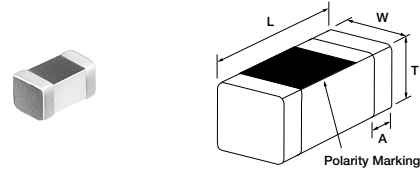


The LL1005-FH Series is a miniature multilayer ceramic chip inductor. TOKO's proprietary laminated ceramic material provides high SRF, excellent Q, and superior reliability. It has an industry standard 0402 footprint and comes on tape in 10,000 piece reels. Designing with the LL1005-FH allows savings of 50-80% board space which reduces the overall cost of the end product and/or allows for more features to be designed in. An ideal replacement for printed as well as wirewound inductors, for today's miniature high frequency RF and wireless communications equipment.



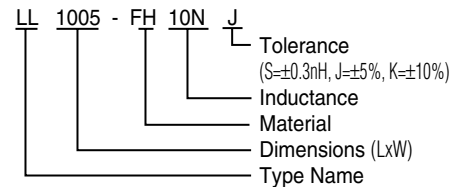
Unit: mm

L (mm)	W (mm)	T (mm)	A (mm)
1.0±0.1	0.5±0.1	0.5±0.1	0.25±0.1

## Features

- Inductance range: 1.0-100nH
- Miniature size: 0402 footprint (1.0mm x 0.5mm)
- Laminated ceramic allows high SRF over 6 GHz
- Q: 9 ~ 49 typical (at 1800MHz)
- 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 10,000 piece quantity
- Reflow solderable

## Part Numbering



## STANDARD PARTS SELECTION GUIDE

### TYPE LL1005-FH

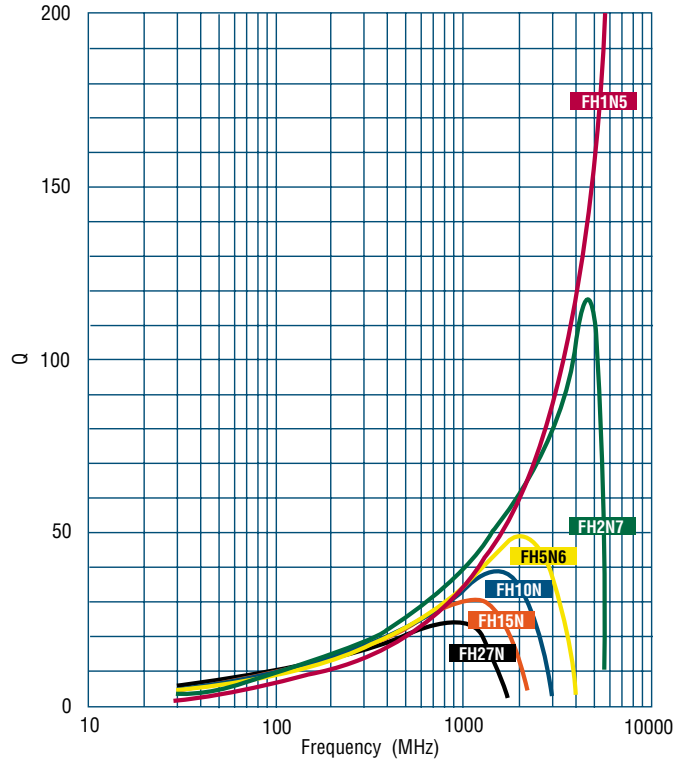
TOKO Part Number	Inductance		Q (typ.) at---MHz			SRF (MHz) typ.	RDC (Ω) max.	IDC (mA) max.
	Lo (nH)	L Tol.*	100MHz	800MHz	1800MHz			
LL1005-FH1N0S	1.0	S	10	28	45	13500	0.10	300
LL1005-FH1N2S	1.2	S	9	28	39	12000	0.10	300
LL1005-FH1N5S	1.5	S	10	30	41	10500	0.13	300
LL1005-FH1N8S	1.8	S	10	28	40	9400	0.14	300
LL1005-FH2N2S	2.2	S	10	30	43	8700	0.16	300
LL1005-FH2N7S	2.7	S	10	30	49	7700	0.17	300
LL1005-FH3N3_*	3.3	S, K	10	30	48	6800	0.19	300
LL1005-FH3N9_*	3.9	S, K	11	31	42	6300	0.22	300
LL1005-FH4N7_*	4.7	S, K	10	30	41	5700	0.25	300
LL1005-FH5N6_*	5.6	S, K	11	31	46	5100	0.29	300
LL1005-FH6N8_*	6.8	J, K	10	31	42	4550	0.33	300
LL1005-FH8N2_*	8.2	J, K	12	34	43	4100	0.39	300
LL1005-FH10N_*	10	J, K	12	32	43	3750	0.46	300
LL1005-FH12N_*	12	J, K	12	31	34	2950	0.60	300
LL1005-FH15N_*	15	J, K	11	30	30	2600	0.65	300
LL1005-FH18N_*	18	J, K	11	29	28	2350	0.76	300
LL1005-FH22N_*	22	J, K	11	28	19	1950	0.88	300
LL1005-FH27N_*	27	J, K	12	27	9	1750	1.04	300
LL1005-FH33N_*	33	J, K	10	25	12	1700	1.50	200
LL1005-FH39N_*	39	J, K	10	25	9	1650	1.80	200
LL1005-FH47N_*	47	J, K	9	23	-	1300	2.00	200
LL1005-FH56N_*	56	J, K	10	22	-	1250	2.00	200
LL1005-FH68N_*	68	J, K	10	18	-	1150	2.20	180
LL1005-FH82N_*	82	J, K	11	16	-	1000	2.50	150
LL1005-FHR10_*	100	J, K	13	-	-	900	2.50	100

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

Testing Conditions: (1) L,Q: Agilent 4291A at 100MHz (Test fixture Agilent 16192A) (2) SRF: Agilent 8719D (3) RDC: Agilent 4338B

**ELECTRICAL CHARACTERISTICS**

**Q vs. Frequency**



**Inductance vs. Frequency**

