

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.

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

Part number ¹	Inductance ² (μH)	Percent tolerance ³	Q min ⁴	Test freq (MHz)	SRF typ ⁵ (MHz)	DCR max ⁶ (Ohms)	Irms ⁷ (mA)
1812LS-123X_B_	12	5	42	2.5	85	2.0	310
1812LS-153X_B_	15	5	42	2.5	70	2.5	290
1812LS-183X_B_	18	5	45	2.5	52	2.8	270
1812LS-223X_B_	22	5	45	2.5	58	3.2	260
1812LS-273X_B_	27	5	45	2.5	46	3.6	240
1812LS-333X_B_	33	5	45	2.5	40	4.0	230
1812LS-393X_B_	39	5	45	2.5	30	4.5	210
1812LS-473X_B_	47	5	42	2.5	24	5.0	200
1812LS-563X_B_	56	5	42	2.5	20	5.5	190
1812LS-683X_B_	68	5	40	2.5	16	6.0	180
1812LS-823X_B_	82	5	40	2.5	13.5	7.0	170
1812LS-104X_B_	100	5	40	2.5	12.0	8.0	150
1812LS-124X_B_	120	5	33	0.79	14.5	11.5	135
1812LS-154X_B_	150	5	36	0.79	11.5	13.0	125
1812LS-184X_B_	180	5	36	0.79	9.3	14.2	120
1812LS-224X_B_	220	5	38	0.79	7.6	16.2	115
1812LS-274X_B_	270	5	38	0.79	8.3	20.5	105
1812LS-334X_B_	330	5	38	0.79	7.0	22.5	100
1812LS-394X_B_	390	5	38	0.79	5.2	24.5	90
1812LS-474X_B_	470	5	38	0.79	4.4	26.5	85
1812LS-564X_B_	560	5	33	0.79	2.8	28.5	75
1812LS-684X_B_	680	5	33	0.79	2.3	38.0	60
1812LS-824X_B_	820	5	30	0.79	2.1	41.0	55
1812LS-105X_B_	1000	5	30	0.79	1.9	44.0	50

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

1812LS-105XJB C

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 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. Tolerances in bold are stocked for immediate shipment.

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

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

6. DCR measured on a 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.

Please check our website for latest information.

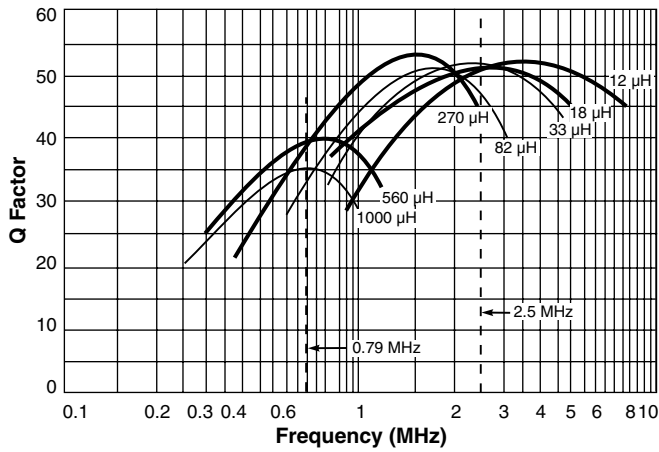
Document 106-1 Revised 02/09/05

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

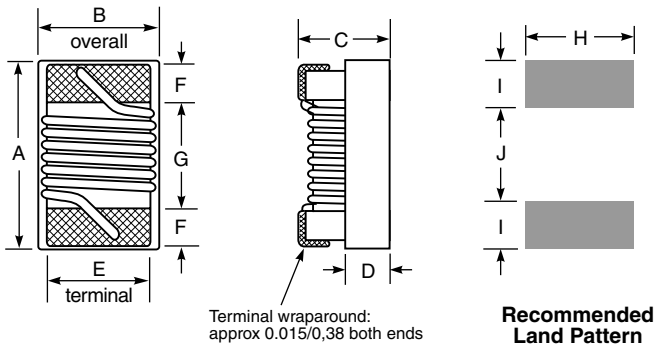
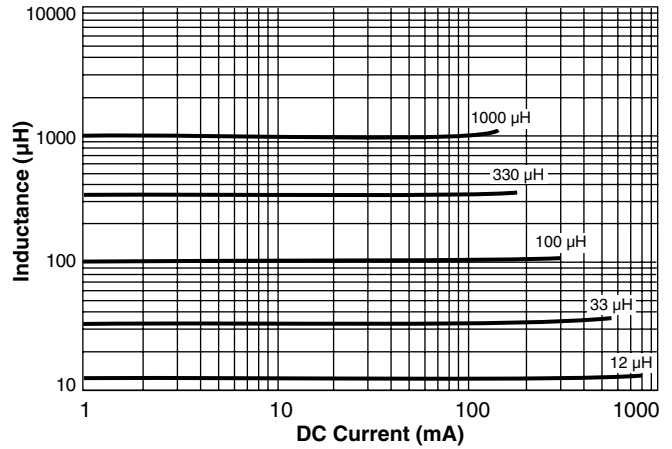
E-mail info@coilcraft.com Web <http://www.coilcraft.com>

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 106-2 Revised 12/14/04

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