

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 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)	R _{DC} Max ⁶ (Ohms)	I _{DC} Max ⁷ (mA)
1812LS-123X_BC	12	10, 5	42	2.5	55	2.0	310
1812LS-153X_BC	15	10, 5	42	2.5	45	2.5	290
1812LS-183X_BC	18	10, 5	45	2.5	37	2.8	270
1812LS-223X_BC	22	10, 5	45	2.5	32	3.2	260
1812LS-273X_BC	27	10, 5	45	2.5	27	3.6	240
1812LS-333X_BC	33	10, 5	45	2.5	23	4.0	230
1812LS-393X_BC	39	10, 5	45	2.5	19	4.5	210
1812LS-473X_BC	47	10, 5	42	2.5	16	5.0	200
1812LS-563X_BC	56	10, 5	42	2.5	13	5.5	190
1812LS-683X_BC	68	10, 5	40	2.5	10	6.0	180
1812LS-823X_BC	82	10, 5	40	2.5	9	7.0	170
1812LS-104X_BC	100	10, 5	40	2.5	8.5	8.0	150
1812LS-124X_BC	120	10, 5	33	0.79	8.5	11.5	135
1812LS-154X_BC	150	10, 5	36	0.79	8.5	13.0	125
1812LS-184X_BC	180	10, 5	36	0.79	8.0	14.2	120
1812LS-224X_BC	220	10, 5	38	0.79	6.0	16.2	115
1812LS-274X_BC	270	10, 5	38	0.79	5.0	20.5	105
1812LS-334X_BC	330	10, 5	38	0.79	4.5	22.5	100
1812LS-394X_BC	390	10, 5	38	0.79	3.5	24.5	90
1812LS-474X_BC	470	10, 5	38	0.79	3.0	26.5	85
1812LS-564X_BC	560	10, 5	33	0.79	2.0	28.5	75
1812LS-684X_BC	680	10, 5	33	0.79	1.9	38.0	60
1812LS-824X_BC	820	10, 5	30	0.79	1.6	41.0	55
1812LS-105X_BC	1000	10, 5	30	0.79	1.5	44.0	50

• For environmental data see "Product Specifications" section (Document 121).

1. When ordering, please specify tolerance and packaging codes:

1812LS-105X_BC

Packaging

C = EIA RS-481 clear tape and reel (standard).
For orders of less than a full reel, there is a \$25 per reel charge to make them machine-ready.
B = In a carrier tape but without leader or trailer.

Inductance tolerance

J = 5%, **K** = 10%
Table above shows stock tolerances in bold.

- Inductance at 2.5 MHz measured using HP4286A and Coilcraft SMD-A fixture with Coilcraft-provided correlation pieces. Inductance at 0.79 MHz measured using HP4192A and Coilcraft SMD-B test fixture with Coilcraft-provided correlation pieces.
- Tolerances in bold are stocked for immediate shipment.
- Q read directly on HP4192A LF impedance analyzer and Coilcraft SMD-B test fixture using Coilcraft supplied correlation pieces.
- SRF measured using HP8753D network analyzer and Coilcraft SMD-D test fixture.
- R_{DC} measured on Cambridge Technology micro-ohmmeter.
- For 15°C rise.
- Operating temperature range -40° C to +85° C.
- Electrical specifications at 25° C.

COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
DOC. 126 **TEST FIXTURES**

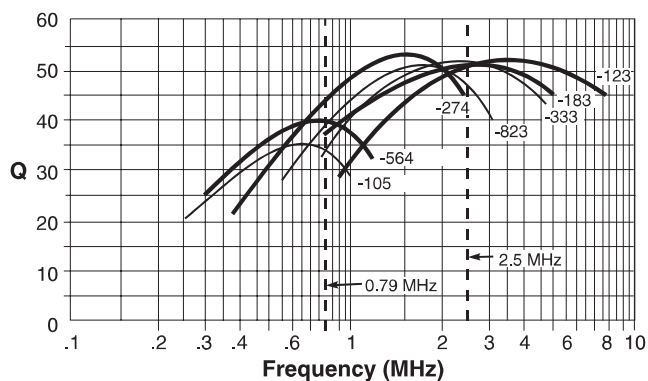
Coilcraft

Specifications subject to change without notice. Document 106-1 Revised 7/31/00

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1812LS (4532) Chip Inductors

TYPICAL Q vs FREQUENCY

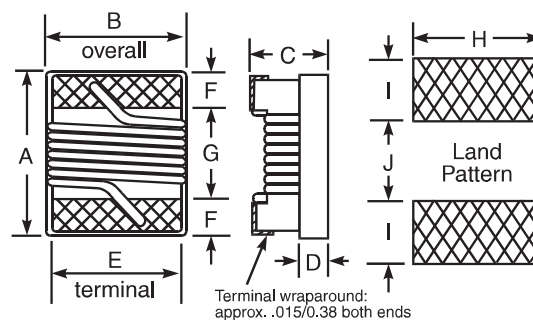


S-Parameter files

ON OUR WEB SITE OR CD

PSPICE models

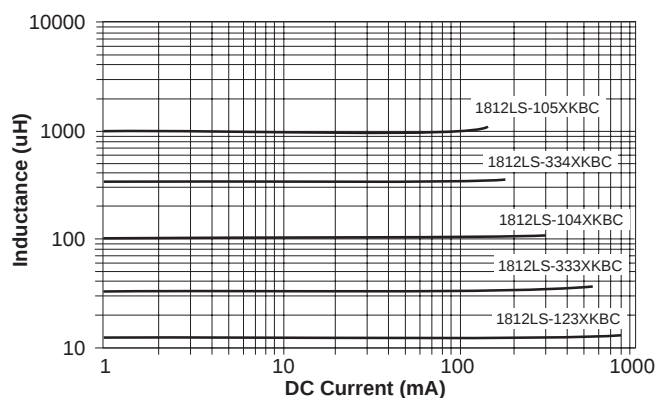
SEE DOC 158



A Max	B Max	C Max	D Ref	E	F	G	H	I	J
.195	.150	.135	.070	.100	.025	.128	.120	.045	.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: 12mm
 For packaging data see "Tape and Reel Specifications" (Document 173)

SATURATING CURRENT



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