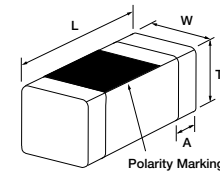


The LL1608-FS Series is a miniature multilayer ceramic chip inductor. TOKO's proprietary laminated ceramic material provides high SRF, excellent Q, and superior reliability. The FS allows up to 3 times the current handling of standard multilayers. In addition, the Qs are 1.3-1.6 times higher. It has 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.



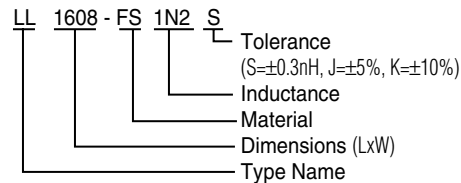
Unit: mm

Type	L (mm)	W (mm)	T (mm)	A (mm)
LL1608FS	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2

## Features

- Inductance range: 1.2-270nH (E-12 Series)
- Miniature size: 0603 footprint (1.6mm x 0.8mm)
- Laminated ceramic allows high SRF
- Q: 43 ~ 71 typical (at 1800MHz)
- 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-FS

TOKO Part Number	Inductance (nH) at 100MHz	Inductance Tolerance *	Q (typ.) at---MHz			SRF (MHz) typ.	RDC ( Ω ) max.	IDC (mA) max.
			100MHz	800MHz	1800MHz			
LL1608-FS1N2S	1.2	S	13	45	60	10000	0.10	1000
LL1608-FS1N5S	1.5	S	13	45	60	8000	0.10	1000
LL1608-FS1N8S	1.8	S	12	40	61	8000	0.10	1000
LL1608-FS2N2S	2.2	S	13	45	69	7200	0.10	1000
LL1608-FS2N7S	2.7	S	13	45	67	6200	0.11	1000
LL1608-FS3N3_*	3.3	S, K	16	53	71	5350	0.13	1000
LL1608-FS3N9_*	3.9	S, K	13	42	59	5250	0.15	1000
LL1608-FS4N7_*	4.7	S, K	14	43	59	4750	0.17	1000
LL1608-FS5N6_*	5.6	S, K	15	47	66	4100	0.20	600
LL1608-FS6N8_*	6.8	J, K	15	50	66	3300	0.22	600
LL1608-FS8N2_*	8.2	J, K	16	52	69	3300	0.26	600
LL1608-FS10N_*	10	J, K	20	56	60	3000	0.30	600
LL1608-FS12N_*	12	J, K	20	57	43	2500	0.35	600
LL1608-FS15N_*	15	J, K	18	53	58	2500	0.40	600
LL1608-FS18N_*	18	J, K	14	40	-	2350	0.47	600
LL1608-FS22N_*	22	J, K	22	56	-	2050	0.54	600
LL1608-FS27N_*	27	J, K	21	54	-	1900	0.62	600
LL1608-FS33N_*	33	J, K	21	53	-	1750	0.71	600
LL1608-FS39N_*	39	J, K	23	51	-	1450	0.74	500
LL1608-FS47N_*	47	J, K	22	40	-	1250	0.86	500
LL1608-FS56N_*	56	J, K	23	44	-	1200	0.94	500
LL1608-FS68N_*	68	J, K	23	38	-	1100	1.20	400
LL1608-FS82N_*	82	J, K	23	-	-	950	1.80	300
LL1608-FSR10_*	100	J, K	24	-	-	850	2.00	300
LL1608-FSR12_*	120	J, K	**18	-	-	850	2.40	200
LL1608-FSR15_*	150	J, K	**19	-	-	680	2.40	200
LL1608-FSR18_*	180	J, K	**19	-	-	600	2.70	150
LL1608-FSR22_*	220	J, K	**19	-	-	500	3.00	150
LL1608-FSR27_*	270	J, K	***15	-	-	450	3.50	150

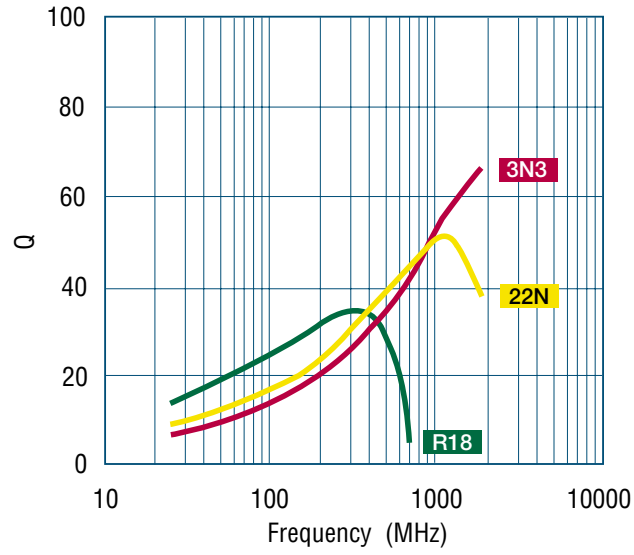
\* Add tolerance to part number: S=±0.3nH, J = ±5%, K = ±10%

\*\*50MHz, \*\*\*25MHz

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**

