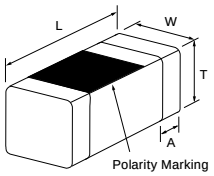
The LL1608-FH Series is a miniature multilayer ceramic chip inductor. TOKO's proprietary laminated ceramic material provides high SRF, excellent Q, and superior reliability. The FH allows up to 3 times the current handling of standard multilayers. In addition, the Qs are 1.3-1.6 times higher. It has an industry standard 0603 footprint and comes on tape in 4,000 piece reels. It is an ideal solution for higher current needs in high frequency RF and wireless communications equipment.



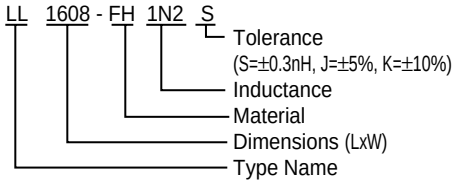
Unit: mm

Type	L (mm)	W (mm)	T (mm)	A (mm)
LL1608FH	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2

Features

- Inductance range: 1.2-100nH
- Miniature size: 0603 footprint (1.6mm x 0.8mm)
- Laminated ceramic allows high SRF
- Q: 35 typical (at 800MHz)
- High current handling, up to 1A
- Temperature coefficient of inductance: +250ppm/°C
- Temperature range: –40°C to +100°C
- S-parameter data available upon request
- Packaged on tape and reel in 4,000 piece quantity
- Reflow solderable

Part Numbering



STANDARD PARTS SELECTION GUIDE

TYPE LL1608-FH

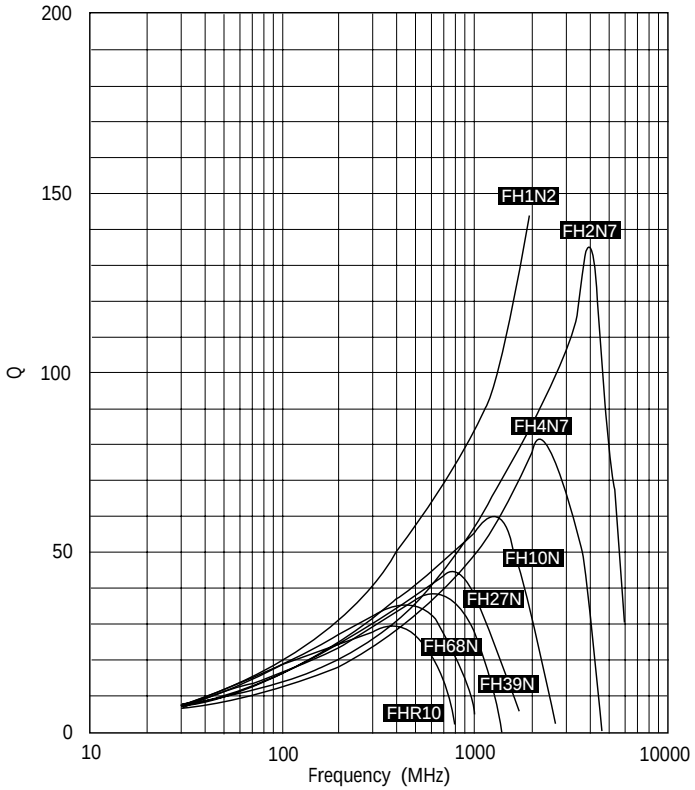
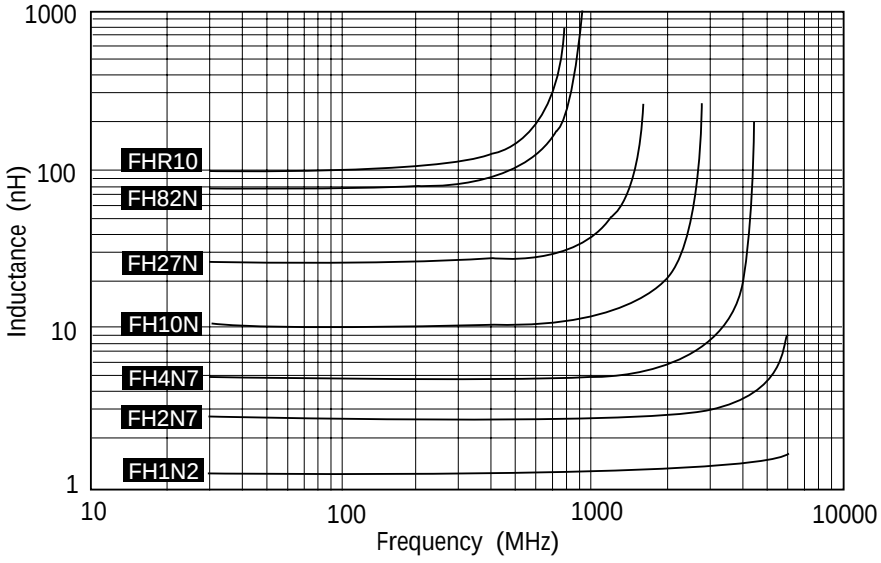
TOKO Part Number	Lo (nH)	L Tol.*	Q 100MHz typ.	Q 800MHz typ. [500MHz]	SRF (MHz) typ.	RDC (Ω) max.	IDC (mA) max.
LL1608-FH1N2S	1.2	S	13	60	>6000	0.10	1000
LL1608-FH1N5S	1.5	S	13	47	>6000	0.10	1000
LL1608-FH1N8S	1.8	S	12	51	>6000	0.10	1000
LL1608-FH2N2S	2.2	S	12	38	>6000	0.10	1000
LL1608-FH2N7S	2.7	S	12	38	>6000	0.10	1000
LL1608-FH3N3_*	3.3	S, K	12	41	5900	0.12	1000
LL1608-FH3N9_*	3.9	S, K	13	50	5600	0.14	1000
LL1608-FH4N7_*	4.7	S, K	12	41	4800	0.16	1000
LL1608-FH5N6_*	5.6	S, K	12	42	4350	0.18	600
LL1608-FH6N8_*	6.8	J, K	12	40	3750	0.22	600
LL1608-FH8N2_*	8.2	J, K	13	34	3300	0.24	600
LL1608-FH10N_*	10.0	J, K	13	45	2850	0.26	600
LL1608-FH12N_*	12.0	J, K	15	46	2500	0.28	600
LL1608-FH15N_*	15.0	J, K	15	48	2150	0.32	600
LL1608-FH18N_*	18.0	J, K	16	48	2100	0.35	600
LL1608-FH22N_*	22.0	J, K	17	45	1850	0.40	600
LL1608-FH27N_*	27.0	J, K	17	43	1680	0.45	600
LL1608-FH33N_*	33.0	J, K	18	39	1580	0.55	600
LL1608-FH39N_*	39.0	J, K	17	[37]	1400	0.60	500
LL1608-FH47N_*	47.0	J, K	17	[35]	1200	0.70	500
LL1608-FH56N_*	56.0	J, K	17	[32]	1100	0.75	500
LL1608-FH68N_*	68.0	J, K	18	[34]	1050	0.85	400
LL1608-FH82N_*	82.0	J, K	18	[32]	900	1.50	300
LL1608-FHR10_*	100.0	J, K	15	[16]	850	2.10	300

* Add tolerance to part number: S=±0.3nH, J = ±5%, K = ±10%

Testing Conditions: (1) L,Q: Agilent 4191A at 100MHz (Test fixture 16092A) (2) SRF: Agilent 8753C (Test fixture 16091A) (3) RDC: Agilent 4338B

ELECTRICAL CHARACTERISTICS

Q vs. Frequency



Inductance vs. Frequency