



# Chip Inductors - 0603LS Series (1608)

These ferrite core surface mount inductors have lower DCR and higher current ratings than our 0603CS Series. They come in inductance values from 47 to 10,000 nH.

Coilcraft **Designer's Kit C147** contains samples of all 5% tolerance parts. To order, contact Coilcraft or visit <http://order.coilcraft.com> to order on-line.

Part number <sup>1</sup>	Inductance <sup>2</sup> (nH)	Percent tolerance	Q min <sup>3</sup>	SRF min <sup>4</sup> (MHz)	DCR max <sup>5</sup> (Ohms)	Irms <sup>6</sup> (A)	Color code
0603LS-47NX_B_	47 @ 7.9 MHz	<b>5,2</b>	12 @ 7.9 MHz	1500	0.075	1.40	Black
0603LS-72NX_B_	72 @ 7.9 MHz	<b>5,2</b>	12 @ 7.9 MHz	1400	0.12	1.40	Brown
0603LS-101X_B_	100 @ 7.9 MHz	<b>5,2</b>	12 @ 7.9 MHz	1150	0.13	1.40	Red
0603LS-121X_B_	120 @ 7.9 MHz	<b>5,2</b>	12 @ 7.9 MHz	1100	0.15	1.40	Orange
0603LS-151X_B_	150 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	1050	0.15	1.30	Yellow
0603LS-181X_B_	180 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	950	0.15	1.30	Green
0603LS-241X_B_	240 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	800	0.16	0.95	Violet
0603LS-271X_B_	270 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	775	0.30	0.71	Gray
0603LS-331X_B_	330 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	725	0.46	0.56	White
0603LS-391X_B_	390 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	620	0.51	0.50	Black
0603LS-471X_B_	470 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	540	0.62	0.42	Brown
0603LS-561X_B_	560 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	525	0.44	0.55	Red
0603LS-681X_B_	680 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	260	0.52	0.47	Orange
0603LS-781X_B_	780 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	460	0.83	0.39	Yellow
0603LS-821X_B_	820 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	410	0.69	0.40	Green
0603LS-102X_B_	1000 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	190	0.81	0.40	Blue
0603LS-122X_B_	1200 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	160	0.87	0.37	Violet
0603LS-152X_B_	1500 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	100	0.96	0.35	Gray
0603LS-182X_B_	1800 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	80	1.1	0.35	White
0603LS-222X_B_	2200 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	68	1.2	0.32	Black
0603LS-272X_B_	2700 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	60	1.5	0.28	Brown
0603LS-332X_B_	3300 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	42	1.5	0.28	Red
0603LS-392X_B_	3900 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	40	1.6	0.28	Orange
0603LS-472X_B_	4700 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	34	2.1	0.26	Yellow
0603LS-562X_B_	5600 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	32	2.6	0.24	Green
0603LS-682X_B_	6800 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	31	3.1	0.20	Black
0603LS-782X_B_	7800 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	28	3.5	0.20	Blue
0603LS-822X_B_	8200 @ 7.9 MHz	<b>5,2</b>	15 @ 7.9 MHz	26	3.6	0.19	Violet
0603LS-103X_B_	10,000 @ 2.5 MHz	<b>5,2</b>	12 @ 2.5 MHz	25	4.8	0.18	Gray

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

**0603LS-822X J B C**

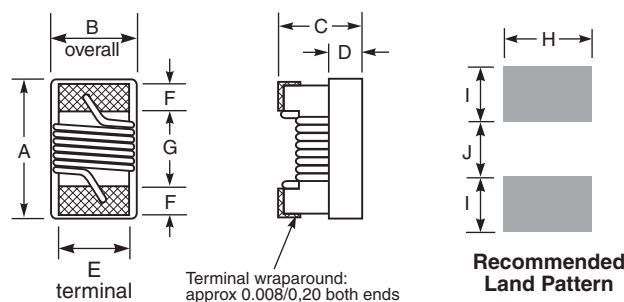
**Tolerance:** G = 2% J = 5%

(Table shows stock tolerances in bold.)

**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.

- Inductance measured at 7.9 MHz, 0.1 Vrms, using Coilcraft SMD-A fixture in Agilent/HP 4286A impedance analyzer.
  - Q measured on Agilent/HP 4395A with Agilent/HP 16193 test fixture.
  - SRF measured using Agilent/HP 8753D network analyzer with Coilcraft SMD-D test fixture.
  - DCR measured on Cambridge Technology Micro-ohmmeter.
  - Average current for a 15°C temperature rise above 25°C ambient.
  - Operating temperature range -40°C to +85°C.
  - Electrical specifications at 25°C.
- See Qualification Standards section for environmental and test data.



A max	B max	C max	D ref	E	F	G	H	I	J
0.071	0.048	0.042	0.015	0.030	0.013	0.034	0.040	0.025	0.025
1,80	1,22	1,07	0,38	0,76	0,33	0,86	1,02	0,64	0,64

**Weight:** 4.8 – 6.2 mg

**Terminations:** Platinum/palladium/silver

**Tape and reel:** 2000/7" reel 8 mm tape width

For packaging data see Tape and Reel Specifications section.

**Coilcraft**<sup>®</sup>

Specifications subject to change without notice.

Please check our website for latest information.

Document 264-1 Revised 12/14/04

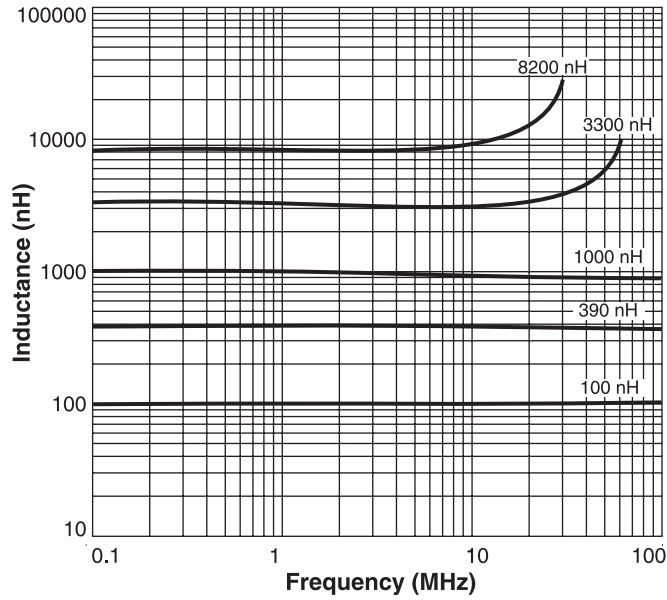
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>



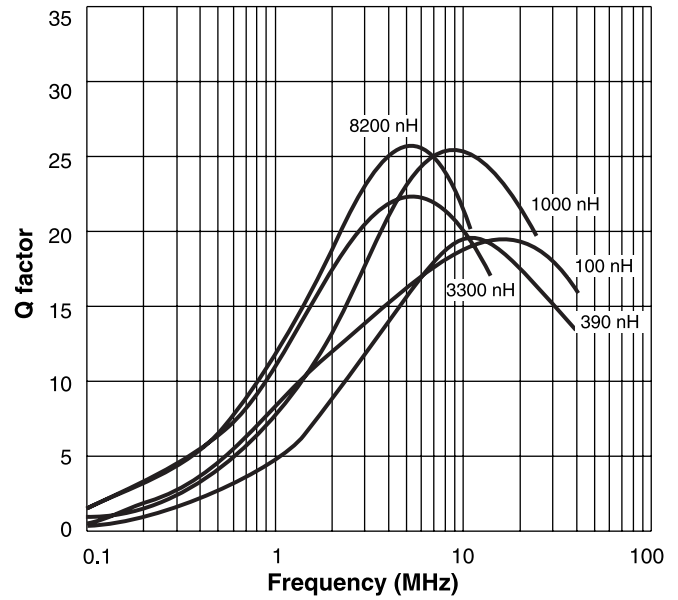
# Chip Inductors - 0603LS Series

## Typical L vs Frequency



**S-Parameter files**  
ON OUR WEB SITE OR CD  
**SPICE models**  
ON OUR WEB SITE OR CD

## Typical Q vs Frequency



Specifications subject to change without notice.  
Please check our website for latest information.

Document 264-2 Revised 11/03/03

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

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>