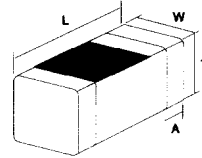


LL2012-F Multilayer Chip Inductor

The LL2012-F Series is a miniature multilayer ceramic chip inductor. 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

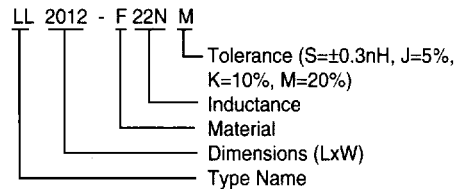


Features

- Laminated ceramic allows SRF over 6 GHz
- Miniature size: 0805 footprint
- Inductance range: 1.5 ~ 470 nH
- Q: 40 ~ 50 typical at 800 MHz
- Temp. coefficient of L: +250ppm/°C
- Operating Temperature Range: -40°C ~ +100°C
- Packaged on tape and reel

Type	L(mm)	W(mm)	T(mm)	A(mm)
LL2012	2.0±0.2	1.25±0.25	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) ⁽¹⁾	L Tol.*	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	>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,M	13	56	>6000	0.13	300	0.60 ± 0.2	4000
LL2012-F3N9_*	3.9	S,K,M	15	54	5400	0.15	300	0.60 ± 0.2	4000
LL2012-F4N7_*	4.7	S,K,M	15	50	4500	0.20	300	0.60 ± 0.2	4000
LL2012-F5N6_*	5.6	S,K,M	15	53	4000	0.23	300	0.60 ± 0.2	4000
LL2012-F6N8_*	6.8	J,K,M	15	51	3650	0.25	300	0.60 ± 0.2	4000
LL2012-F8N2_*	8.2	J,K,M	15	53	3000	0.28	300	0.60 ± 0.2	4000
LL2012-F10N_*	10.0	J,K,M	16	45	2500	0.30	300	0.85 ± 0.3	4000
LL2012-F12N_*	12.0	J,K,M	16	48	2450	0.35	300	0.85 ± 0.3	4000
LL2012-F15N_*	15.0	J,K,M	17	48	2000	0.40	300	0.85 ± 0.3	4000
LL2012-F18N_*	18.0	J,K,M	17	43	1750	0.45	300	0.85 ± 0.3	4000
LL2012-F22N_*	22.0	J,K,M	17	47	1700	0.50	300	0.85 ± 0.3	4000
LL2012-F27N_*	27.0	J,K,M	18	38	1550	0.55	300	0.85 ± 0.3	4000
LL2012-F33N_*	33.0	J,K,M	18	35	1350	0.60	300	0.85 ± 0.3	4000
LL2012-F39N_*	39.0	J,K,M	18	40	1300	0.65	300	0.85 ± 0.3	4000
LL2012-F47N_*	47.0	J,K,M	18	33	1200	0.70	300	1.00 ± 0.3	3000
LL2012-F56N_*	56.0	J,K,M	19	31	1150	0.75	300	1.00 ± 0.3	3000
LL2012-F68N_*	68.0	J,K,M	19	28	1000	0.85	300	1.00 ± 0.3	3000
LL2012-F82N_*	82.0	J,K,M	20	9	850	0.90	300	1.00 ± 0.3	3000
LL2012-FR10_*	100	J,K,M	18	-	730	1.00	300	1.00 ± 0.3	3000
LL2012-FR12_*	120	J,K,M	19	-	650	1.30	250	**1.10 ± 0.3	3000
LL2012-FR15_*	150	J,K,M	20	-	550	1.50	250	**1.10 ± 0.3	3000
LL2012-FR18_*	180	J,K,M	20	-	500	1.80	250	**1.10 ± 0.3	3000
LL2012-FR22_*	220	J,K,M	20	-	450	2.00	200	**1.10 ± 0.3	3000
LL2012-FR27_*	270	J,K,M	20	-	400	2.50	200	**1.10 ± 0.3	3000
LL2012-FR33_*	330	J,K,M	20	-	380	3.00	150	**1.10 ± 0.3	3000
LL2012-FR39_*	390	J,K,M	20	-	330	3.50	150	**1.10 ± 0.3	3000
LL2012-FR47_*	470	J,K,M	19	-	300	4.00	100	**1.10 ± 0.3	3000

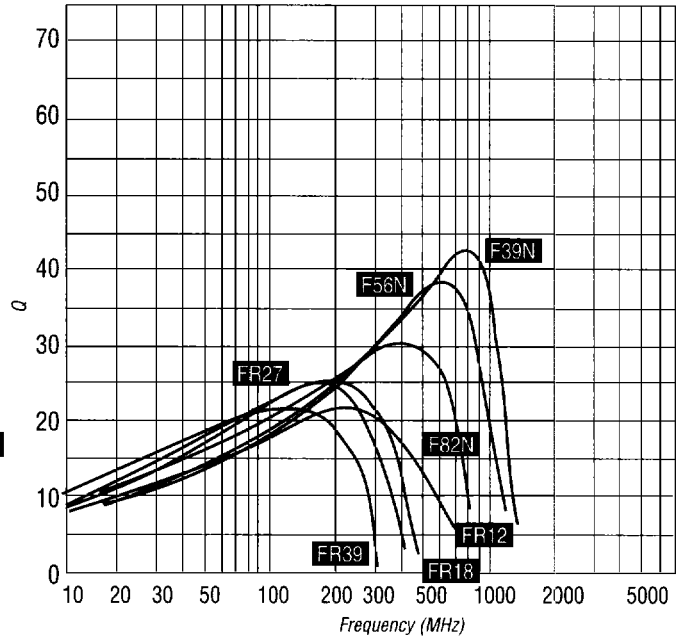
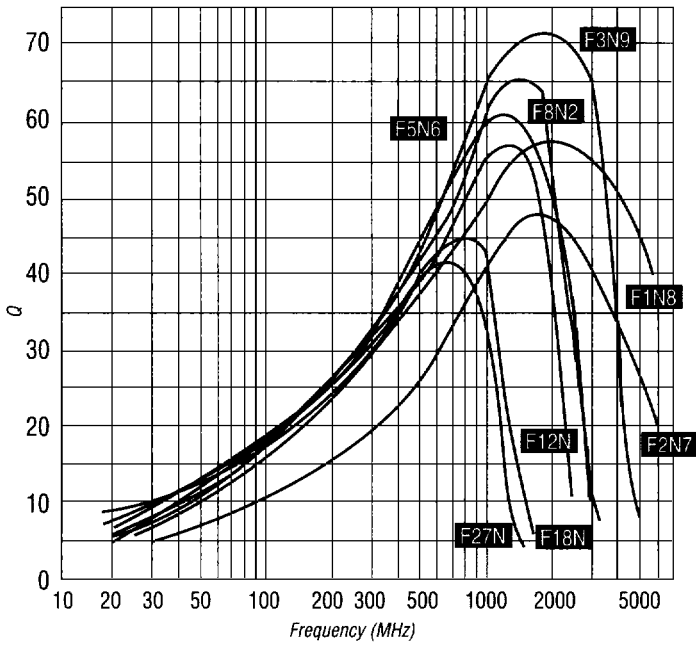
* Add tolerance to part number: S=±0.3nH, J=5%, K=10%, M=20%,

Testing Conditions: (1.) L,Q: HP4291A at 100MHz (Test fixture 16192A) (2.) SRF: HP8753C (Test fixture 16091A) (3.) RDC: VP-2811A Panasonic

** These parts have polarity/orientation marking

LL2012-F Multilayer Chip Inductor

Q vs. Frequency



Inductance vs. Frequency

