



Chip Inductors – 1812LS Series (4532)

With inductance values up to 1000 μH , these are our highest rated chip inductors. Their ferrite core allows higher current ratings and lower DC resistance. These parts can be ordered with terminations that make them compliant with

RoHS standards. Coilcraft **Designer's Kit C114** contains samples of all 5% tolerance parts. To order, contact Coilcraft or purchase on-line at <http://order.coilcraft.com>.

Part number ¹	Inductance ² (μH)	Percent tolerance ³	Q min ⁴	Test freq (MHz)	SRF min ⁵ (MHz)	DCR max ⁶ (Ohms)	I _{rms} 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. When ordering, specify **tolerance, termination and packaging** codes:

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

Tolerance: J = 5% K = 10%

(Table shows stock tolerances in bold.)

Termination: B = Standard Ag/Pd/Pt L = RoHS compliant Ag/Pd/Pt

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[®]

Specifications subject to change without notice. Document 106-1 Revised 11/13/03

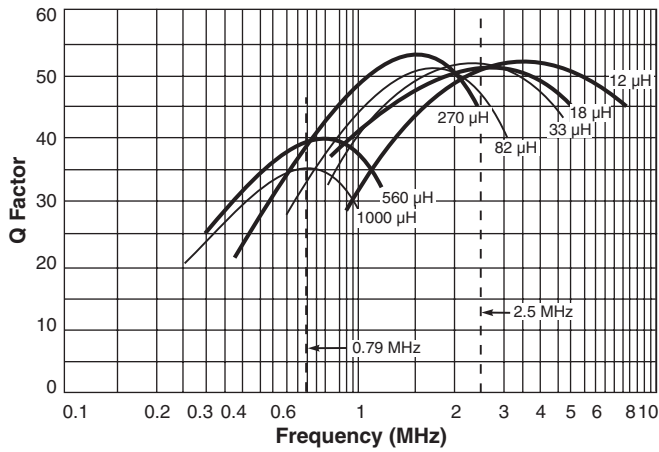
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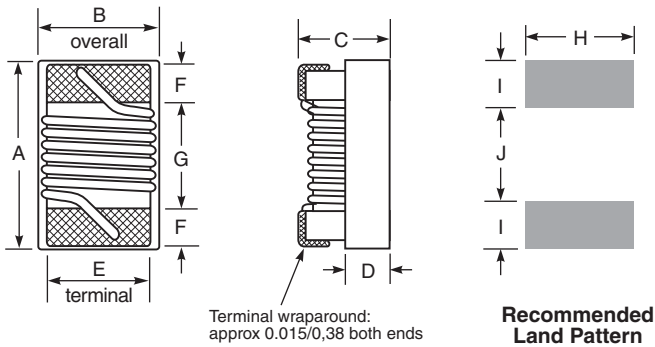
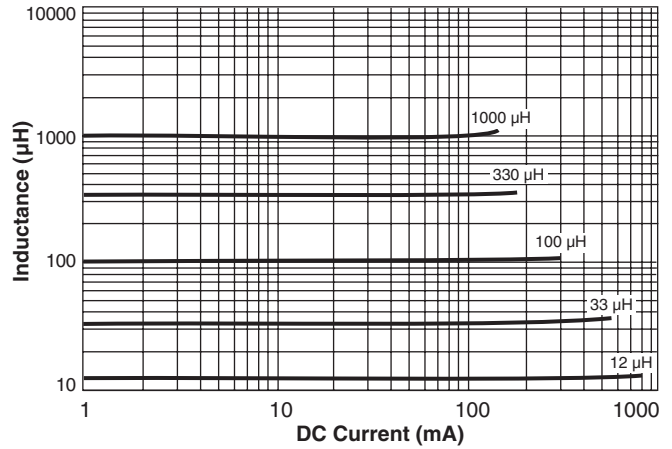


1812LS (4532) Chip Inductors

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

Weight: 142 – 171 mg

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



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