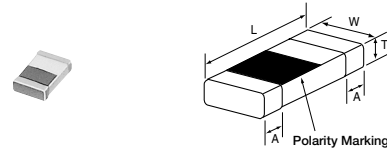


The LLP1608-F is a photolithographically etched single layer ceramic chip inductor in a standard 0603 footprint. TOKO's proprietary design provides high SRF, excellent Q, and superior temperature stability. This highly stable inductor family is specifically designed for critical tolerance inductor needs. More economical than thin film or screened wirewounds, the LLP1608-F is an ideal solution for tight tolerance requirements, such as VCO circuits and GaAs matching.



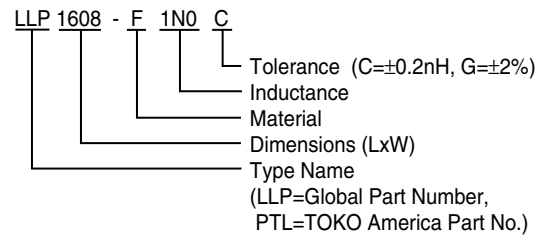
Unit: mm

Type	L (mm)	W (mm)	T (mm)	A (mm)
LLP1608F	1.6±0.1	0.8±0.1	0.5±0.1	0.3±0.2

## Features

- ±0.2nH and ±2% inductance tolerance
- Inductance range: 1.0-18nH
- Miniature size: 0603 footprint (1.6mm x 0.8mm)
- Inductance and Q specified at 100MHz and 800MHz
- Self-resonant frequency specified at ±10%
- Q: 35 ~ 48 typical (at 1800MHz)
- Temperature coefficient of inductance: +100ppm/°C
- Temperature range: -40°C to +100°C
- S-parameter data available upon request
- Packaged on tape and reel in 6,000 piece quantity
- Reflow solderable

## Part Numbering



## STANDARD PARTS SELECTION GUIDE

### TYPE LLP1608-F

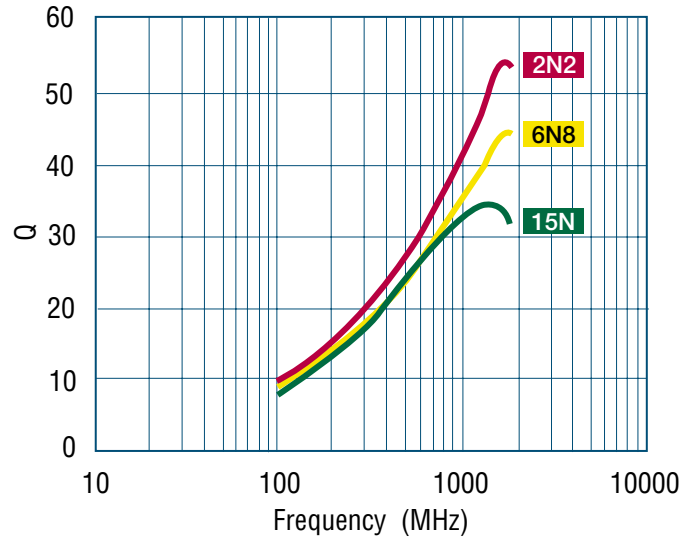
Global Part Number	TOKO America Part Number	Inductance & Tolerance				Q min.		Q (Typ.)						SRF (MHz)	RDC (Ω) max.	IDC (mA) max.
		at 100MHz		at 800 MHz				100 MHz	800 MHz	100 MHz	300 MHz	500 MHz	800 MHz			
		Lo (nH)	L Tol.*	Lo (nH)	L Tol.*											
LLP1608-F1N0_*	PTL1608-F1N0_*	1.0	C	1.0	± 0.3nH	6	20	8.3	14.9	20.1	26.0	30.2	39.9	12500 ± 10%	0.10	1000
LLP1608-F1N2_*	PTL1608-F1N2_*	1.2	C	1.2	± 0.3nH	6	20	8.2	13.9	18.1	23.1	26.5	35.1	11500 ± 10%	0.12	900
LLP1608-F1N5_*	PTL1608-F1N5_*	1.5	C	1.4	± 0.3nH	6	20	7.4	14.0	19.0	24.6	28.1	37.0	10000 ± 10%	0.15	800
LLP1608-F1N8_*	PTL1608-F1N8_*	1.8	C	1.7	± 0.3nH	6.5	20	7.9	15.2	20.8	26.6	30.4	40.3	9250 ± 10%	0.15	700
LLP1608-F2N2_*	PTL1608-F2N2_*	2.2	C	2.1	± 0.3nH	6.5	20	8.2	15.8	21.3	27.7	31.3	42.3	8400 ± 10%	0.22	650
LLP1608-F2N7_*	PTL1608-F2N7_*	2.7	C	2.6	± 0.3nH	6.5	20	8.1	16.1	21.9	28.7	32.5	45.0	7400 ± 10%	0.25	600
LLP1608-F3N3C	PTL1608-F3N3C	3.3	C	3.2	± 0.3nH	6.5	20	7.2	14.3	19.4	25.1	28.1	38.3	6600 ± 10%	0.35	500
LLP1608-F3N9C	PTL1608-F3N9C	3.9	C	3.8	± 0.3nH	7.5	22	8.4	16.7	22.6	29.0	32.4	44.1	5850 ± 10%	0.40	500
LLP1608-F4N7C	PTL1608-F4N7C	4.7	C	4.6	± 0.3nH	7.5	25	9.1	18.3	24.6	31.3	35.0	47.6	5200 ± 10%	0.45	450
LLP1608-F5N6C	PTL1608-F5N6C	5.6	C	5.5	± 0.3nH	7.5	25	9.0	17.4	23.5	30.5	34.3	48.4	4700 ± 10%	0.55	400
LLP1608-F6N8C	PTL1608-F6N8C	6.8	C	6.7	± 0.3nH	7.5	25	8.8	17.5	23.7	30.3	33.6	45.8	4200 ± 10%	0.75	350
LLP1608-F8N2C	PTL1608-F8N2C	8.2	C	8.2	± 0.3nH	7.5	28	8.8	17.4	23.6	30.3	33.9	46.6	3750 ± 10%	1.00	300
LLP1608-F10NG	PTL1608-F10NG	10	G	10.1	± 4%	7.5	25	8.4	17.6	24.4	31.1	34.4	44.7	3250 ± 10%	1.20	250
LLP1608-F12NG	PTL1608-F12NG	12	G	12.1	± 4%	7	25	8.3	17.4	23.8	30.1	33.2	43.6	3100 ± 10%	1.60	200
LLP1608-F15NG	PTL1608-F15NG	15	G	15.6	± 4%	7	25	8.3	17.8	24.6	30.7	33.6	40.5	2650 ± 10%	2.00	200
LLP1608-F18NG	PTL1608-F18NG	18	G	18.8	± 4%	6	25	7.5	16.8	23.5	29.1	31.7	36.3	2400 ± 10%	2.50	180

\* Add tolerance to part number: C=±0.2nH, G = ±2%

Testing Conditions: (1) L,Q: Agilent 4291A (Test fixture Agilent 16193A) (2) SRF: Agilent 8719D (3) RDC: Agilent 4338B

**ELECTRICAL CHARACTERISTICS**

**Q vs. Frequency**



**Inductance vs. Frequency**

