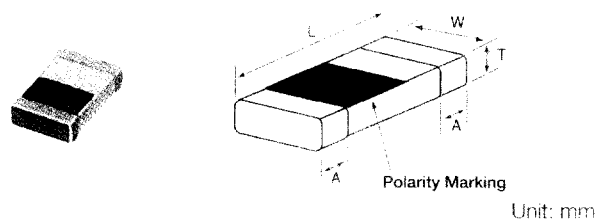


The PTL2012-F is a photolithographically etched single layer ceramic chip inductor in a standard 0805 package. Toko's proprietary design provides high SRF, excellent Q, and superior temperature stability. This inductor family is specifically designed for critical tolerance inductor needs. The family features Qs of well over 100 at 1.9GHz. More economical than thin film or screened wirewounds, the PTL2012 is an ideal solution for tight tolerance requirements, such as VCO circuits and GaAs matching.

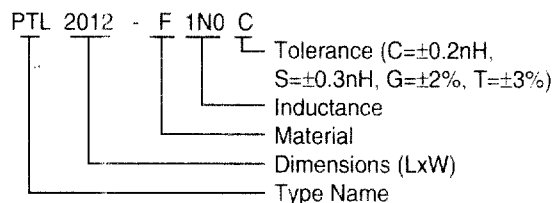


Type	L (mm)	W (mm)	T (mm)	A (mm)
PTL2012	2.0±0.2	1.25±0.2	0.5±0.15	0.3±0.2

Features

- 2% Inductance tolerance
- Inductance Range: 1.0-100nH (E-12 Series)
- Temperature Coefficient: +100ppm/°C
- Temperature Range: -40°C to +100°C
- SRF tolerance within 10%
- Miniature size: 0805 footprint (1.0mm x 0.5mm)
- Q: 35 Typical (at 800MHz)
- S-parameter data available upon request
- Packaged on tape and reel in 6,000 piece quantity

Part Numbering



STANDARD PARTS SELECTION GUIDE

TYPE PTL2012-F

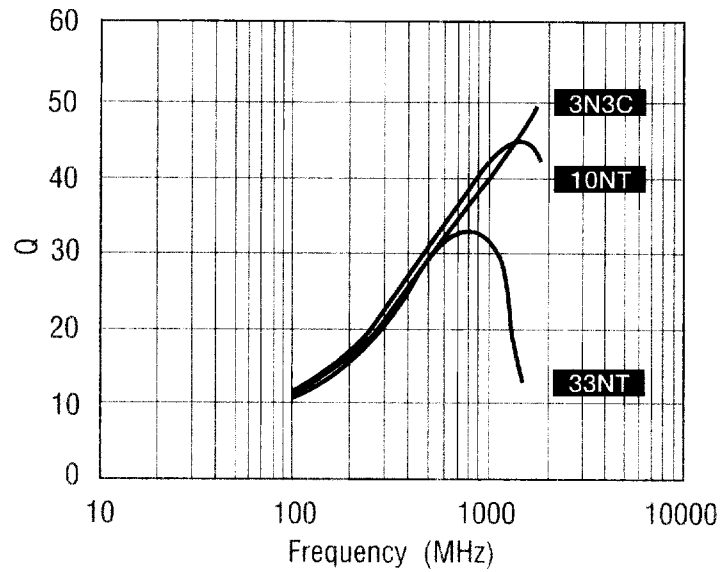
TOKO Part Number	Inductance (nH) at 100MHz		Inductance (nH) at 800MHz		Q (Typ.) at --- MHz			SRF (MHz)	RDC (Ω) (Max.)	IDC mA (Max.)
	L (nH)	Tolerance *	L (nH)	Tolerance	100	800	1800			
PTL2012-F1N0C	1.0	C	1.0	±0.3nH	11	36	50	10000±10%	0.10	1300
PTL2012-F1N2C	1.2	C	1.2	±0.3nH	10	29	45	9000±10%	0.10	1100
PTL2012-F1N5C	1.5	C	1.5	±0.3nH	8	28	40	8500±10%	0.12	800
PTL2012-F1N8C	1.8	C	1.7	±0.3nH	9	29	40	8000±10%	0.15	800
PTL2012-F2N2C	2.2	C	2.1	±0.3nH	10	32	50	7000±10%	0.15	750
PTL2012-F2N7C	2.7	C	2.6	±0.3nH	10	34	47	6000±10%	0.20	750
PTL2012-F3N3C	3.3	C	3.2	±0.3nH	10	36	49	5300±10%	0.20	650
PTL2012-F3N9C	3.9	C	3.8	±0.3nH	10	34	46	4800±10%	0.30	600
PTL2012-F4N7C	4.7	C	4.6	±0.3nH	10	37	54	4350±10%	0.35	550
PTL2012-F5N6C	5.6	C	5.5	±0.3nH	10	37	52	4000±10%	0.50	500
PTL2012-F6N8S	6.8	S	6.7	±0.4nH	10	38	54	3600±10%	0.50	450
PTL2012-F8N2S	8.2	S	8.1	±0.4nH	10	34	47	3250±10%	0.60	400
PTL2012-F10NS	10	S	10.0	±4%	11	38	41	2850±10%	0.70	350
PTL2012-F12N_*	12	S, T	12.2	±4%	12	38	38	2500±10%	0.80	350
PTL2012-F15N_*	15	G, T	15.5	±4%	12	37	32	2250±10%	1.0	300
PTL2012-F18N_*	18	G, T	19.1	±4%	12	37	27	2000±10%	1.2	300
PTL2012-F22N_*	22	G, T	23.8	±4%	12	35	—	1800±10%	1.5	250
PTL2012-F27N_*	27	G, T	30.2	±5%	12	35	—	1650±10%	1.8	200
PTL2012-F33N_*	33	G, T	39.0	±5%	11	33	—	1450±10%	2.5	200
PTL2012-F39N_*	39	G, T	49.4	±5%	11	31	—	1350±10%	3.0	180
PTL2012-F47N_*	47	G, T	62.8	±5%	11	28	—	1180±10%	4.0	130
PTL2012-F56N_*	56	G, T	83.4	±5%	11	25	—	1070±10%	4.5	120
PTL2012-F68N_*	68	G, T	117.3	±5%	11	24	—	950±10%	5.0	100
PTL2012-F82N_*	82	G, T	159.9	±5%	11	20	—	900±10%	6.0	90
PTL2012-FR10_*	100	G, T	250.5	±5%	11	17	—	800±10%	6.5	90

* Add tolerance to part number: S=±0.3nH, G = ±2%, T=±3%

Testing Conditions: (1) L,Q: HP4291A (Test fixture HP16193A) (2) SRF: HP8719D (3) RDC: VP-2811A Panasonic

ELECTRICAL CHARACTERISTICS

Q vs. Frequency



Inductance vs. Frequency

