NLC Series

The characteristics of this series perform low RDC and carry large current. These unique open type inductors offer many superior features in opposition to the molding type one of Japanese peers.

Features

- RoHS compliant
- Very strong solderability by reflow soldering and soldering iron
- Highly accurate dimensions can be mounted automatically
- Terminals are highly resistant to pull forces
- Highly resistant to mechanical shocks and pressure
- Highly reliable in environments of sudden temperature change and humidity
- Superior IDC for DC/DC converter

Applications

- DC/DC converter such as DSC
- LCD TV
- Game console
- Portable VCRs
- Conveyable telephone and others

Product Identification

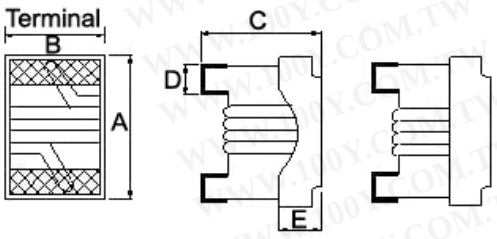
NLC □ □□□□□□ T - □□□ □ - □

- CEC Internal No.
- Tolerance
- Inductance
- Packaging Style
- Dimensions(A、B、C)
- Type
- Product Symbol

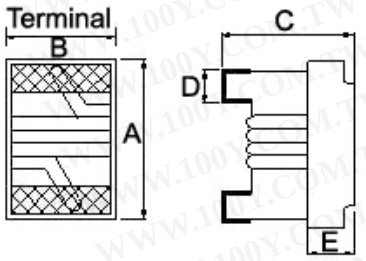
- Packaging: T：Tape and Reel

Shape and Dimensions

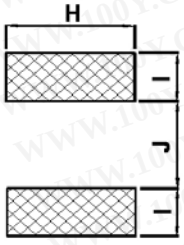
NLC252018



NLC322522



Recommended Pattern



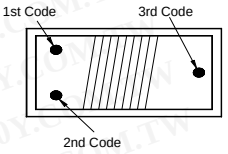
Dimensions in mm

TYPE	A Max	B Max	C Max	D	E	H	I	J
NLC252018	2.92	2.50	2.20	0.51	0.51	2.54	1.02	1.27
NLC322522	3.70	2.90	2.60	0.51	0.51	2.70	1.00	2.00

Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	Rdc (Ω) Max	Idc (mA)	Color Coding 1ST	2ND	3RD
NLC252018T-1R0□-N	1.0	7.96	10 / 5	25	7.96	300	0.34	1500	Brown	Black	Red
NLC252018T-1R5□-N	1.5	7.96	10 / 5	25	7.96	270	0.42	1400	Brown	Green	Red
NLC252018T-2R2□-N	2.2	7.96	10 / 5	25	7.96	140	0.50	1200	Red	Red	Red
NLC252018T-3R3□-N	3.3	7.96	10 / 5	25	7.96	95	0.65	1000	Orange	Orange	Red
NLC252018T-4R7□-N	4.7	7.96	10 / 5	25	7.96	90	0.80	800	Yellow	Violet	Red
NLC252018T-6R8□-N	6.8	7.96	10 / 5	25	7.96	68	1.00	730	Blue	Gray	Red
NLC252018T-100□-N	10	2.52	10 / 5	20	2.52	45	1.50	700	Brown	Black	Orange
NLC252018T-150□-N	15	2.52	10 / 5	20	2.52	40	2.20	500	Brown	Green	Orange
NLC252018T-220□-N	22	2.52	10 / 5	20	2.52	25	2.70	470	Red	Red	Orange
NLC252018T-330□-N	33	2.52	10 / 5	20	2.52	25	4.00	400	Orange	Orange	Orange
NLC252018T-470□-N	47	2.52	10 / 5	16	2.52	20	8.00	300	Yellow	Violet	Orange

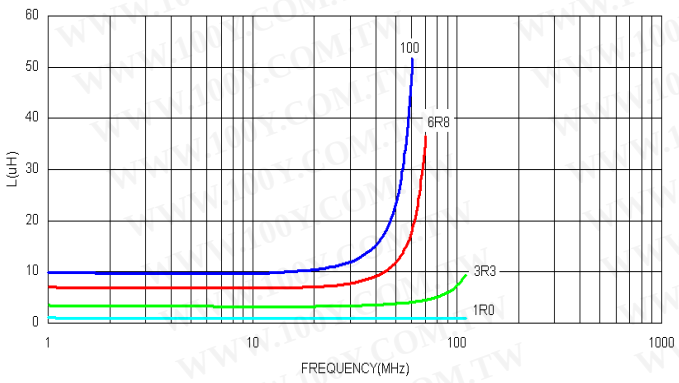
- When ordering, please specify tolerance and packaging codes.
- Tolerance: J = ±5%, K = ±10%
- L /Q：Agilent E4991A + Agilent HP16197A
- SRF： Agilent E4991A
- RDC：CH502BC/ HP4338B
- Idc for Inductance drop 10% from its value without current.
- Operating temperature range from -25℃ to 105℃ (Including self - temperature rise)



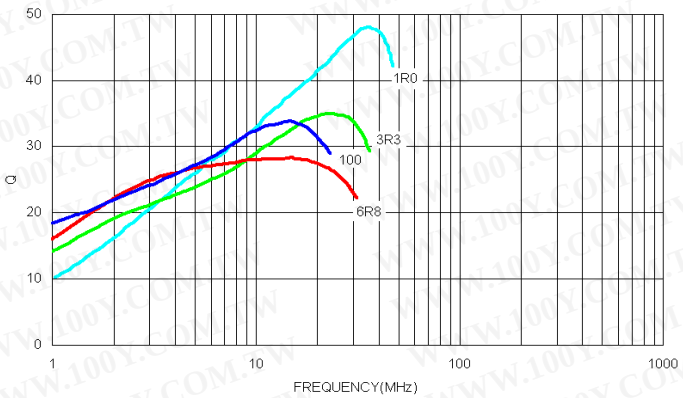
COLOR CODING

Test Instruments：Agilent E4991A Material/Impedance Analyzer

Typical L vs. Frequency



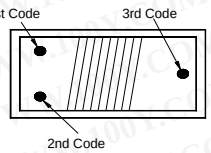
Typical Q vs. Frequency



Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (MHz)	Tolerance (±%)	Q Min	Test Frequency (MHz)	SRF (MHz) Typ	Rdc (Ω)±30%	Idc (mA)	Color Coding 1ST	2ND	3RD
NLC322522T-R47□-N	0.47	25.2	5 / 10	40	25.2	450	0.07	1800	Yellow	Violet	Brown
NLC322522T-1R0□-N	1.0	7.96	5 / 10	20	7.96	100	0.08	1500	Brown	Black	Red
NLC322522T-1R2□-N	1.2	7.96	5 / 10	20	7.96	90	0.12	1400	Brown	Red	Red
NLC322522T-1R5□-N	1.5	7.96	5 / 10	20	7.96	80	0.13	1125	Brown	Green	Red
NLC322522T-1R8□-N	1.8	7.96	5 / 10	20	7.96	70	0.13	970	Brown	Gray	Red
NLC322522T-2R2□-N	2.2	7.96	5 / 10	20	7.96	68	0.13	970	Red	Red	Red
NLC322522T-3R3□-N	3.3	7.96	5 / 10	20	7.96	54	0.16	837	Orange	Orange	Red
NLC322522T-4R7□-N	4.7	7.96	5 / 10	20	7.96	43	0.23	675	Yellow	Violet	Red
NLC322522T-5R6□-N	5.6	7.96	5 / 10	20	7.96	36	0.26	620	Green	Blue	Red
NLC322522T-6R8□-N	6.8	7.96	5 / 10	20	7.96	33	0.27	600	Blue	Gray	Red
NLC322522T-8R2□-N	8.2	7.96	5 / 10	20	7.96	30	0.32	580	Gray	Red	Red
NLC322522T-100□-N	10	2.52	5 / 10	15	2.52	28	0.36	520	Brown	Black	Orange
NLC322522T-150□-N	15	2.52	5 / 10	15	2.52	19	0.56	480	Brown	Green	Orange
NLC322522T-220□-N	22	2.52	5 / 10	15	2.52	16	0.77	310	Red	Red	Orange
NLC322522T-270□-N	27	2.52	5 / 10	15	2.52	13	1.00	280	Red	Violet	Orange
NLC322522T-330□-N	33	2.52	5 / 10	15	2.52	12	1.10	270	Orange	Orange	Orange
NLC322522T-470□-N	47	2.52	5 / 10	15	2.52	10	1.64	210	Yellow	Violet	Orange
NLC322522T-680□-N	68	2.52	5 / 10	15	2.52	9	2.80	189	Blue	Gray	Orange
NLC322522T-101□-N	100	0.796	5 / 10	15	0.796	6	3.70	145	Brown	Black	Yellow
NLC322522T-151□-N	150	0.796	5 / 10	15	0.796	5	6.10	120	Brown	Green	Yellow
NLC322522T-181□-N	180	0.796	5 / 10	15	0.796	4	8.00	105	Brown	Gray	Yellow
NLC322522T-221□-N	220	0.796	5 / 10	15	0.796	4	8.40	100	Red	Red	Yellow
NLC322522T-331□-N	330	0.796	5 / 10	15	0.796	3.5	12.3	80	Orange	Orange	Yellow
NLC322522T-471□-N	470	0.796	5 / 10	15	0.796	2.8	22.0	75	Yellow	Violet	Yellow
NLC322522T-561□-N	560	0.796	5 / 10	15	0.796	2.5	23.0	65	Green	Blue	Yellow
NLC322522T-681□-N	680	0.796	5 / 10	15	0.796	2	28.0	65	Blue	Gray	Yellow

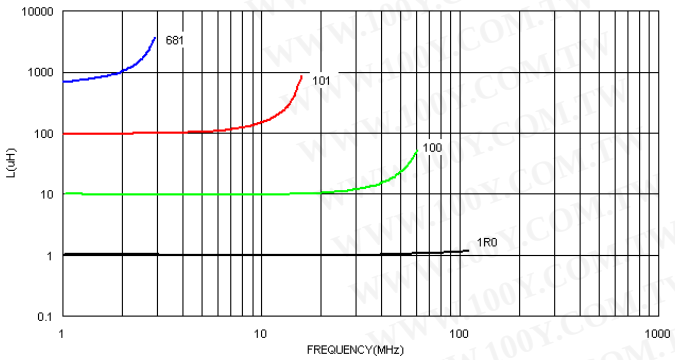
- When ordering, please specify tolerance and packaging codes.
- Tolerance: J = ±5%, K = ±10%
- Packaging: Clear tape and reel {standard}.
- L/Q: Agilent E4991A+Agilent HP16197A (over 1MHz); Agilent/HP4285A+Agilent HP16197A (under 1MHz)
- SRF: Agilent E4991A
- RDC: HP4338B/ CH502BC
- Idc for Inductance drop 10% from its value without current.
- Operating temperature range from -25℃ to 105℃. (Including self - temperature rise)



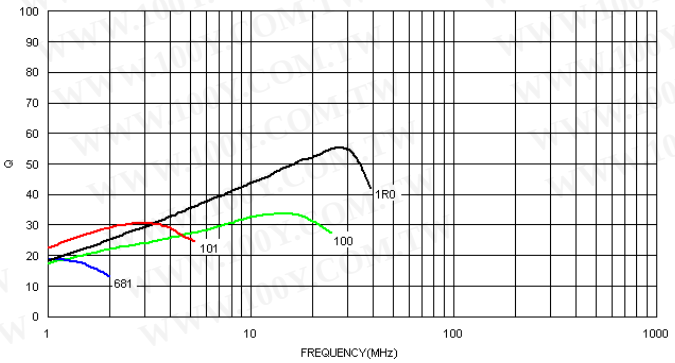
COLOR CODING

Test Instruments：Agilent E4991A Material/Impedance Analyzer

Typical L vs. Frequency

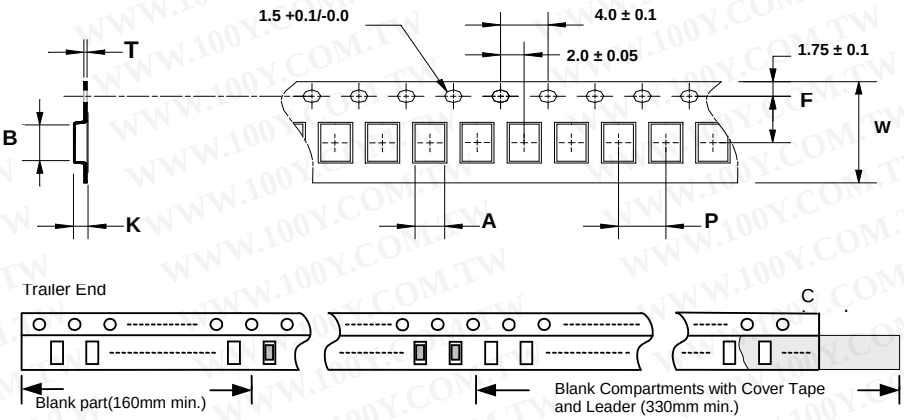


Typical Q vs. Frequency

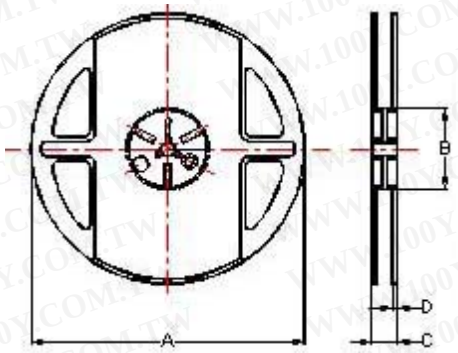


Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity
	A	B	T	W	P	F	K	A	B	C	D	PCS / Reel
NLC252018	2.61	2.93	0.26	8	4	3.5	2.25	178	60	12	1.5	2000
NLC322522	2.85	3.58	0.25	12	4	5.5	2.45	178	60	16	1.4	2000