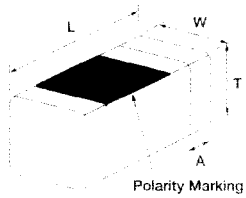
TYPE
LL2012F

The LL2012-F Series is a miniature multilayer ceramic chip inductor in a standard 0805 package. Toko's proprietary laminated ceramic material provides high SRF, excellent Q, and superior reliability. These inductors are an ideal solution for signal shaping, or RF filtering for high frequency RF and wireless communication devices.



Unit: mm

Type	L (mm)	W (mm)	T (mm)	A (mm)
LL2012	2.0±0.2	1.25±0.2	0.60±0.2	0.5±0.3
			0.85±0.3	
			1.00±0.3	
			1.10±0.3	

Features

- Inductance Range: 1.5-470nH
- Temperature Coefficient: +250ppm/°C
- Temperature Range: -40°C to +100°C
- Miniature size: 0805 footprint (2mm x 1.2mm)
- Laminated ceramic allows high SRF over 6 GHz
- Q: 50 Typical (at 800MHz)
- S-parameter data available upon request
- Packaged on tape and reel in 3,000 & 4,000 piece quantity

Part Numbering

LL 2012 - F 22N J
- J: Tolerance (S=±0.3nH, J=±5%, K=±10%)
- 22N: Inductance
- F: Material
- 2012: Dimensions (LxW)
- LL: Type Name

STANDARD PARTS SELECTION GUIDE

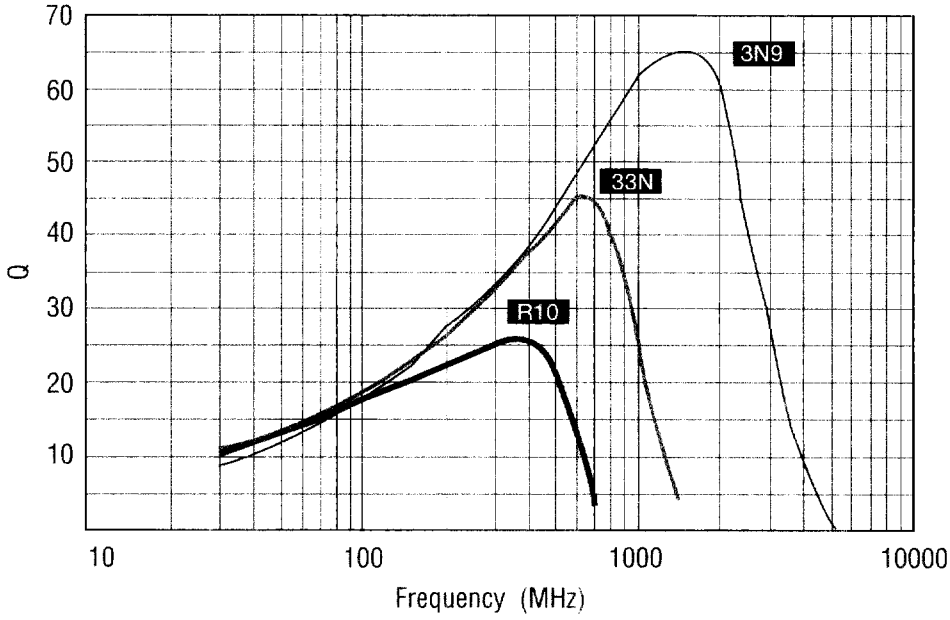
TYPE LL2012F

TOKO Part Number	Lo (nH)	L Tol.* (1)	Q 100MHz (typ) (1)	Q 800MHz (typ) (1)	SRF MHz (typ) (2)	RDC (Ω) (max) (3)	IDC mA (max)	Height T (mm)	Qty/reel
LL2012-F1N5S	1.5	S	13	40	>6000	0.10	300	0.60 ± 0.2	4000
LL2012-F1N8S	1.8	S	13	45	>6000	0.10	300	0.60 ± 0.2	4000
LL2012-F2N2S	2.2	S	13	48	>6000	0.10	300	0.60 ± 0.2	4000
LL2012-F2N7S	2.7	S	12	36	>6000	0.10	300	0.60 ± 0.2	4000
LL2012-F3N3_*	3.3	S,K	13	56	>6000	0.13	300	0.60 ± 0.2	4000
LL2012-F3N9_*	3.9	S,K	15	54	5400	0.15	300	0.60 ± 0.2	4000
LL2012-F4N7_*	4.7	S,K	15	50	4500	0.20	300	0.60 ± 0.2	4000
LL2012-F5N6_*	5.6	S,K	15	53	4000	0.23	300	0.60 ± 0.2	4000
LL2012-F6N8_*	6.8	J,K	15	51	3650	0.25	300	0.60 ± 0.2	4000
LL2012-F8N2_*	8.2	J,K	15	53	3000	0.28	300	0.60 ± 0.2	4000
LL2012-F10N_*	10.0	J,K	16	45	2500	0.30	300	0.85 ± 0.3	4000
LL2012-F12N_*	12.0	J,K	16	48	2450	0.35	300	0.85 ± 0.3	4000
LL2012-F15N_*	15.0	J,K	17	48	2000	0.40	300	0.85 ± 0.3	4000
LL2012-F18N_*	18.0	J,K	17	43	1750	0.45	300	0.85 ± 0.3	4000
LL2012-F22N_*	22.0	J,K	17	47	1700	0.50	300	0.85 ± 0.3	4000
LL2012-F27N_*	27.0	J,K	18	38	1550	0.55	300	0.85 ± 0.3	4000
LL2012-F33N_*	33.0	J,K	18	35	1350	0.60	300	0.85 ± 0.3	4000
LL2012-F39N_*	39.0	J,K	18	40	1300	0.65	300	0.85 ± 0.3	4000
LL2012-F47N_*	47.0	J,K	18	33	1200	0.70	300	1.00 ± 0.3	3000
LL2012-F56N_*	56.0	J,K	19	31	1150	0.75	300	1.00 ± 0.3	3000
LL2012-F68N_*	68.0	J,K	19	28	1000	0.80	300	1.00 ± 0.3	3000
LL2012-F82N_*	82.0	J,K	20	9	850	0.90	300	1.00 ± 0.3	3000
LL2012-FR10_*	100	J,K	18	–	730	1.00	300	1.00 ± 0.3	3000
LL2012-FR12_*	120	J,K	19	–	650	1.30	250	**1.10 ± 0.3	3000
LL2012-FR15_*	150	J,K	20	–	550	1.50	250	**1.10 ± 0.3	3000
LL2012-FR18_*	180	J,K	20	–	500	1.80	250	**1.10 ± 0.3	3000
LL2012-FR22_*	220	J,K	20	–	450	2.00	200	**1.10 ± 0.3	3000
LL2012-FR27_*	270	J,K	–	–	400	2.50	200	**1.10 ± 0.3	3000
LL2012-FR33_*	330	J,K	–	–	380	3.00	150	**1.10 ± 0.3	3000
LL2012-FR39_*	390	J,K	–	–	330	3.50	150	**1.10 ± 0.3	3000
LL2012-FR47_*	470	J,K	–	–	300	4.00	100	**1.10 ± 0.3	3000

* Add tolerance to part number: S=±0.3nH, J=±5%, K=±10%
** These parts have polarity/orientation marking
Testing Conditions: (1.) L,Q: HP4191A at 100MHz (2.) SRF: HP8753C (Test fixture 16091A) (3.) RDC: VP-2811A Panasonic

ELECTRICAL CHARACTERISTICS

Q vs. Frequency



Inductance vs. Frequency