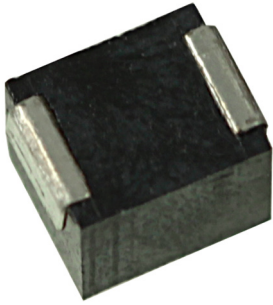


Molded Wirewound Inductors (NL Series)



Features:

- RoHS Compliant and Halogen Free
- Molded, heat resistant, resin package
- Unified automatic chip mounting shape with no directionality
- Excellent solderability for flow or reflow soldering
- Resistant to mechanical shocks and pressure
- Inductance Range: 0.1uH to 470uH
- Ferrite core

Part Number Structure

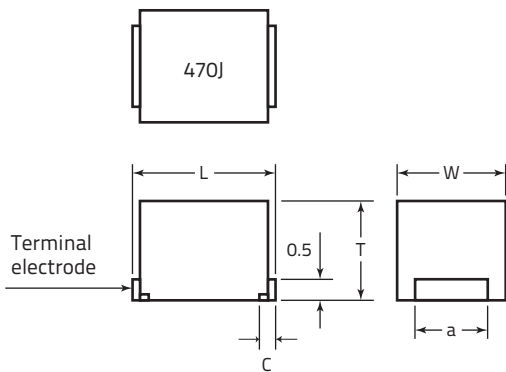
NL	252018	- 1R0	J	T
Series	Size	Inductance Value	Tolerance	Packaging
	252018	R12 = 0.12μH	J = ±5%	T = Tape & Reel
	322522	1R0 = 1.0μH 820 = 82μH	K = ±10% M = ±20%	

Example P/N: NL252018-1R0JT

NOTE: Topside marking available for 322522 size only.

Standard termination finish is 100% matte Tin (Sn) over Nickel.

Dimensions



Unit: mm (inches)

SIZE	L	W	T	a	C
252018 (1008)	2.5 ± 0.2	2.0 ± 0.2	1.8 ± 0.1	1.4 ± 0.1	0.4
322522 (1210)	3.2 ± 0.4	2.5 ± 0.2	2.2 ± 0.2	1.0 ± 0.2	0.6 + 0.3, -0

Operating / Storage Temperature Range

Operating Temperature Range* (including Self-Temperature Rise)	-40 to 105° C
Temperature Rise (against Ambient Temperature)	20° C max.
Ambient Temperature	80° C max.
Terminal Tensile Strength	0.5kg min.
Current Rating	Value obtained when current flows and the temperature has risen to 20° C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.
Resistance to Soldering Heat	260° C, 10 seconds
Resistance to Solvent	Conforms to MIL-STD-202E
* Should be used at a stabilized operating temperature.	

Molded Wirewound Inductors (NL Series)

Electrical Specifications and Range

252018 (1008)

Inductance (uH)	Tolerance (%)	Q min.	Test Freq. (MHz)	Self-resonant Frequency (MHz)	DC Resistance (Ω)	Rated Current (mA)	Venkel Part Number
0.1	±5%, ±10%, ±20%	20	100	800	0.80	280	NL252018-R10□T
0.12	±5%, ±10%, ±20%	30	25.2	700	0.30	550	NL252018-R12□T
0.15	±5%, ±10%, ±20%	30	25.2	550	0.35	500	NL252018-R15□T
0.18	±5%, ±10%, ±20%	30	25.2	500	0.40	460	NL252018-R18□T
0.22	±5%, ±10%, ±20%	30	25.2	450	0.50	430	NL252018-R22□T
0.27	±5%, ±10%, ±20%	30	25.2	425	0.55	420	NL252018-R27□T
0.33	±5%, ±10%, ±20%	30	25.2	400	0.60	400	NL252018-R33□T
0.39	±5%, ±10%, ±20%	30	25.2	375	0.65	375	NL252018-R39□T
0.47	±5%, ±10%, ±20%	30	25.2	350	0.68	350	NL252018-R47□T
0.56	±5%, ±10%, ±20%	30	25.2	325	0.75	325	NL252018-R56□T
0.68	±5%, ±10%, ±20%	30	25.2	300	0.85	300	NL252018-R68□T
0.82	±5%, ±10%, ±20%	30	25.2	260	1.00	260	NL252018-R82□T
1.0	±5%, ±10%, ±20%	30	7.96	245	1.10	245	NL252018-1R0□T
1.2	±5%, ±10%, ±20%	30	7.96	230	1.20	230	NL252018-1R2□T
1.5	±5%, ±10%, ±20%	30	7.96	182	1.30	220	NL252018-1R5□T
1.8	±5%, ±10%, ±20%	30	7.96	135	1.45	210	NL252018-1R8□T
2.2	±5%, ±10%, ±20%	30	7.96	105	1.55	200	NL252018-2R2□T
2.7	±5%, ±10%, ±20%	30	7.96	70	1.70	195	NL252018-2R7□T
3.3	±5%, ±10%, ±20%	30	7.96	55	1.90	185	NL252018-3R3□T
3.9	±5%, ±10%, ±20%	30	7.96	48	2.10	180	NL252018-3R9□T
4.7	±5%, ±10%, ±20%	30	7.96	43	2.30	175	NL252018-4R7□T
5.6	±5%, ±10%, ±20%	25	7.96	42	2.50	170	NL252018-5R6□T
6.8	±5%, ±10%, ±20%	25	7.96	39	2.70	165	NL252018-6R8□T
8.2	±5%, ±10%, ±20%	25	7.96	36	3.05	160	NL252018-8R2□T
10	±5%, ±10%, ±20%	25	2.52	33	3.50	155	NL252018-100□T
12	±5%, ±10%, ±20%	25	2.52	30	3.80	150	NL252018-120□T
15	±5%, ±10%, ±20%	25	2.52	26	4.40	140	NL252018-150□T
18	±5%, ±10%, ±20%	25	2.52	24	4.80	130	NL252018-180□T
22	±5%, ±10%, ±20%	25	2.52	22	5.50	125	NL252018-220□T
27	±5%, ±10%, ±20%	25	2.52	21	6.30	115	NL252018-270□T
33	±5%, ±10%, ±20%	25	2.52	20	7.10	110	NL252018-330□T
39	±5%, ±10%, ±20%	20	2.52	18	9.50	90	NL252018-390□T
47	±5%, ±10%, ±20%	20	2.52	17	11.1	80	NL252018-470□T
56	±5%, ±10%, ±20%	20	2.52	16	12.1	75	NL252018-560□T
68	±5%, ±10%, ±20%	20	2.52	15	16.6	70	NL252018-680□T
82	±5%, ±10%, ±20%	20	2.52	13	19.0	66	NL252018-820□T
100	±5%, ±10%, ±20%	15	0.796	12	21.0	60	NL252018-101□T

Molded Wirewound Inductors (NL Series)

Electrical Specifications and Range

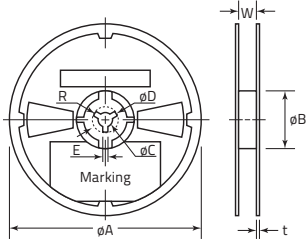
322522 (1210)

Inductance (uH)	Tolerance (□)	Q min.	Test Freq. (MHz)	Self-resonant Frequency (MHz)	DC Resistance (Ω)	Rated Current (mA)	Venkel Part Number
0.12	±5%, ±10%, ±20%	30	25.2	500	0.22	450	NL322522-R12□T
0.15	±5%, ±10%, ±20%	30	25.2	450	0.25	450	NL322522-R15□T
0.18	±5%, ±10%, ±20%	30	25.2	400	0.28	450	NL322522-R18□T
0.22	±5%, ±10%, ±20%	30	25.2	350	0.32	450	NL322522-R22□T
0.27	±5%, ±10%, ±20%	30	25.2	320	0.36	450	NL322522-R27□T
0.33	±5%, ±10%, ±20%	30	25.2	300	0.40	450	NL322522-R33□T
0.39	±5%, ±10%, ±20%	30	25.2	250	0.45	450	NL322522-R39□T
0.47	±5%, ±10%, ±20%	30	25.2	220	0.50	450	NL322522-R47□T
0.56	±5%, ±10%, ±20%	30	25.2	180	0.55	450	NL322522-R56□T
0.68	±5%, ±10%, ±20%	30	25.2	160	0.60	450	NL322522-R68□T
0.82	±5%, ±10%, ±20%	30	25.2	140	0.65	450	NL322522-R82□T
1.0	±5%, ±10%, ±20%	30	7.96	120	0.70	400	NL322522-1R0□T
1.2	±5%, ±10%, ±20%	30	7.96	100	0.75	390	NL322522-1R2□T
1.5	±5%, ±10%, ±20%	30	7.96	85	0.85	370	NL322522-1R5□T
1.8	±5%, ±10%, ±20%	30	7.96	80	0.90	350	NL322522-1R8□T
2.2	±5%, ±10%, ±20%	30	7.96	75	1.0	320	NL322522-2R2□T
2.7	±5%, ±10%, ±20%	30	7.96	70	1.10	290	NL322522-2R7□T
3.3	±5%, ±10%, ±20%	30	7.96	60	1.20	260	NL322522-3R3□T
3.9	±5%, ±10%, ±20%	30	7.96	55	1.30	250	NL322522-3R9□T
4.7	±5%, ±10%, ±20%	30	7.96	50	1.50	220	NL322522-4R7□T
5.6	±5%, ±10%, ±20%	30	7.96	45	1.60	200	NL322522-5R6□T
6.8	±5%, ±10%, ±20%	30	7.96	40	1.80	180	NL322522-6R8□T
8.2	±5%, ±10%, ±20%	30	7.96	35	2.0	170	NL322522-8R2□T
10	±5%, ±10%, ±20%	30	2.52	30	2.10	150	NL322522-100□T
12	±5%, ±10%, ±20%	30	2.52	20	2.50	140	NL322522-120□T
15	±5%, ±10%, ±20%	30	2.52	20	2.80	130	NL322522-150□T
18	±5%, ±10%, ±20%	30	2.52	20	3.30	120	NL322522-180□T
22	±5%, ±10%, ±20%	30	2.52	20	3.70	110	NL322522-220□T
27	±5%, ±10%, ±20%	30	2.52	20	5.00	80	NL322522-270□T
33	±5%, ±10%, ±20%	30	2.52	17	5.60	70	NL322522-330□T
39	±5%, ±10%, ±20%	30	2.52	16	6.40	65	NL322522-390□T
47	±5%, ±10%, ±20%	30	2.52	15	7.00	60	NL322522-470□T
56	±5%, ±10%, ±20%	30	2.52	13	8.00	55	NL322522-560□T
68	±5%, ±10%, ±20%	30	2.52	12	9.00	50	NL322522-680□T
82	±5%, ±10%, ±20%	30	2.52	11	10.0	45	NL322522-820□T
100	±5%, ±10%, ±20%	20	0.796	10	10.0	40	NL322522-101□T
120	±5%, ±10%, ±20%	20	0.796	10	11.0	70	NL322522-121□T
150	±5%, ±10%, ±20%	20	0.796	8	15.0	65	NL322522-151□T
180	±5%, ±10%, ±20%	20	0.796	7	17	60	NL322522-181□T
220	±5%, ±10%, ±20%	20	0.796	7	21	50	NL322522-221□T
270	±5%, ±10%, ±20%	20	0.796	6	28	45	NL322522-271□T
330	±5%, ±10%, ±20%	20	0.796	5	34	40	NL322522-331□T
390	±5%, ±10%, ±20%	20	0.796	5	36	35	NL322522-391□T
470	±5%, ±10%, ±20%	20	0.796	4	40	25	NL322522-471□T

Molded Wirewound Inductors (NL Series)

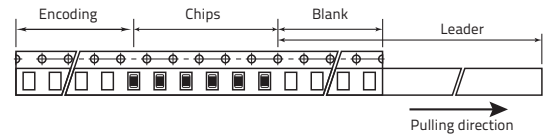
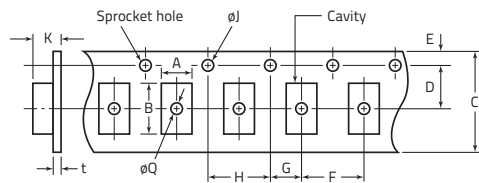
Tape and Reel Specifications

Reel Dimensions



Size	Thickness (mm)	Qty/Reel	Reel Dimensions (mm)				
			ϕA	ϕB	ϕC	W	t
252018	1.8 ± 0.2	2000	178 ± 2	50 min.	13 ± 0.5	10 ± 1.5	2 ± 0.5
322522	2.2 ± 0.2	2000					

Taping Dimensions



Size	Tape Dimensions (mm)												Tape
	A	B	C	D	E	F	G	H	ϕJ	K	t	ϕQ	
252018	2.3	2.8	8	3.5	1.75	4	2	4	1.5	2.3	0.3	1.5	Embossed
322522	2.9	3.6	8	3.5	1.75	4	2	4	1.5	2.3	0.3	1.5	