NLI Radial Power Inductors

NLI__H Series

FEATURES

- RADIAL LEADED POWER INDUCTOR
- WIRE WOUND CONSTRUCTION
- WIDE VALUE RANGE 1.0µH ~ 330µH
- AVAILABLE WITH HIGH TEMPERATURE SLEEVE
- FIVE CASE SIZES (6.5X6.5mm ~ 11X15.5mm)
- BULK PACKAGING ONLY

RoHS Compliant
includes all homogeneous materials

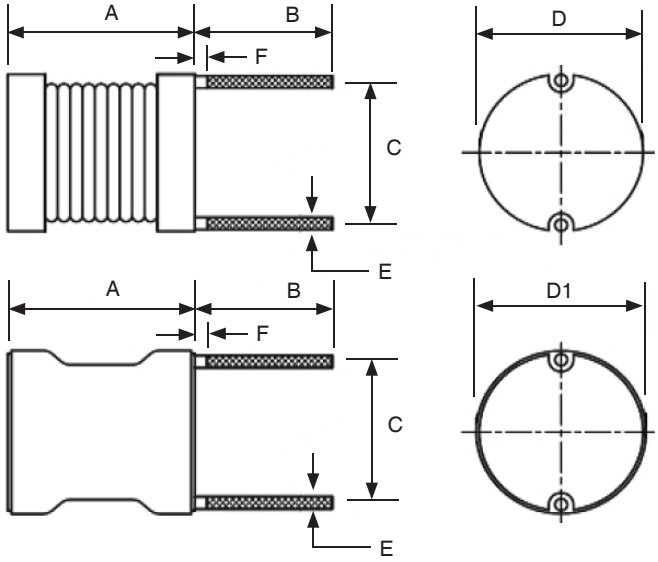
*See Part Number System for Details

CHARACTERISTICS

Case Code	NLI66H	NLI77H	NLI87H	NLI101H	NLI121H
Inductance Range (µH)	1.0µH ~ 4.7µH	1.0µH ~ 22µH	2.2µH ~ 22µH	3.3µH ~ 100µH	10µH ~ 330µH
Ambient Operating Temperature Range	-20°C ~ +80°C				
Maximum Component Temperature (Ambient + Self-Heating)	+105°C				
Temperature Rise at Irms	+20°C				
Inductance Change at Isat	-20%				
Inductance Tolerance	K (±10%), M (±20%)				

DIMENSIONS (mm)

Series	A max.	B	C	D max. (Without Sleeve)	D1 max. (With Sleeve)	E	F max.
NLI66H	6.5	5.0 ± 1.0	5.0 ± 1.0	6.5	7.0	See Specifications Tables	1.5
NLI77H	7.5	5.0 ± 1.0	6.0 ± 1.0	7.5	8.0		1.5
NLI87H	7.5	5.0 ± 1.0	6.0 ± 1.0	8.5	9.0		1.5
NLI101H	10.5	10.0 ± 2.0	8.0 ± 1.0	11.0	11.5		1.5
NLI121H	15.5	10.0 ± 2.0	11.0 ± 1.0	15.0	15.5		1.5



PART NUMBER SYSTEM

NLI 66 H 4R7 K U F

- F — RoHS Compliant
- U = Optional Black UL Sleeving (blank for no sleeving)
- K = Inductance Tolerance Code: K = ±10%, M = ±20%
- 4R7 = Inductance Code (µH): 1st two digits are significant, 3rd digit is multiplier for values from 10µH and up.
- H = Construction Code (see drawing for details)
- 66 = Size Code (see table for details)
- NLI = Series

NLI66H STANDARD VALUES (H = 6.5mm x D = 6.5mm)									
Part Number	Inductance (µH)	Inductance Tolerance*	Q min.	Q Freq.	SRF (MHz) min.	DCR (Ω) max.	I sat (A)	I rms (A)	Dim. E (ref.)
NLI66H1R0M _ F	1	±20%	20	7.96MHz	100	0.008	6	4.3	0.6
NLI66H1R5M _ F	1.5	±20%	20	7.96MHz	70	0.009	5	3.7	0.55
NLI66H2R2M _ F	2.2	±20%	20	7.96MHz	60	0.013	4	3.2	0.55
NLI66H3R3M _ F	3.3	±20%	20	7.96MHz	50	0.018	3.2	2.7	0.5
NLI66H4R7M _ F	4. 7	±20%	20	7.96MHz	40	0.024	2. 7	2. 4	0.5

DC I maximum +25°C temperature rise, ΔL -20% max.

* Contact NIC for other tolerance options. _ Add the letter "U" if sleeving is required.

NLI77H STANDARD VALUES (H = 7.5mm x D = 7.5mm)									
Part Number	Inductance (µH)	Inductance Tolerance*	Q min.	Q Freq.	SRF (MHz) min.	DCR (Ω) max.	I sat (A)	I rms (A)	Dim. E (ref.)
NLI77H1R0M _ F	1	±20%	10	7.96MHz	70	0.006	6.6	5	0.7
NLI77H1R5M _ F	1.5	±20%	10	7.96MHz	56	0.008	5.4	4.3	0.7
NLI77H2R2M _ F	2.2	±20%	10	7.96MHz	45	0.011	4	3.7	0.7
NLI77H3R3M _ F	3.3	±20%	10	7.96MHz	36	0.018	3.6	2.9	0.55
NLI77H4R7M _ F	4.7	±20%	10	7.96MHz	29	0.022	3.1	2.6	0.5
NLI77H6R8M _ F	6.8	±20%	10	7.96MHz	24	0.028	2.5	2.3	0.5
NLI77H100K _ F	10	±10%	20	2.52MHz	19	0.043	2.1	1.9	0.45
NLI77H150K _ F	15	±10%	20	2.52MHz	15	0.056	1.7	1.6	0.45
NLI77H220K _ F	22	±10%	20	2.52MHz	12	0.086	1. 4	1. 3	0.4

DC I maximum +25°C temperature rise, ΔL -20% max.

* Contact NIC for other tolerance options. _ Add the letter "U" if sleeving is required.

NLI87H STANDARD VALUES (H = 7.5mm x D = 8.5mm)									
Part Number	Inductance (µH)	Inductance Tolerance*	Q min.	Q Freq.	SRF (MHz) min.	DCR (Ω) max.	I sat (A)	I rms (A)	Dim. E (ref.)
NLI87H2R2M _ F	2.2	±20%	10	7.96MHz	60	0.011	5.5	4	0.7
NLI87H3R3M _ F	3.3	±20%	10	7.96MHz	38	0.013	3.8	3.4	0.7
NLI87H4R7M _ F	4.7	±20%	10	7.96MHz	30	0.017	3.7	3	0.6
NLI87H6R8M _ F	6.8	±20%	10	7.96MHz	24	0.023	2.8	2.6	0.55
NLI87H100K _ F	10	±10%	20	2.52MHz	19	0.031	2.5	2.2	0.55
NLI87H150K _ F	15	±10%	20	2.52MHz	15	0.042	2	1.9	0.5
NLI87H220K _ F	22	±10%	20	2.52MHz	12	0.07	1. 6	1. 5	0.45

DC I maximum +25°C temperature rise, ΔL -20% max.

* Contact NIC for other tolerance options. _ Add the letter "U" if sleeving is required.

NLI101H STANDARD VALUES (H = 10.5mm x D = 11.0mm)									
Part Number	Inductance (µH)	Inductance Tolerance*	Q min.	Q Freq.	SRF (MHz) min.	DCR (Ω) max.	I sat (A)	I rms (A)	Dim. E (ref.)
NLI101H3R3M _ F	3.3	±20%	10	7.96MHz	36	0.01	8.8	5.9	0.8
NLI101H4R7M _ F	4.7	±20%	10	7.96MHz	28	0.015	7.2	4.8	0.8
NLI101H6R8M _ F	6.8	±20%	10	7.96MHz	18	0.016	6.1	4.6	0.8
NLI101H100M _ F	10	±20%	20	2.52MHz	16	0.025	5	3.7	0.8
NLI101H150K _ F	15	±10%	20	2.52MHz	12	0.029	4.2	3.4	0.8
NLI101H220K _ F	22	±10%	20	2.52MHz	9.5	0.04	3.4	2.9	0.7
NLI101H330K _ F	33	±10%	30	2.52MHz	7	0.062	2.8	2.3	0.6
NLI101H470K _ F	47	±10%	30	2.52MHz	5.8	0.075	2.3	2.1	0.6
NLI101H680K _ F	68	±10%	20	2.52MHz	4.7	0.13	1.9	1.6	0.5
NLI101H101K _ F	100	±10%	20	796KHz	3.8	0.16	1. 6	1. 4	0.5

DC I maximum +25°C temperature rise, ΔL -20% max.

* Contact NIC for other tolerance options. _ Add the letter "U" if sleeving is required.

NLI121H STANDARD VALUES (H = 15.5mm x D = 15.0mm)									
Part Number	Inductance (µH)	Inductance Tolerance*	Q min.	Q Freq.	SRF (MHz) min.	DCR (Ω) max.	I sat (A)	I rms (A)	Dim. E (ref.)
NLI121H100M _ F	10	±20%	20	2.52MHz	19	0.023	8	5.1	0.9
NLI121H150K _ F	15	±10%	20	2.52MHz	12	0.028	6.5	4.5	0.9
NLI121H220K _ F	22	±10%	20	2.52MHz	7.6	0.035	5.5	4.2	0.8
NLI121H330K _ F	33	±10%	20	2.52MHz	6.9	0.043	4.5	3.7	0.7
NLI121H470K _ F	47	±10%	20	2.52MHz	5.6	0.052	3.6	3.4	0.7
NLI121H680K _ F	68	±10%	20	2.52MHz	4.4	0.068	3.1	3	0.7
NLI121H101K _ F	100	±10%	20	796KHz	3.3	0.097	2.6	2.5	0.6
NLI121H151K _ F	150	±10%	20	796KHz	2.6	0.14	2.1	2.1	0.55
NLI121H221K _ F	220	±10%	20	796KHz	2.2	0.2	1.7	1.7	0.5
NLI121H331K _ F	330	±10%	20	796KHz	1.8	0.3	1.4	1.4	0.45

DC I maximum +25°C temperature rise, ΔL -20% max.

* Contact NIC for other tolerance options. _ Add the letter "U" if sleeving is required.

PACKAGING QUANTITIY

Series	Bulk (per bag)
NLI66H	100
NLI77H	100
NLI87H	100
NLI101H	100
NLI121H	80