

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 compo-

nents. We can also provide several complete low pass and band pass filter modules in space-saving SIP configurations.

For free evaluation samples or more information, please contact Coilcraft or visit www.coilcraft.com/xdsl.

Part number ¹	Inductance ² (μ H)	Percent tolerance ³	Q min ⁴	Test freq (MHz)	SRF min ⁵ (MHz)	DCR max ⁶ (Ohms)	Irms ⁷ (mA)
1812LS-123X_B_	12	10, 5	42	2.5	55	2.0	310
1812LS-153X_B_	15	10, 5	42	2.5	45	2.5	290
1812LS-183X_B_	18	10, 5	45	2.5	37	2.8	270
1812LS-223X_B_	22	10, 5	45	2.5	32	3.2	260
1812LS-273X_B_	27	10, 5	45	2.5	27	3.6	240
1812LS-333X_B_	33	10, 5	45	2.5	23	4.0	230
1812LS-393X_B_	39	10, 5	45	2.5	19	4.5	210
1812LS-473X_B_	47	10, 5	42	2.5	16	5.0	200
1812LS-563X_B_	56	10, 5	42	2.5	13	5.5	190
1812LS-683X_B_	68	10, 5	40	2.5	10	6.0	180
1812LS-823X_B_	82	10, 5	40	2.5	9.0	7.0	170
1812LS-104X_B_	100	10, 5	40	2.5	8.5	8.0	150
1812LS-124X_B_	120	10, 5	33	0.79	8.5	11.5	135
1812LS-154X_B_	150	10, 5	36	0.79	8.5	13.0	125
1812LS-184X_B_	180	10, 5	36	0.79	8.0	14.2	120
1812LS-224X_B_	220	10, 5	38	0.79	6.0	16.2	115
1812LS-274X_B_	270	10, 5	38	0.79	5.0	20.5	105
1812LS-334X_B_	330	10, 5	38	0.79	4.5	22.5	100
1812LS-394X_B_	390	10, 5	38	0.79	3.5	24.5	90
1812LS-474X_B_	470	10, 5	38	0.79	3.0	26.5	85
1812LS-564X_B_	560	10, 5	33	0.79	2.0	28.5	75
1812LS-684X_B_	680	10, 5	33	0.79	1.9	38.0	60
1812LS-824X_B_	820	10, 5	30	0.79	1.6	41.0	55
1812LS-105X_B_	1000	10, 5	30	0.79	1.5	44.0	50

1. Specify **tolerance** and **packaging** codes:

1812LS-105X **J** **B** **C**

Tolerance: **J** = 5% **K** = 10%

(Table shows stock tolerances in bold.)

Packaging: **C** = 7" 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 Agilent/HP 4286A and Coilcraft SMD-A fixture with Coilcraft-provided correlation pieces. Inductance at 0.79 MHz measured using Agilent/HP 4192A and Coilcraft SMD-B test fixture.

3. Tolerances in bold are stocked for immediate shipment.

4. Q read directly on Agilent/HP 4192A LF impedance analyzer and Coilcraft SMD-B test fixture.

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

6. DCR measured on Cambridge Technology micro-ohmmeter.

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

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

9. 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[®]

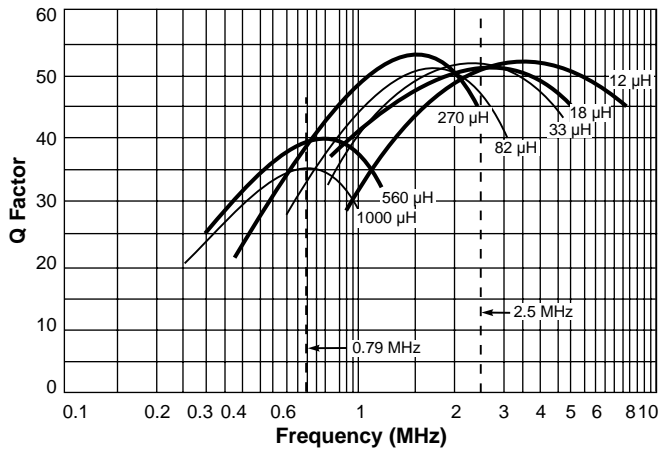
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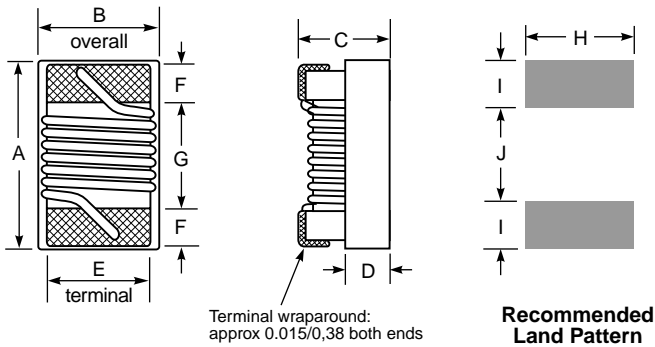
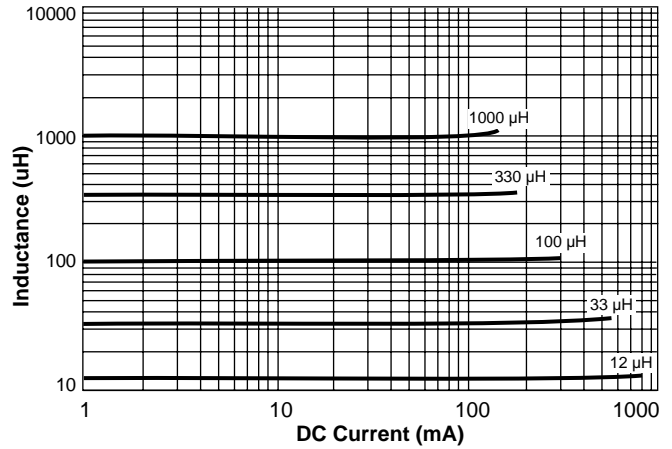
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1812LS (4532) Chip Inductors

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

Parts/reel: 7" 600; 13" 2200 Tape width: 12 mm
 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



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