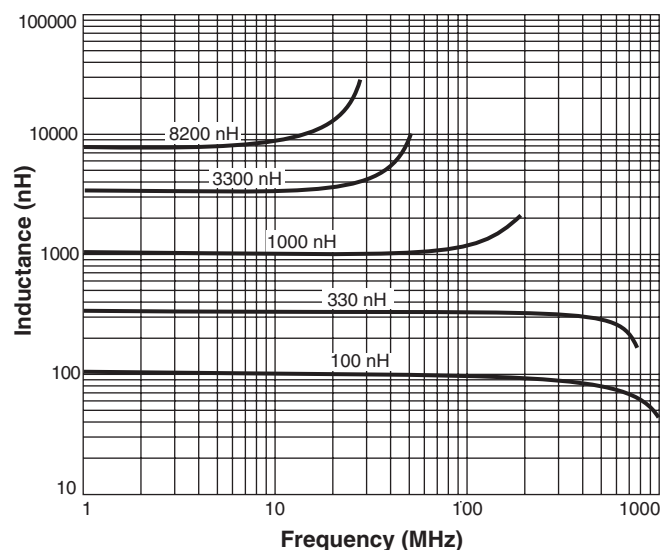




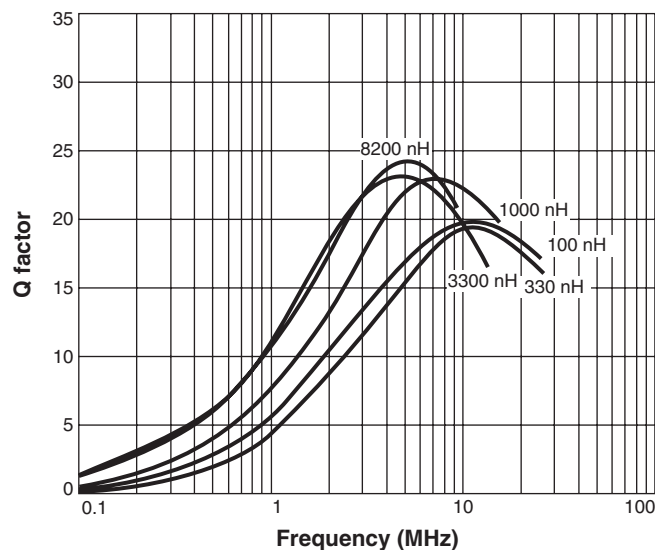
Chip Inductors – 0603LS (1608)

- Higher inductance values than other 0603 inductors
- Ferrite construction for high current handling
- Inductance values: 47 nH – 22 μ H; 5% and 2% tolerance

Typical L vs Frequency



Typical Q vs Frequency



Designer's Kit C347 contains 10 each of all 5% values

Core material Ceramic/Ferrite

Environmental RoHS compliant, halogen free optional

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

Weight 4.8 – 6.2 mg

Ambient temperature –40°C to +85°C with Irms current, +85°C to +100°C with derated current

Storage temperature Component: –40°C to +100°C. Tape and reel 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) +50 to +150 ppm/°C

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

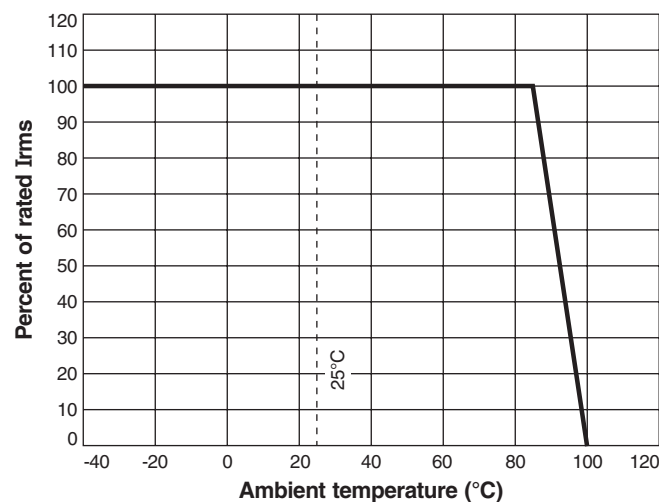
Failures in Time (FIT) / Mean Time Between Failures (MTBF)

One per billion hours / one billion hours, calculated per Telcordia SR-332

Packaging 2000 per 7" reel. Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.17 mm pocket depth

PCB washing Only pure water or alcohol recommended

Irms Derating



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 264-1 Revised 01/18/12

© Coilcraft Inc. 2012

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check out web site for latest information.



Chip Inductors – 0603LS Series

S-Parameter files

ON OUR WEB SITE

SPICE models

ON OUR WEB SITE

Part number ¹	Inductance ² (nH)	Percent tolerance	Q min ³	SRF min ⁴ (MHz)	DCR max ⁵ (Ohms)	Irms ⁶ (A)	Color code	Overall width
0603LS-47NX_L_	47 @ 7.9 MHz	5,2	12 @ 7.9 MHz	1500	0.075	1.40	Black	B1
0603LS-51NX_L_	51 @ 7.9 MHz	5,2	12 @ 7.9 MHz	1400	0.075	1.00	Violet	B1
0603LS-72NX_L_	72 @ 7.9 MHz	5,2	12 @ 7.9 MHz	1400	0.12	1.40	Brown	B1
0603LS-101X_L_	100 @ 7.9 MHz	5,2	12 @ 7.9 MHz	1150	0.13	1.40	Red	B1
0603LS-121X_L_	120 @ 7.9 MHz	5,2	12 @ 7.9 MHz	1100	0.15	1.40	Orange	B1
0603LS-151X_L_	150 @ 7.9 MHz	5,2	15 @ 7.9 MHz	1050	0.15	1.30	Yellow	B1
0603LS-181X_L_	180 @ 7.9 MHz	5,2	15 @ 7.9 MHz	950	0.15	1.30	Green	B1
0603LS-241X_L_	240 @ 7.9 MHz	5,2	15 @ 7.9 MHz	800	0.16	0.95	Violet	B1
0603LS-271X_L_	270 @ 7.9 MHz	5,2	15 @ 7.9 MHz	775	0.30	0.71	Gray	B1
0603LS-331X_L_	330 @ 7.9 MHz	5,2	15 @ 7.9 MHz	725	0.46	0.56	White	B1
0603LS-391X_L_	390 @ 7.9 MHz	5,2	15 @ 7.9 MHz	620	0.51	0.50	Black	B1
0603LS-471X_L_	470 @ 7.9 MHz	5,2	15 @ 7.9 MHz	540	0.62	0.42	Brown	B1
0603LS-561X_L_	560 @ 7.9 MHz	5,2	15 @ 7.9 MHz	525	0.44	0.55	Red	B1
0603LS-681X_L_	680 @ 7.9 MHz	5,2	15 @ 7.9 MHz	260	0.52	0.47	Orange	B2
0603LS-781X_L_	780 @ 7.9 MHz	5,2	15 @ 7.9 MHz	460	0.83	0.39	Yellow	B1
0603LS-821X_L_	820 @ 7.9 MHz	5,2	15 @ 7.9 MHz	410	0.69	0.40	Green	B2
0603LS-102X_L_	1000 @ 7.9 MHz	5,2	15 @ 7.9 MHz	190	0.81	0.40	Blue	B2
0603LS-122X_L_	1200 @ 7.9 MHz	5,2	15 @ 7.9 MHz	160	0.87	0.37	Violet	B2
0603LS-152X_L_	1500 @ 7.9 MHz	5,2	15 @ 7.9 MHz	100	0.96	0.35	Gray	B2
0603LS-182X_L_	1800 @ 7.9 MHz	5,2	15 @ 7.9 MHz	80	1.1	0.35	White	B2
0603LS-222X_L_	2200 @ 7.9 MHz	5,2	15 @ 7.9 MHz	68	1.2	0.32	Black	B2
0603LS-272X_L_	2700 @ 7.9 MHz	5,2	15 @ 7.9 MHz	60	1.5	0.28	Brown	B2
0603LS-332X_L_	3300 @ 7.9 MHz	5,2	15 @ 7.9 MHz	42	1.5	0.28	Red	B2
0603LS-392X_L_	3900 @ 7.9 MHz	5,2	15 @ 7.9 MHz	40	1.6	0.28	Orange	B2
0603LS-472X_L_	4700 @ 7.9 MHz	5,2	15 @ 7.9 MHz	34	2.1	0.26	Yellow	B2
0603LS-562X_L_	5600 @ 7.9 MHz	5,2	15 @ 7.9 MHz	32	2.6	0.24	Green	B2
0603LS-682X_L_	6800 @ 7.9 MHz	5,2	15 @ 7.9 MHz	31	3.1	0.20	Black	B2
0603LS-782X_L_	7800 @ 7.9 MHz	5,2	15 @ 7.9 MHz	28	3.5	0.20	Blue	B2
0603LS-822X_L_	8200 @ 7.9 MHz	5,2	15 @ 7.9 MHz	26	3.6	0.19	Violet	B2
0603LS-103X_L_	10,000 @ 2.5 MHz	5,2	12 @ 2.5 MHz	25	4.8	0.18	Gray	B2
0603LS-153X_L_	15,000 @ 2.5 MHz	5,2	20 @ 2.5 MHz	23	7.1	0.17	White	B2
0603LS-183X_L_	18,000 @ 2.5 MHz	5,2	20 @ 2.5 MHz	22	7.6	0.16	Brown	B2
0603LS-223X_L_	22,000 @ 2.5 MHz	5,2	22 @ 2.5 MHz	19	8.81	0.13	Black	B2

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

0603LS-822XJLC
Tolerance: G = 2% J = 5% (Table shows stock tolerances in bold.)

Termination: L = RoHS compliant silver-palladium-platinum-glass frit.

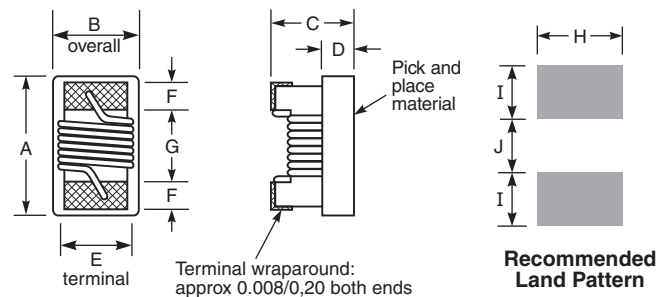
 E = Halogen free component. RoHS compliant silver-palladium-platinum-glass frit terminations.
 Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).

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.

- Inductance measured at 0.1 Vrms, using Coilcraft SMD-A fixture in Agilent/HP 4286A impedance analyzer with Coilcraft-provided correlation pieces.
- 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.
- Current that causes a 15°C temperature rise from 25°C ambient. Because of their open construction, these parts will not saturate.
- Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



A max	B	C max	D ref	E	F	G	H	I	J
0.071	See	0.044	0.015	0.030	0.013	0.034	0.040	0.025	0.025 inches
1,80	note	1,12	0,38	0,76	0,33	0,86	1,02	0,64	0,64 mm

Note: B1 = 0.040 ±0.004 in / 1,016 ±0,102 mm
 B2 = 0.046 ±0.004 in / 1,169 ±0,102 mm

Height dimension (C) is before optional solder application. For maximum height dimension including solder, add 0.006 in / 0,152 mm.


www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
 UK +44-1236-730595 sales@coilcraft-europe.com
 Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
 China +86-21-6218 8074 sales@coilcraft.com.cn
 Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 264-2 Revised 01/18/12

© Coilcraft Inc. 2012

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check out web site for latest information.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.