



0603LS Series – SMD WIRE WOUND FERRITE CHIP INDUCTORS

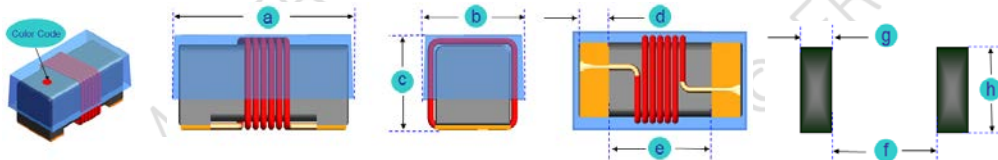
Rev. A

A. Electrical Specifications:

P/N	L (nH)	Tol.	Q min. Typ.	Test Freq. (MHz)	SRF min. (MHz)	DCR max. (Ω)	I rms. Max.(mA)	Color code
0603LS-47N_	47	K	12	7.9	2000	0.075	1800	White
0603LS-51N_	51	K	12	7.9	1500	0.075	1800	Violet
0603LS-68N_	68	K	12	7.9	1500	0.12	1800	Gray
0603LS-72N_	72	K	12	7.9	1500	0.12	1800	Brown
0603LS-R10_	100	K	12	7.9	1150	0.13	1700	Black
0603LS-R12_	120	J,K	12	7.9	1100	0.15	1700	Orange
0603LS-R15_	150	J,K	15	7.9	1050	0.15	1600	Brown
0603LS-R18_	180	J,K	15	7.9	950	0.15	1500	Green
0603LS-R22_	220	J,K	15	7.9	900	0.30	1200	Red
0603LS-R24_	240	J,K	15	7.9	850	0.16	1460	Green
0603LS-R27_	270	J,K	15	7.9	835	0.30	1460	Yellow
0603LS-R33_	330	J,K	15	7.9	725	0.40	1420	Orange
0603LS-R39_	390	J,K	15	7.9	680	0.41	1400	Blue
0603LS-R47_	470	J,K	15	7.9	640	0.43	1400	Black
0603LS-R56_	560	J,K	15	7.9	630	0.44	1400	Brown
0603LS-R68_	680	J,K	15	7.9	510	0.52	1340	Red
0603LS-R78_	780	J,K	15	7.9	465	0.63	1300	Orange
0603LS-R82_	820	J,K	15	7.9	460	0.69	1200	Yellow
0603LS-1R0_	1000	J,K	15	7.9	320	0.81	1100	Green
0603LS-1R2_	1200	J,K	15	7.9	270	0.87	1000	Blue
0603LS-1R5_	1500	J,K	15	7.9	230	0.96	920	Violet
0603LS-1R8_	1800	J,K	15	7.9	210	1.10	900	Gray
0603LS-2R2_	2200	J,K	15	7.9	115	1.20	740	White
0603LS-2R7_	2700	J,K	15	7.9	100	1.38	700	Black
0603LS-3R3_	3300	J,K	15	7.9	84	1.50	680	Brown
0603LS-3R9_	3900	J,K	15	7.9	75	1.50	600	Red
0603LS-4R7_	4700	J,K	15	7.9	67	2.10	580	Orange
0603LS-5R6_	5600	J,K	15	7.9	55	2.37	540	Yellow
0603LS-6R8_	6800	J,K	15	7.9	48	3.10	500	Green
0603LS-7R8_	7800	J,K	15	7.9	40	3.35	460	Blue
0603LS-8R2_	8200	J,K	15	7.9	38	3.50	440	Violet
0603LS-100_	10000	J,K	15	7.9	32	4.46	400	Gray

B. Dimensions: mm (Inch)

Series	a	b	c	d	e	f	g	h
0603LS	1.80 (0.07)	1.22 (0.05)	1.10 (0.04)	0.33 (0.013)	0.86 (0.034)	0.64 (0.02)	0.64 (0.02)	1.02 (0.04)
Tol.	Max.	Max.	Max.	Max.	Typ.	Typ.	Typ.	Typ.





C. General Information:

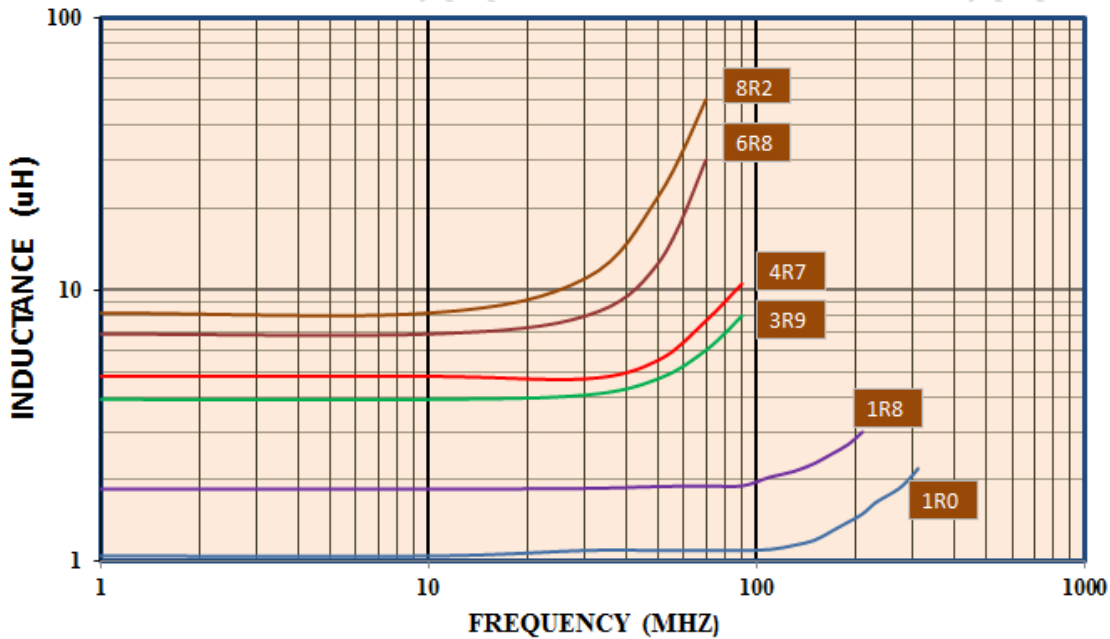
1. P/N: 0603LS-xxx_: “0603LS” = Size Type, “xxx” = Inductance, “_” = Tolerance.
2. Tolerance “_”: K: $\pm 10\%$, J: $\pm 5\%$.
3. 0603LS has first inductance color code only.
4. Small and lightweight surface mounting type
5. High Q at high frequency
6. High self-resonance frequency.
7. For 15°C Temperature Rise
8. Inductance & Q measured with HP4291B Impedance Analyzer
9. SRF measured with HP8720D or HP8753E Network Analyzer
10. DCR measured with 502BC milliohm meter
11. Operating temperature: -40 C to +125°C
12. Inductance and Current Range: From 47 nH (1800mA) to 10,000 nH (400mA)
13. SRF: from 32 MHz to 2000 MHz
14. MSL: Level 1.

D. Applications:

1. Game Consoles
2. Set Top Boxes
3. Cables Modems
4. Computers
5. Mobile Communication Devices (Cell Phones, Radios, etc.)
6. RF Filters

E. Characteristics Curve:

Inductance vs. Frequency





Q vs. Frequency

