

# LL2012-F Series

#### **Multilayer Chip Inductors**

#### DESCRIPTION

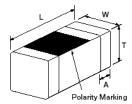
The LL2012-F Series is a miniature multilayer ceramic chip inductor in a standard 0805 package. Toko's proprietary laminated ceramic material provides high SRF, excellent Q, and superior reliability. These inductors are an ideal solution for signal shaping, or RF filtering for high frequency RF and wireless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

### **FEATURES**

- Inductance range: 1.5-470nH
- Temperature Coefficient: +250ppm/°C
- Temperature Range: -40°C +100°C
- Miniature size: 0805 footprint (2.0mm 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

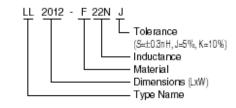


DIMENSIONS



Туре	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	

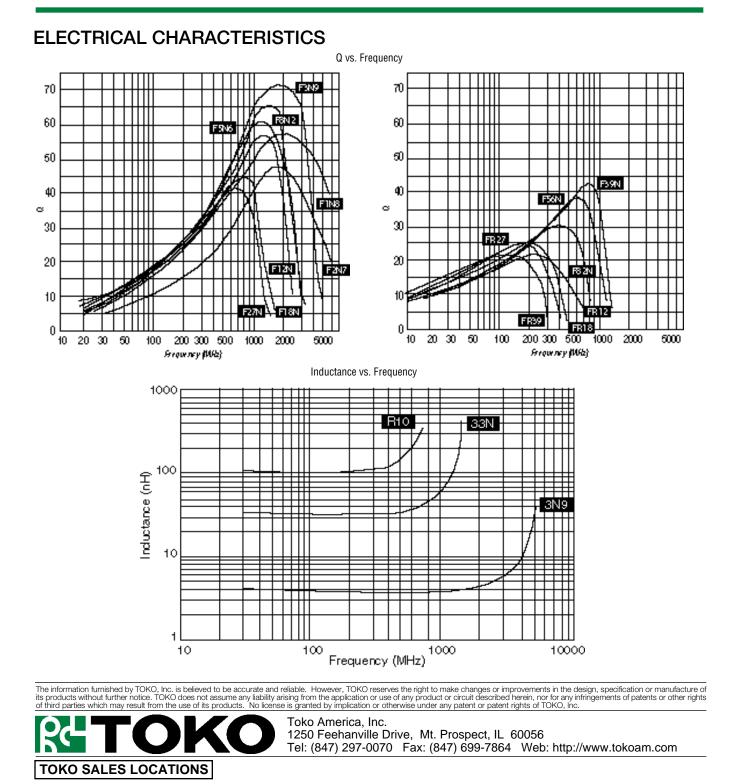
# PART NUMBERING



# STANDARD PART NUMBERS

TOKO Part Number	Lo (nH )	L Tol. (1)	О 100МНz (typ)(1)	Q 800MHz (typ) (1)	SRF MHz (typ)(2)	RDCΩ (max) (3)	IDC m A (max)	Height T (mm)	Qty/reel
LL2012-F1N68	15	8	13	40	> 6000	D.1D	300	0.60± 02	4000
LL2012-F1NBS	1.8	8	13	45	> 6000	D.10	300	DED± D2	4000
LL2012-F2N28	2.2	8	13	48	>6003<	D.1D	300	0.60± 0.2	4000
LL2012-F2N78	2.7	8	12	36	>8000	D.1D	300	0.80± D2	4000
LL2012-F3NS*	3.3	aк	13	56	> ED00	D.13	300	0.60± 0.2	4000
LL2012-F3N9_	3.0	вк	15	64	5400	D.16	300	D.60± D2	4000
LL2012-F4N7*	4.7	sк	15	50	4500	0.20	300	D.60± 0.2	4000
LL2012-F5N6."	5.6	вк	15	63	4000	D.23	300	D.80± 02	4000
LL2012-F6N8."	6.B	J,K	15	51	3660	D.25	300	D.60± 02	4000
LL2012-F8N2_*	82	J.K.	15	63	3000	0.28	300	DED± D2	4000
LL2012-F10N*	10 D	J,K	16	45	2500	0.30	300	0.86±0.3	4000
LL2012-F12N_"	12.D	J,K	16	48	246D	D.35	300	0.85 ± D.3	4000
LL2012-F15N"	15 D	J,K	17	48	2000	D.40	300	0.85±0.3	4000
LL2012-F18N_"	18.D	J,K	17	43	1760	D.48	300	D.85 ± D.3	4000
LL2012-F22N*	22 D	J,K	17	47	1700	0.50	300	D.85±0.3	4000
LL2012 F23N_	27 D	J,K	18	38	1550	D.55	300	$DB5 \pm D3$	4000
LL2012-F33N*	33.D	J,K	18	35	1350	0.60	300	D.85 ± D.3	4000
LL2012-F39N_	30 D	J.K.	18	40	1300	D.65	300	D.85 ± D.8	4000
LL2012-F47N*	47 D	J,K	18	33	1200	0.70	300	1.00± 0.3	3000
LL2D12-F56N_*	56.D	J.K	19	3.1	1150	0.75	300	1.00±0.3	3000
LL2012-F68N*	68.D	J,K	10-	28	1000	D.BD	300	1.00± 0.3	3000
LL2012-F82N_"	82.D	3,E	20	0	860	0.00	300	1.00 ± 0.3	3000
LL2012-FR10*	100	J,K	18	**	730	1.00	300	1.00±0.3	3000
LL2012-FF12_"	120	J,K	19	***	66D	1.30	25D	""1.10±03	3000
LL2012-FF115"	160	J,K	20	10.	550	1.50	250	""1.10± 0.3	3000
LL2012-FR18_*	1BD	J,K	20	<i>w</i>	500	1.80	250	**1.1D± D3	3000
LL2012-FP22*	220	J,K	20	50.	450	2.00	200	""1.1D± D.3	3000
LL2012-FF27_*	27D	3.K	ut.	<i>w</i>	400	2.50	200	""1.1D± D3	3000
LL2012-FF33*	330	J,K	~	50	380	3.00	160	""1.1D± D.3	3000
LL2012-FF89_"	390	J,K	N.		330	3.50	15D	""1.1D± D3	3000
LL2012-FF47_*	470	J'K	87°	-	300	4.00	100	**1.10±03	3000

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



Midwest Regional Office Toko America, Inc. 1250 Feehanville Drive Mount Prospect, IL 60056 Tel: (847) 297-0070 Fax: (847) 699-7864

Western Regional Office Toko America, Inc. 2480 North First Street , Suite 260 San Jose, CA 95131 Tel: (408) 432-8281 Fax: (408) 943-9790 Eastern Regional Office Toko America, Inc. 107 Mill Plain Road Danbury, CT 06811 Tel: (203)748-6871 Fax: (203)797-1223