



Chip Inductors - 0805LS Series (2012)

These ferrite core surface mount inductors have lower DCR and higher current ratings than our 0805CS Series. They come in inductance values from 0.078 to 27 μ H.

Coilcraft **Designer's Kit C354** contains samples of all 5% inductance tolerance parts. To order, contact Coilcraft or visit <http://order.coilcraft.com> to purchase on-line.

Part number ¹	Inductance ² (μ H)	Percent tolerance	Qmin ³	SRF min ⁴ (MHz)	DCR max ⁵ (Ohms)	Irms ⁶ (A)	Color code
0805LS-78NX_L_	0.078 @ 7.9 MHz	5,2	19 @ 7.9 MHz	1440	0.042	2.0	Black
0805LS-111X_L_	0.110 @ 7.9 MHz	5,2	19 @ 7.9 MHz	1200	0.05	2.0	Brown
0805LS-471X_L_	0.470 @ 7.9 MHz	5,2	19 @ 7.9 MHz	500	0.31	0.720	Red
0805LS-681X_L_	0.680 @ 7.9 MHz	5,2	20 @ 7.9 MHz	400	0.46	0.590	Orange
0805LS-102X_L_	1.0 @ 7.9 MHz	5,2	20 @ 7.9 MHz	340	0.69	0.500	Yellow
0805LS-122X_L_	1.2 @ 7.9 MHz	5,2	15 @ 7.9 MHz	280	1.20	0.400	Brown
0805LS-152X_L_	1.5 @ 7.9 MHz	5,2	20 @ 7.9 MHz	275	1.03	0.490	Green
0805LS-182X_L_	1.8 @ 7.9 MHz	5,2	20 @ 7.9 MHz	246	1.15	0.410	Blue
0805LS-222X_L_	2.2 @ 7.9 MHz	5,2	20 @ 7.9 MHz	106	1.28	0.365	Brown
0805LS-272X_L_	2.7 @ 7.9 MHz	5,2	20 @ 7.9 MHz	105	1.48	0.350	Violet
0805LS-332X_L_	3.3 @ 7.9 MHz	5,2	20 @ 7.9 MHz	83	1.57	0.330	Gray
0805LS-392X_L_	3.9 @ 7.9 MHz	5,2	20 @ 7.9 MHz	52	1.70	0.300	White
0805LS-472X_L_	4.7 @ 7.9 MHz	5,2	20 @ 7.9 MHz	50	1.87	0.280	Black
0805LS-682X_L_	6.8 @ 7.9 MHz	5,2	20 @ 7.9 MHz	35	2.25	0.260	Brown
0805LS-822X_L_	8.2 @ 2.5 MHz	5,2	18 @ 2.5 MHz	27	2.55	0.250	Red
0805LS-103X_L_	10.0 @ 2.5 MHz	5,2	18 @ 2.5 MHz	21	3.45	0.200	Orange
0805LS-153X_L_	15.0 @ 2.5 MHz	5,2	18 @ 2.5 MHz	17	5.03	0.180	Yellow
0805LS-223X_L_	22.0 @ 2.5 MHz	5,2	18 @ 2.5 MHz	13	6.18	0.150	Green
0805LS-273X_L_	27.0 @ 2.5 MHz	5,2	15 @ 2.5 MHz	11	11.04	0.120	Blue

1. When ordering, specify **tolerance**, **termination** and **packaging** codes:

0805LS-273XJ L C

- Tolerance:** G = 2% J = 5%
(Table shows stock tolerances in bold.)
- Termination:** L = RoHS compliant silver-palladium-platinum-glass frit.
Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).
- Packaging:** C = 7" machine-ready reel. EIA-481 embossed plastic tape (2000 parts 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.

2. Inductance measured using a Coilcraft SMD-A fixture in an Agilent/HP 4286A impedance analyzer with Coilcraft-provided correlation pieces.
3. Q measured on an Agilent/HP 4291A with an Agilent/HP 16193 test fixture.
4. SRF measured using an Agilent/HP 8753D network analyzer with a Coilcraft SMD-D test fixture.
5. DCR measured on a Cambridge Technology Micro-ohmmeter.
6. Current that causes a 15°C temperature rise from 25°C ambient. Because of their open construction, these parts will not saturate.
7. Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Core material Ceramic/Ferrite

Terminations RoHS compliant silver-palladium-platinum-glass frit. Other terminations available at additional cost.

Weight 12.7 – 13.9 mg

Ambient temperature -40°C to +85°C with I_{rms} current, +85°C to +100°C with derated current

Storage temperature Component: -40°C to +100°C.
Packaging: -40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Temperature Coefficient of Inductance (TCL) +100 to +250 ppm/°C

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Mean Time Between Failures (MTBF) 1 billion hours

Packaging 2000 per 7" reel; 7500 per 13" reel;
Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.6 mm pocket depth

PCB washing Only pure water or alcohol recommended

Specifications subject to change without notice.

Please check our website for latest information. Document 288-1 Revised 10/06/08

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>



0805LS Series Chip Inductors

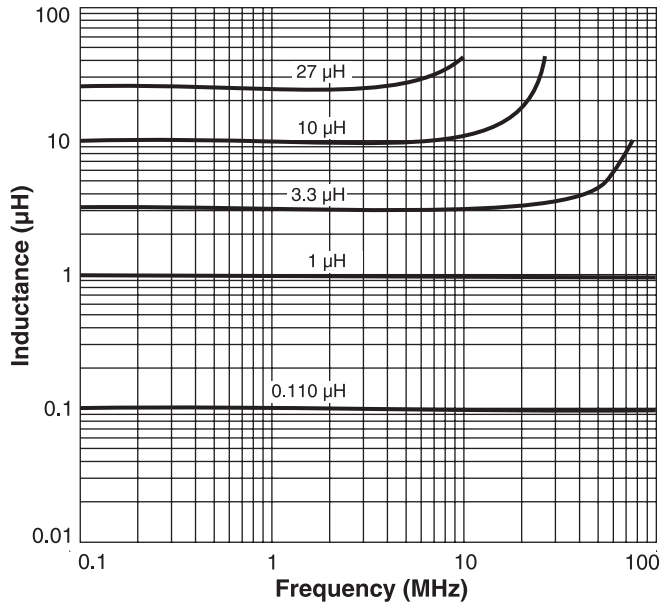
S-Parameter files

ON OUR WEB SITE OR CD

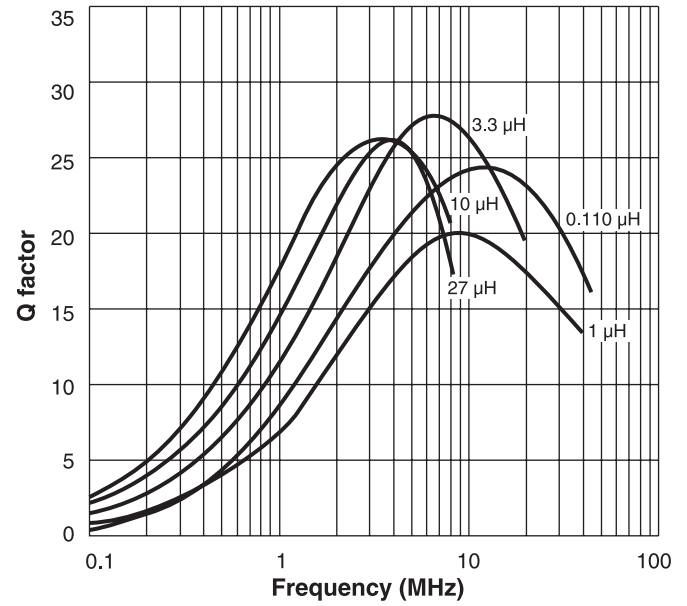
SPICE models

ON OUR WEB SITE OR CD

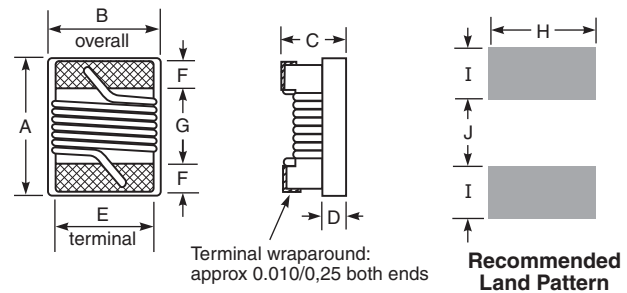
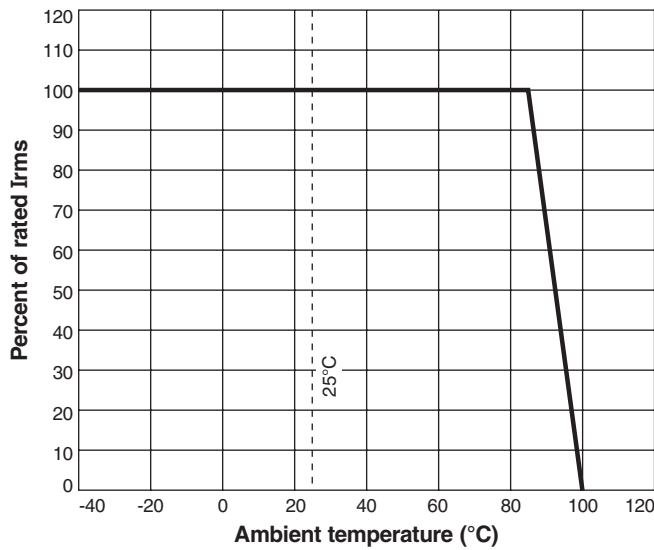
Typical L vs Frequency



Typical Q vs Frequency



Irms Derating



A	B	C	D	E	F	G	H	I	J
max	max	max	ref						
0.090	0.075	0.063	0.020	0.050	0.020	0.040	0.070	0.040	0.030 inches
2,29	1,91	1,60	0,51	1,27	0,51	1,02	1,78	1,02	0,76 mm



Specifications subject to change without notice.

Please check our website for latest information. Document 288-2 Revised 10/06/08

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