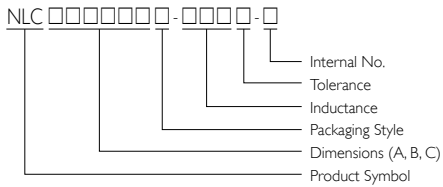


# SMD Wire Wound Chip Inductors

# NLC Series



## PRODUCT IDENTIFICATION



- Packaging: T = Tape and Reel; B = Bulk
- Internal No.: N = Lead-Free

## APPLICATIONS

DC-DC converters such as DSC, LCD TV, game consoles, portable VCRs, conveyable telephones, and others.

## OUTLINE

The characteristics of this series perform low DCR and carry large current.

These unique open type inductors offer many superior features in opposition to the molding type one of Japanese peers.

## FEATURES

Very strong solderability by reflow soldering and soldering iron.

Highly accurate dimensions can be mounted automatically.

Terminals are highly resistant to pull forces.

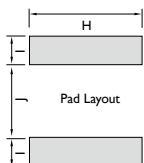
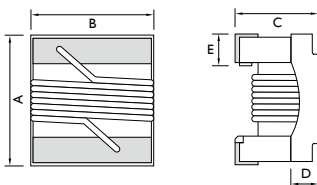
Highly resistant to mechanical shocks and pressure.

Highly reliable in environments of sudden temperature change and humidity.

Superior IDC for DC-DC converter.

## SHAPES AND DIMENSIONS

Unit: mm



TYPE	A	B	C	D	E	H	I	J
	Max.	Max.	Max.	Ref.				
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 NO.	INDUCTANCE ( $\mu$ H)	TOLERANCE ( $\pm$ %)	Q Min.	TEST FREQUENCY (MHz)	SRF (MHz) Min.	DC RESISTANCE ( $\Omega$ ) Max.	RATED CURRENT (mA) Max.	COLOR CODING		
								1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
NLC252018T-1R0□-N	1.00	5 / 10	25	7.96	300	0.34	1,500	Brown	Black	Red
NLC252018T-1R5□-N	1.50	5 / 10	25	7.96	270	0.42	1,400	Brown	Green	Red
NLC252018T-2R2□-N	2.20	5 / 10	25	7.96	140	0.50	1,200	Red	Red	Red
NLC252018T-3R3□-N	3.30	5 / 10	25	7.96	95	0.65	1,000	Orange	Orange	Red
NLC252018T-4R7□-N	4.70	5 / 10	25	7.96	90	0.80	800	Yellow	Violet	Red
NLC252018T-6R8□-N	6.80	5 / 10	25	7.96	68	1.00	730	Blue	Gray	Red
NLC252018T-100□-N	10.0	5 / 10	20	2.52	45	1.50	700	Brown	Black	Orange
NLC252018T-150□-N	15.0	5 / 10	20	2.52	40	2.20	500	Brown	Green	Orange
NLC252018T-220□-N	22.0	5 / 10	20	2.52	25	2.70	470	Red	Red	Orange
NLC252018T-330□-N	33.0	5 / 10	20	2.52	25	4.00	400	Orange	Orange	Orange
NLC252018T-470□-N	47.0	5 / 10	16	2.52	20	8.00	300	Yellow	Violet	Orange
NLC322522T-R47□-N	0.47	5 / 10	40	25.2	450	0.07	1,800	Yellow	Violet	Brown
NLC322522T-1R0□-N	1.00	5 / 10	20	7.96	100	0.08	1,500	Brown	Black	Red
NLC322522T-1R2□-N	1.20	5 / 10	20	7.96	90	0.12	1,400	Brown	Red	Red
NLC322522T-1R5□-N	1.50	5 / 10	20	7.96	80	0.13	1,125	Brown	Green	Red
NLC322522T-1R8□-N	1.80	5 / 10	20	7.96	70	0.13	970	Brown	Gray	Red
NLC322522T-2R2□-N	2.20	5 / 10	20	7.96	68	0.13	970	Red	Red	Red
NLC322522T-3R3□-N	3.30	5 / 10	20	7.96	54	0.16	837	Orange	Orange	Red
NLC322522T-4R7□-N	4.70	5 / 10	20	7.96	43	0.23	675	Yellow	Violet	Red
NLC322522T-5R6□-N	5.60	5 / 10	20	7.96	36	0.26	620	Yellow	Violet	Red
NLC322522T-6R8□-N	6.80	5 / 10	20	7.96	33	0.27	600	Blue	Gray	Red
NLC322522T-8R2□-N	8.20	5 / 10	20	7.96	30	0.32	580	Gray	Red	Red
NLC322522T-100□-N	10.0	5 / 10	15	2.52	28	0.36	520	Brown	Black	Orange
NLC322522T-150□-N	15.0	5 / 10	15	2.52	19	0.56	480	Brown	Green	Orange
NLC322522T-220□-N	22.0	5 / 10	15	2.52	16	0.77	310	Red	Red	Orange
NLC322522T-270□-N	27.0	5 / 10	15	2.52	13	1.00	280	Red	Violet	Orange
NLC322522T-330□-N	33.0	5 / 10	15	2.52	12	1.10	270	Orange	Orange	Orange
NLC322522T-470□-N	47.0	5 / 10	15	2.52	10	1.64	210	Yellow	Violet	Orange
NLC322522T-680□-N	68.0	5 / 10	15	2.52	9.0	2.80	189	Blue	Gray	Orange
NLC322522T-101□-N	100	5 / 10	15	0.796	6.0	3.70	145	Brown	Black	Yellow
NLC322522T-151□-N	150	5 / 10	15	0.796	5.0	6.10	120	Brown	Green	Yellow
NLC322522T-181□-N	180	5 / 10	15	0.796	4.0	8.00	105	Brown	Gray	Yellow
NLC322522T-221□-N	220	5 / 10	15	0.796	4.0	8.40	100	Red	Red	Yellow
NLC322522T-331□-N	330	5 / 10	15	0.796	3.5	12.3	80	Orange	Orange	Yellow
NLC322522T-471□-N	470	5 / 10	15	0.796	2.8	22.0	75	Yellow	Violet	Yellow
NLC322522T-561□-N	560	5 / 10	15	0.796	2.5	23.0	65	Green	Blue	Yellow
NLC322522T-681□-N	680	5 / 10	15	0.796	2.0	28.0	65	Blue	Gray	Yellow

Note:

When ordering, please specify tolerance and packaging codes.

Tolerance: J =  $\pm$  5%, K =  $\pm$  10%

Packaging: Clear tape and reel (standard)

Test Instruments: L/Q- Agilent/HP4291A+Agilent/HP16197A (over 1MHz); Agilent/HP4285A+Agilent/HP16197A (under 1MHz)

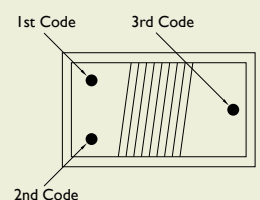
SRF- Agilent/HP4291A

RDC- CH502BC/ HP4338B

IDC- For Inductance drop 10% from its value without current

Operating Temperature Range: -25 °C to +85 °C

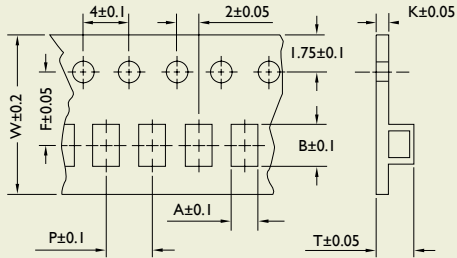
### Color Coding





## TAPE DIMENSIONS

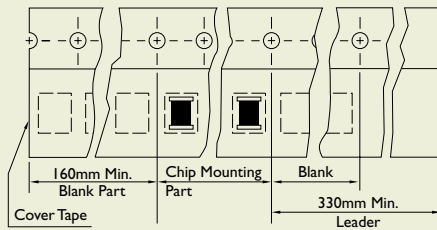
Unit: mm



TYPE	A	B	K	W	P	F	T
NLC252018	2.61	2.93	0.23	8	4	3.5	2.25
NLC322522	2.95	3.85	0.25	12	4	3.5	2.45

## TAPE MATERIAL

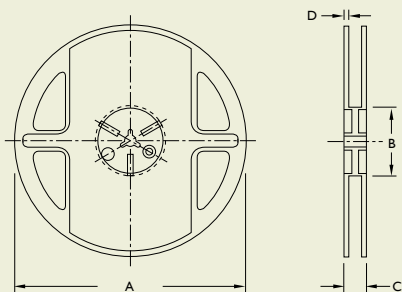
## PACKAGING QUANTITY



TYPE	QUANTITY/REEL
NLC252018	2,000
NLC322522	2,000

## REEL DIMENSIONS

Unit: mm



TYPE	A	B	C	D
NLC252018	178	60	12	1.5
NLC322522	178	60	16	1.4