

### ■ Features:

- Can be used for high frequency bands up to GHz and stable inductance at high frequency
- The high self resonant frequency realizes high Q value
- Low DC resistance design is ideal for low loss, high output and low power consumption

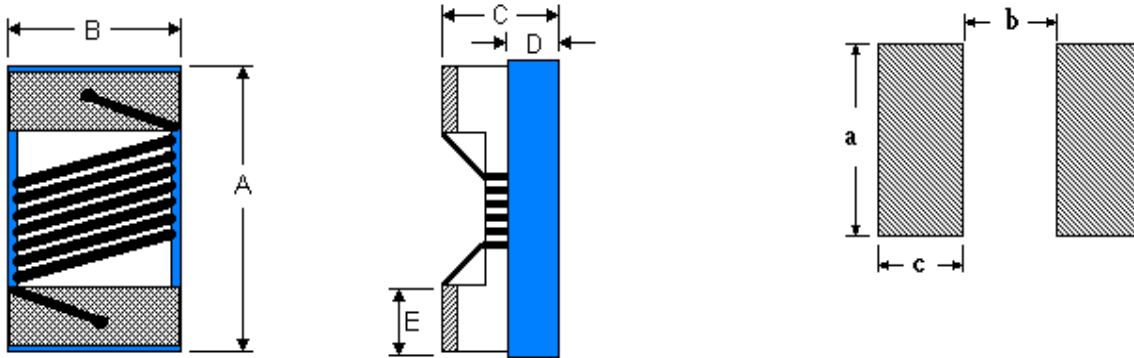
### ■ Applications:

- For high-frequency applications including mobile phones, portable phones, such as PA, ANT, VCO, SAW, etc
- Mobile phones such as GSM, CDMA, PDA, etc
- Bluetooth, W-LAN

### ■ Parts code:

NLC 0402	10N	J
Type	Inductance code	Tolerance

### ■ Recommended Land Pattern:



Dimensions in mm

TYPE	A	B	C	D	E	a	b	c
NLC 0402	1.27 max	0.76 max	0.61 max	0.15 Ref	0.23	0.66	0.46	0.50
NLC 0603	1.80 max	1.20 max	1.02 max	0.45 Ref	0.33	1.02	0.64	0.64
NLC 0805	2.40 max	1.65 max	1.45 max	0.65 Ref	0.44	1.78	0.76	1.02
NLC 1008	2.90 max	2.54 max	2.03 max	1.30 Ref	0.45	2.54	1.27	1.02

### ■ Package:

TYPE	NLC 0402	NLC 0603	NLC 0805	NLC 1008
Q'TY / Reel	4000	3000	2000	2000

### ■ Operating temperature range from -40°C to 125°C.

Storage Temperature: -10°C to +40°C, 70% RH max.

### ■ Specifications

Inductance			NLC 0402							
			Q	900MHz		1.7GHz		SRF	DCR	IDC
Code	nH / MHz	Tolerance	(MHz) Min	L typ	Q typ	L typ	Q typ	(GHz) Min	(Ω) Max	(mA) Max
1N0	1.0 / 250	J,K	16	1.02	77	1.02	69	12.70	0.045	1360
2N0	2.0 / 250	J,K	16	1.93	54	1.93	82	11.30	0.070	1040
2N2	2.2 / 250	J,K	19	2.19	59	2.23	100	10.80	0.070	960
2N4	2.4 / 250	J,K	15	2.24	51	2.27	68	10.50	0.070	790
2N7	2.7 / 250	J,K	16	2.23	42	2.25	61	10.40	0.120	640
3N3	3.3 / 250	J,K	19	3.10	65	3.12	87	7.00	0.066	840
3N6	3.6 / 250	J,K	19	3.56	45	3.62	71	6.80	0.066	840
3N9	3.9 / 250	J,K	19	3.89	50	4.00	75	5.80	0.066	840
4N3	4.3 / 250	J,K	18	4.19	47	4.30	71	6.00	0.091	700
4N7	4.7 / 250	J,K	15	4.55	48	4.68	68	4.70	0.130	640
5N1	5.1 / 250	J,K	20	5.15	56	5.25	82	4.80	0.083	800
5N6	5.6 / 250	J,K	20	5.16	54	5.28	81	4.80	0.083	760
6N2	6.2 / 250	J,K	20	6.16	52	6.37	76	4.80	0.083	760
6N8	6.8 / 250	J,K	20	6.56	63	6.93	78	4.80	0.083	680
7N5	7.5 / 250	J,K	22	7.91	60	8.22	88	4.80	0.104	680
8N2	8.2 / 250	J,K	22	8.50	57	8.85	84	4.40	0.104	680
8N7	8.7 / 250	J,K	18	8.78	54	9.21	7.3	4.10	0.200	480
9N0	9.0 / 250	J,K	22	9.07	62	9.53	78	4.16	0.104	680
9N5	9.5 / 250	J,K	18	9.42	54	9.98	69	4.00	0.200	480
10N	10 / 250	J,K	21	9.80	50	10.10	67	3.90	0.195	480
11N	11 / 250	J,K	24	10.70	52	11.20	78	3.68	0.120	640
12N	12 / 250	J,K	24	11.90	53	12.70	71	3.60	0.120	640
13N	13 / 250	J,K	24	13.40	51	14.60	57	3.45	0.210	440
15N	15 / 250	J,K	24	14.60	55	15.50	77	3.28	0.172	560
16N	16 / 250	J,K	24	16.60	46	18.80	47	3.10	0.220	560
18N	18 / 250	J,K	24	18.30	57	20.28	62	3.10	0.230	420
19N	19 / 250	J,K	24	19.10	50	21.10	67	3.04	0.202	480
20N	20 / 250	J,K	25	20.70	52	23.70	53	3.00	0.250	420
22N	22 / 250	J,K	25	23.20	53	26.80	53	2.80	0.300	400
23N	23 / 250	J,K	22	23.80	49	26.90	64	2.72	0.300	400
24N	24 / 250	J,K	25	25.10	51	29.50	50	2.70	0.300	400
27N	27 / 250	G,J,K	24	28.70	49	33.50	63	2.48	0.300	400
30N	30 / 250	G,J,K	25	31.10	46	38.50	39	2.35	0.350	400
33N	33 / 250	G,J,K	24	34.90	31	41.70	32	2.35	0.350	400
36N	36 / 250	G,J,K	24	39.50	44	48.40	53	2.32	0.440	320
39N	39 / 250	G,J,K	25	41.70	47	5.20	45	2.10	0.550	200
40N	40 / 250	G,J,K	24	39.00	44	47.40	33	2.24	0.440	320
43N	43 / 250	G,J,K	25	45.80	46	61.60	34	2.03	0.810	100
47N	47 / 250	G,J,K	20	50.00	38	55.80	37	2.10	0.830	150
51N	51 / 250	G,J,K	25	50.40	47	59.40	37	1.75	0.820	100
56N	56 / 250	G,J,K	22	57.40	49	72.40	40	1.76	0.970	100
68N	68 / 250	G,J,K	22	69.60	45	83.40	38	1.62	1.120	100
75N	75 / 250	G,J,K	22	-	-	-	-	1.50	1.300	80
R10	100 / 250	G,J,K	22	-	-	-	-	1.16	2.000	30
R12	120 / 250	G,J,K	20	-	-	-	-	> 1.80	2.660	50

■ Notes: Tolerance: B (± 0.2nH), S (± 0.3nH), G (± 2%), J (± 5%), K (± 10%)