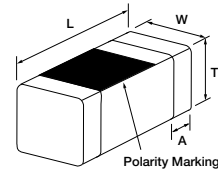


The LL1005-FHL Series is a multilayer ceramic chip inductor with an EIA standard 0402 footprint, lead-free terminations, and expanded electrical specifications with respect to inductance, Q, self-resonant frequency, and operating temperature range.



Unit: mm

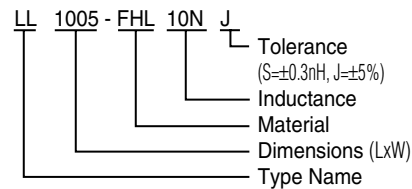


	L (mm)	W (mm)	T (mm)	A (mm)
1nH~68nH	1.0±0.05	0.5±0.05	0.5±0.05	0.25±0.1
82nH~100nH	1.0±0.1	0.5±0.1	0.5±0.1	0.25±0.1

Features

- Inductance range: 1.0-100nH
- Miniature size: 0402 footprint (1.0mm x 0.5mm)
- Inductance specified at 100MHz and 800MHz
- Self-resonant frequency specified at ±15%
- Q: 8 ~ 50 typical (at 1800MHz)
- Temperature coefficient of inductance: +250ppm/°C
- Temperature range: -55°C to +125°C
- S-parameter data available upon request
- Packaged on tape and reel in 10,000 piece quantity
- Reflow solderable
- Lead-free terminations

Part Numbering



STANDARD PARTS SELECTION GUIDE

TYPE LL1005-FHL

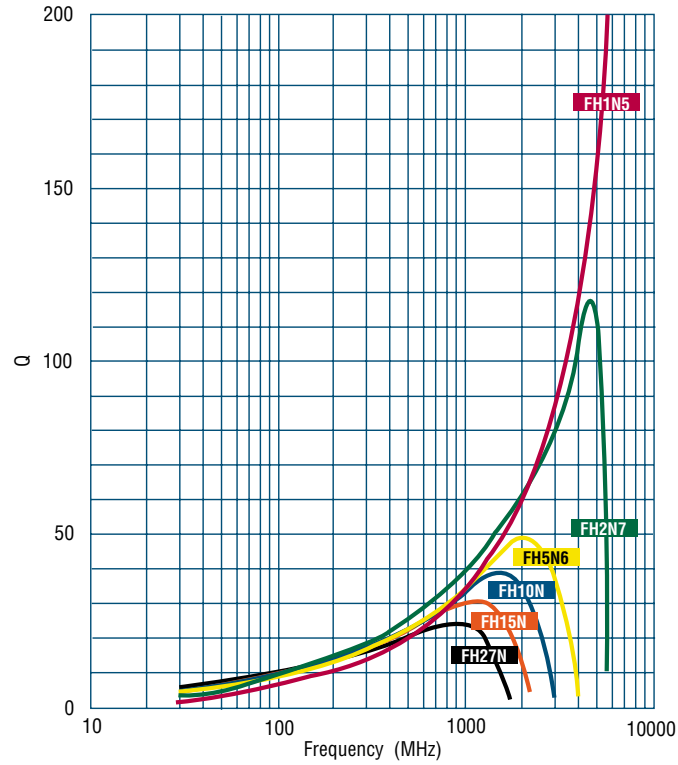
TOKO Part Number	Inductance & Tolerance					Q min.	Q (Typ.)						SRF (MHz)	RDC (Ω) max.	IDC (mA) max.
	at 100MHz		at 800 (500) MHz				100 MHz	100 MHz	300 MHz	500 MHz	800 MHz	1000 MHz			
	Lo (nH)	L Tol.*	Lo (nH)	L Tol.*	Freq. (MHz)										
LL1005-FHL1N0S	1.0	S	0.93	± 0.5nH	800	7	8.7	15.5	21.0	25.5	31.5	42.5	20000 min	0.10	400
LL1005-FHL1N2S	1.2	S	1.1	± 0.5nH	800	7	9.0	16.5	21.0	27.2	31.0	42.5	16000 min	0.10	400
LL1005-FHL1N5S	1.5	S	1.4	± 0.5nH	800	8	9.6	17.5	22.5	28.1	31.5	44.0	15000 ± 15%	0.13	400
LL1005-FHL1N8S	1.8	S	1.7	± 0.5nH	800	8	9.0	16.5	21.0	26.7	30.0	40.5	15000 ± 15%	0.14	400
LL1005-FHL2N2S	2.2	S	2.0	± 0.5nH	800	8	10.0	17.5	23.0	29.6	33.0	44.5	13000 ± 15%	0.15	400
LL1005-FHL2N7S	2.7	S	2.5	± 0.5nH	800	8	9.9	18.0	24.0	30.3	35.0	49.0	9600 ± 15%	0.15	400
LL1005-FHL3N3S	3.3	S	3.1	± 0.5nH	800	8	9.7	17.0	23.0	28.5	33.5	47.5	9100 ± 15%	0.16	400
LL1005-FHL3N9S	3.9	S	3.7	± 0.5nH	800	8	9.9	18.5	24.5	29.2	35.5	50.0	7400 ± 15%	0.18	300
LL1005-FHL4N7S	4.7	S	4.4	± 0.5nH	800	9	10.2	18.0	23.0	30.3	33.0	42.5	7000 ± 15%	0.20	300
LL1005-FHL5N6S	5.6	S	5.3	± 0.5nH	800	9	10.7	18.5	24.5	31.7	34.0	44.0	6100 ± 15%	0.22	300
LL1005-FHL6N8J	6.8	J	6.5	± 10%	800	9	10.8	18.5	24.0	31.3	34.5	43.0	5600 ± 15%	0.23	300
LL1005-FHL8N2J	8.2	J	7.9	± 10%	800	9	11.3	20.0	26.0	33.1	37.0	46.0	4700 ± 15%	0.25	300
LL1005-FHL10NJ	10	J	9.7	± 10%	800	9	11.1	19.0	25.0	32.0	35.0	43.0	4300 ± 15%	0.30	300
LL1005-FHL12NJ	12	J	12	± 10%	800	9	11.8	19.5	25.0	31.8	34.0	34.0	3300 ± 15%	0.40	300
LL1005-FHL15NJ	15	J	15	± 10%	800	9	12.4	19.0	24.0	32.0	32.0	30.0	2800 ± 15%	0.50	300
LL1005-FHL18NJ	18	J	18	± 10%	800	10	12.0	18.5	23.5	31.5	30.5	27.5	2800 ± 15%	0.60	300
LL1005-FHL22NJ	22	J	23	± 10%	800	10	11.9	18.5	23.0	30.3	28.5	18.5	2500 ± 15%	0.70	300
LL1005-FHL27NJ	27	J	30	± 10%	800	10	12.4	19.0	24.0	29.2	26.5	8.0	2100 ± 15%	0.85	300
LL1005-FHL33NJ	33	J	36	± 10%	800	10	12.0	16.5	21.0	28.6	25.0	13.0	2100 ± 15%	1.00	200
LL1005-FHL39NJ	39	J	44	± 10%	800	10	12.0	17.0	21.5	27.6	25.0	10.5	1900 ± 15%	1.10	200
LL1005-FHL47NJ	47	J	50	± 10%	500	10	11.5	15.5	19.7	21.7	22.2	—	1500 ± 15%	1.30	200
LL1005-FHL56NJ	56	J	60	± 10%	500	10	11.9	19.5	23.4	22.6	17.8	—	1400 ± 15%	1.50	200
LL1005-FHL68NJ	68	J	77	± 10%	500	10	11.7	17.9	20.3	20.8	—	—	1300 ± 15%	1.70	180
LL1005-FHL82NJ	82	J	95	± 10%	500	10	13.1	19.1	21.8	21.4	—	—	1150 ± 15%	1.90	150
LL1005-FHLR10J	100	J	122	± 10%	500	10	13.2	19.1	20.0	18.8	—	—	1030 ± 15%	2.20	150

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

Testing Conditions: (1) L,Q: Agilent 4291A/B (Test fixture Agilent 16192A) (2) SRF: Agilent 8719D, 8720D (3) RDC: Agilent 4338A/B

ELECTRICAL CHARACTERISTICS

Q vs. Frequency



Inductance vs. Frequency

