.5	85
1812LS-564XJL_	560	5	33	0.79	2.8	28.5	75
1812LS-684XJL_	680	5	33	0.79	2.3	38.0	60
1812LS-824XJL_	820	5	30	0.79	2.1	41.0	55
1812LS-105XJL_	1000	5	30	0.79	1.9	44.0	50

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

1812LS-105XJL C

Packaging: C = 7² machine-ready reel. EIA-481 embossed plastic tape (600 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 per full reel).

2. Inductance at 2.5 MHz measured using an Agilent/HP 4286A and a Coilcraft SMD-A fixture with Coilcraft-provided correlation pieces. Inductance at 0.79 MHz measured using an Agilent/HP 4192A and Coilcraft SMD-B test fixture.

3. Q read at test frequency directly on an Agilent/HP 4192A LF impedance analyzer and a Coilcraft SMD-B test fixture.

4. SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.

5. DCR measured on a Cambridge Technology micro-ohmmeter.

6. Average current for 15°C temperature rise from 25°C.

7. Operating temperature range -40°C to +85°C.

8. Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

See Color Coding section for part marking 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 225-1 Revised 03/23/05

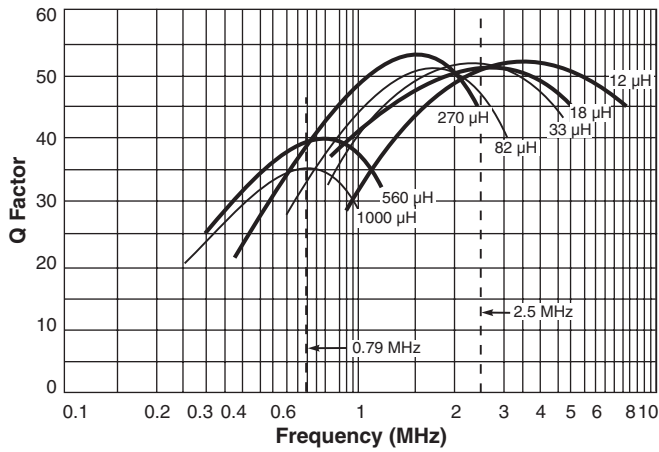
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

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

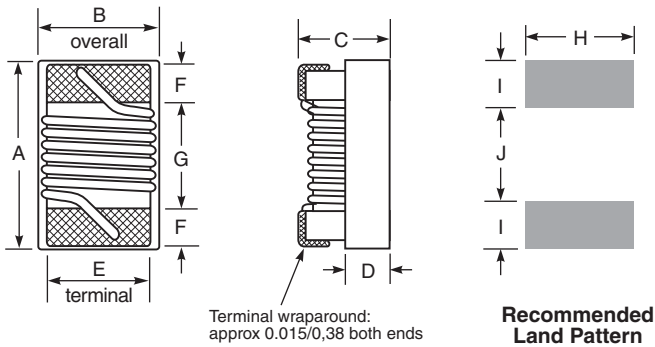
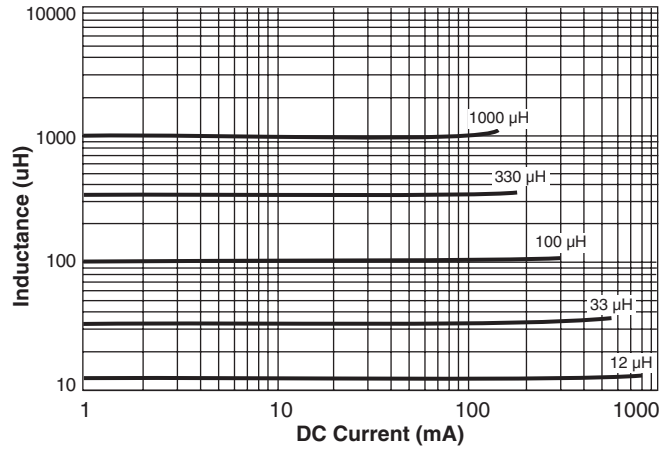


1812LS (4532) Chip Inductors

Typical Q vs Frequency



Typical L vs Current



A max	B max	C max	D ref	E	F	G	H	I	J
0.195	0.150	0.135	0.070	0.100	0.025	0.128	0.120	0.045	0.118
4,95	3,81	3,43	1,78	2,54	0,64	3,25	3,05	1,14	3,00

Weight: 142 – 171 mg
Terminations: Silver-palladium-platinum
Tape and reel: 600/7" reel; 2200/13" reel 12 mm tape width
 For packaging data see Tape and Reel Specifications section.

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



Specifications subject to change without notice.
Please check our website for latest information.

Document 225-2 Revised 03/23/05

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>