TOKO

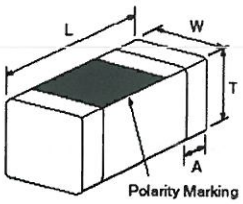
LL2012-F Series

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.

DIMENSIONS



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

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

PART NUMBERING

LL 2012 - F 22N J

- Tolerance (S=±0.3nH, J=5%, K=10%)
- Inductance
- Material
- Dimensions (LxW)
- Type Name

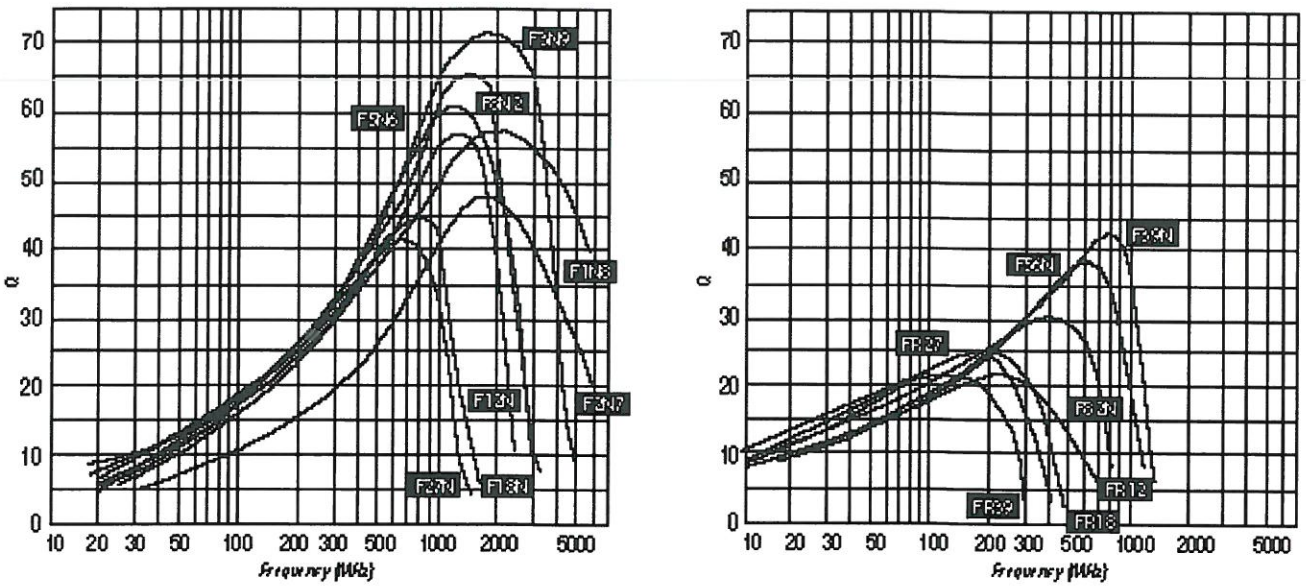
STANDARD PART NUMBERS

TOKO Part Number	Lo (nH)	L Tol.*(1)	Q 100MHz (typ) (1)	Q 800MHz (typ) (1)	SRF MHz (typ) (2)	RDCΩ (max) (3)	IDC mA (max)	Height T (mm)	Qty/reel
LL2012-F1N5S	1.5	S	13	40	>8000	0.10	300	0.60± 0.2	4000
LL2012-F1N8S	1.8	S	13	45	>8000	0.10	300	0.60± 0.2	4000
LL2012-F2N2S	2.2	S	13	46	>8000	0.10	300	0.60± 0.2	4000
LL2012-F2N7S	2.7	S	12	36	>8000	0.10	300	0.60± 0.2	4000
LL2012-F3N3_*	3.3	S,K	13	56	>8000	0.13	300	0.60± 0.2	4000
LL2012-F3N9_*	3.9	S,K	15	64	6400	0.15	300	0.60± 0.2	4000
LL2012-F4N7_*	4.7	S,K	15	60	4800	0.20	300	0.60± 0.2	4000
LL2012-F5N6_*	5.6	S,K	15	59	4000	0.23	300	0.60± 0.2	4000
LL2012-F6N8_*	6.8	J,K	15	51	3600	0.25	300	0.60± 0.2	4000
LL2012-F8N2_*	8.2	J,K	15	60	3000	0.28	300	0.60± 0.2	4000
LL2012-F10N_*	10.0	J,K	16	48	2800	0.30	300	0.85 ± 0.3	4000
LL2012-F12N_*	12.0	J,K	16	48	2460	0.30	300	0.85 ± 0.3	4000
LL2012-F15N_*	15.0	J,K	17	46	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	16	38	1600	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	15	31	1150	0.75	300	1.00± 0.3	3000
LL2012-F68N_*	68.0	J,K	19	35	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	"	660	1.20	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	"	"	360	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

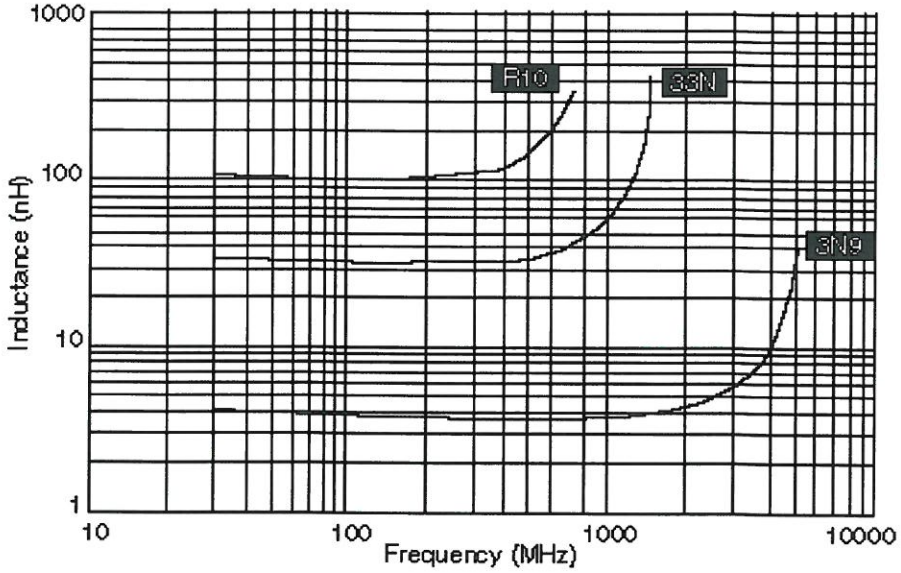
* Add tolerance to part number: S=±0.3nH, J = ±5%, K = ±10%
Testing Conditions: (1.) L,Q: HP4191A at 100MHz (2.) SRF: HP8753C (Test fixture 16091A) (3.) RDC: VP-2811A Panasonic
** These parts have polarity/orientation marking

ELECTRICAL CHARACTERISTICS

Q vs. Frequency



Inductance vs. Frequency



TOKO

Toko America, Inc.
1250 Feehanville Drive, Mt. Prospect, IL 60056
Tel: (847) 297-0070 Fax: (847) 699-7864 Web: http://www.tokoam.com

TOKO SALES LOCATIONS

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