NLI-C Series

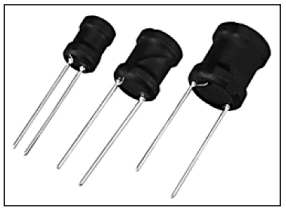
Radial Leaded Power Inductors

ROHS/REACH COMPLIANT HALOGEN FREE

COMPONENTS
Performance Passives By Design

FEATURES

- RADIAL LEADED POWER INDUCTOR
- WIRE WOUND CONSTRUCTION
- WIDE VALUE RANGE 1.0µH ~ 150,000µH
- AVAILABLE WITH HIGH TEMPERATURE SLEEVE
- NINE CASE SIZES (5.5X8mm ~ 14X16mm)



CHARACTERISTICS

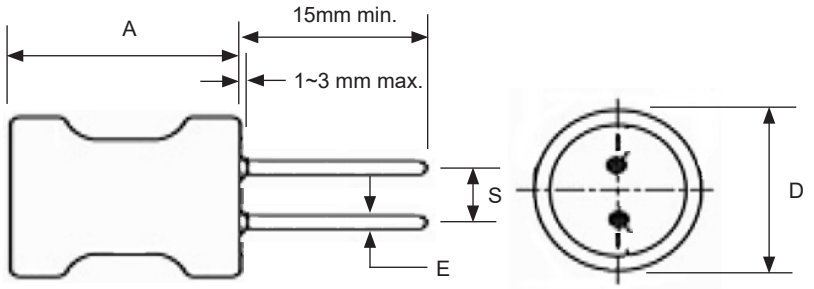
Case Code	NLI46C	NLI68C	NLI77C	NLI87C
Inductance Range	1.0µH ~ 25,000µH	3.3µH ~ 150,000µH	1.0µH ~ 1,500µH	2.2µH ~ 1,500µH

Case Code	NLI81C	NLI100C	NLI102C	NLI108C	NLI123C
Inductance Range (µH)	3.3µH ~ 100,000µH	3.3µH ~ 15,000µH	10,000µH ~ 100,000µH	4.7µH ~ 100,000µH	10µH ~ 10,000µH
Ambient Operating Temperature Range	-20°C ~ +85°C				
Maximum Component Temperature (Ambient + Self-Heating)	+105°C				
Temperature Rise at Irms	+20°C				
Inductance Change at Isat	-10%				
Inductance Tolerance	J (±5%), K (±10%), M (±20%)				

DIMENSIONS (mm)

Series	A max.	S (Bulk)	S (Tape & Box)	D max.	E ± 0.05
NLI46C	8.0	2.0 ± 0.5	5.0 ± 1.0*	5.5	0.55
NLI68C	11.0	2.5 ± 0.5	5.0 ± 1.0*	7.5	0.65
NLI77C	9.5	5.0 ± 1.0	5.0 ± 1.0	8.5	0.65
NLI87C	9.5	5.0 ± 1.0	5.0 ± 1.0	10.0	0.65
NLI81C	13.0	5.0 ± 1.0	5.0 ± 1.0	10.0	0.65
NLI100C	13.0	5.0 ± 1.0	5.0 ± 1.0	12.0	0.80
NLI102C	15.0	6.0 ± 1.0	6.0 ± 1.0	12.0	0.80
NLI108C	21.0	6.0 ± 1.0	6.0 ± 1.0	12.0	0.80
NLI123C	16.0	7.5 ± 1.0	7.5 ± 1.0	14.0	0.80

*These parts on tape & box packaging have crimped leads.



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NIC COMPONENTS Performance Passives By Design

PART NUMBER SYSTEM

NLI 46 C 4R7 K U TB F

- F — RoHS Compliant
- TB = Optional Packaging Tape & Box (blank for bulk packaging)
- U = Optional Black UL +125°C Sleeving (blank for no sleeving)
- Inductance Tolerance Code: J = ±5%, K = ±10%, M = ±20%
- Inductance Code (µH): 1st two digits are significant, 3rd digit is multiplier for values from 10µH and up.
- Construction Code (see drawing for details)
- Size Code (see table for details)
- Series

NPI46C STANDARD VALUES (H = 8.0mm x D = 5.5mm)							
Part Number	Inductance (µH) @ 1KHz	Inductance Tolerance*	Q min.	Q Freq.	SRF (MHz) min.	DCR (Ω) max.	DC I (mA)
NLI46C1R0M_ _ _F	1.0	±20%	100	7.96MHz	120	0.035	2000
NLI46C1R2M_ _ _F	1.2	±20%	100	7.96MHz	120	0.058	1950
NLI46C1R5M_ _ _F	1.5	±20%	100	7.96MHz	120	0.075	1900
NLI46C1R8M_ _ _F	1.8	±20%	100	7.96MHz	120	0.110	1800
NLI46C2R2M_ _ _F	2.2	±20%	100	7.96MHz	100	0.120	1750
NLI46C2R7M_ _ _F	2.7	±20%	100	7.96MHz	80	0.125	1680
NLI46C3R3M_ _ _F	3.3	±20%	100	7.96MHz	75	0.130	1500
NLI46C3R9K_ _ _F	3.9	±10%	100	7.96MHz	70	0.135	1450
NLI46C4R7K_ _ _F	4.7	±10%	100	7.96MHz	50	0.140	1320
NLI46C5R6K_ _ _F	5.6	±10%	100	7.96MHz	45	0.145	1230
NLI46C6R8K_ _ _F	6.8	±10%	100	7.96MHz	30	0.150	1150
NLI46C8R2K_ _ _F	8.2	±10%	100	7.96MHz	22	0.160	1100
NLI46C100K_ _ _F	10	±10%	80	2.52MHz	20	0.230	1000
NLI46C120K_ _ _F	12	±10%	80	2.52MHz	17	0.240	970
NLI46C150K_ _ _F	15	±10%	80	2.52MHz	16	0.250	920
NLI46C180K_ _ _F	18	±10%	80	2.52MHz	12	0.330	860
NLI46C220K_ _ _F	22	±10%	80	2.52MHz	10	0.450	800
NLI46C270K_ _ _F	27	±10%	80	2.52MHz	9.5	0.50	710
NLI46C330K_ _ _F	33	±10%	80	2.52MHz	8.7	0.70	660
NLI46C390K_ _ _F	39	±10%	70	2.52MHz	8.2	0.74	600
NLI46C470K_ _ _F	47	±10%	70	2.52MHz	7.8	0.76	550
NLI46C560K_ _ _F	56	±10%	50	2.52MHz	7.6	0.80	500
NLI46C680K_ _ _F	68	±10%	50	2.52MHz	6.8	0.90	470
NLI46C820K_ _ _F	82	±10%	50	2.52MHz	6.0	0.95	430
NLI46C101K_ _ _F	100	±10%	45	796KHz	6.0	1.0	400
NLI46C121K_ _ _F	120	±10%	45	796KHz	5.5	1.1	370
NLI46C151K_ _ _F	150	±10%	65	796KHz	4.2	1.3	350
NLI46C181K_ _ _F	180	±10%	65	796KHz	3.6	1.5	320
NLI46C221K_ _ _F	220	±10%	65	796KHz	2.8	1.8	300
NLI46C271K_ _ _F	270	±10%	50	796KHz	2.4	1.9	275
NLI46C331K_ _ _F	330	±10%	50	796KHz	2.2	2.2	250

DC I maximum +20°C temperature rise, ΔL -10% max.

* Contact NIC for other tolerance options.

NLI46C continue on next page

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NIC COMPONENTS Performance Passives By Design

NPI46C STANDARD VALUES (H = 8.0mm x D = 5.5mm)							
Part Number	Inductance (μH) @ 1KHz	Inductance Tolerance*	Q min.	Q Freq.	SRF (MHz) min.	DCR (Ω) max.	DC I (mA)
NLI46C391K_ _ _F	390	±10%	50	796KHz	2.0	2.7	220
NLI46C471K_ _ _F	470	±10%	50	796KHz	1.7	3.6	200
NLI46C561K_ _ _F	560	±10%	50	796KHz	1.5	4.2	190
NLI46C681K_ _ _F	680	±10%	50	796KHz	1.3	4.6	170
NLI46C821K_ _ _F	820	±10%	50	796KHz	1.1	5.7	155
NLI46C102K_ _ _F	1,000	±10%	90	252KHz	1.0	6.7	150
NLI46C122K_ _ _F	1,200	±10%	90	252KHz	0.9	8.2	140
NLI46C152K_ _ _F	1,500	±10%	80	252KHz	0.8	13	120
NLI46C182K_ _ _F	1,800	±10%	80	252KHz	0.8	15	110
NLI46C222K_ _ _F	2,200	±10%	80	252KHz	0.8	17	100
NLI46C272K_ _ _F	2,700	±10%	80	252KHz	0.8	19	90
NLI46C332K_ _ _F	3,300	±10%	70	252KHz	0.7	26	83
NLI46C392K_ _ _F	3,900	±10%	70	252KHz	0.65	30	76
NLI46C472K_ _ _F	4,700	±10%	65	252KHz	Not specified	45	70
NLI46C562K_ _ _F	5,600	±10%	65	252KHz	Not specified	48	62
NLI46C682K_ _ _F	6,800	±10%	65	252KHz	Not specified	56	56
NLI46C822K_ _ _F	8,200	±10%	65	252KHz	Not specified	62	52
NLI46C103K_ _ _F	10,000	±10%	45	79.6KHz	Not specified	72	47
NLI46C153K_ _ _F	15,000	±10%	45	79.6KHz	Not specified	120	35
NLI46C223K_ _ _F	22,000	±10%	45	79.6KHz	Not specified	160	24
NLI46C253K_ _ _F	25,000	±10%	45	79.6KHz	Not specified	180	20

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NPI68C STANDARD VALUES (H = 11.0mm x D = 7.5mm)						
Part Number	Inductance (µH) @ 1KHz	Inductance Tolerance*	Q min.	Q Freq.	DCR (Ω) max.	DC I (mA)
NLI68C3R3K_ _ _F	3.3	±10%	20	7.96MHz	0.016	3500
NLI68C4R7K_ _ _F	4.7	±10%	20	7.96MHz	0.020	3000
NLI68C6R8K_ _ _F	6.8	±10%	20	7.96MHz	0.022	2500
NLI68C100K_ _ _F	10	±10%	30	2.52MHz	0.039	2000
NLI68C150K_ _ _F	15	±10%	30	2.52MHz	0.045	1700
NLI68C220K_ _ _F	22	±10%	30	2.52MHz	0.062	1400
NLI68C330K_ _ _F	33	±10%	30	2.52MHz	0.10	1100
NLI68C470K_ _ _F	47	±10%	30	2.52MHz	0.15	950
NLI68C680K_ _ _F	68	±10%	30	2.52MHz	0.22	800
NLI68C101K_ _ _F	100	±10%	20	796KHz	0.35	650
NLI68C151K_ _ _F	150	±10%	20	796KHz	0.43	540
NLI68C221K_ _ _F	220	±10%	20	796KHz	0.90	440
NLI68C331K_ _ _F	330	±10%	20	796KHz	1.5	360
NLI68C471K_ _ _F	470	±10%	20	796KHz	1.8	300
NLI68C681K_ _ _F	680	±10%	20	796KHz	2.5	250
NLI68C102K_ _ _F	1,000	±10%	100	252KHz	3.2	200
NLI68C122K_ _ _F	1,200	±10%	70	252KHz	3.5	180
NLI68C152K_ _ _F	1,500	±10%	70	252KHz	4.5	170
NLI68C182K_ _ _F	1,800	±10%	70	252KHz	5.0	155
NLI68C222K_ _ _F	2,200	±10%	70	252KHz	6.8	140
NLI68C272K_ _ _F	2,700	±10%	70	252KHz	7.2	125
NLI68C332K_ _ _F	3,300	±10%	70	252KHz	10.5	115
NLI68C392K_ _ _F	3,900	±10%	70	252KHz	11.7	105
NLI68C472K_ _ _F	4,700	±10%	70	252KHz	13.6	95
NLI68C562K_ _ _F	5,600	±10%	70	252KHz	16.6	85
NLI68C682K_ _ _F	6,800	±10%	70	252KHz	19.6	80
NLI68C822K_ _ _F	8,200	±10%	70	252KHz	25.2	70
NLI68C103K_ _ _F	10,000	±10%	70	79.6KHz	29.5	65
NLI68C123K_ _ _F	12,000	±10%	50	79.6KHz	33.8	60
NLI68C153K_ _ _F	15,000	±10%	50	79.6KHz	45.4	55
NLI68C183K_ _ _F	18,000	±10%	50	79.6KHz	50.4	50
NLI68C223K_ _ _F	22,000	±10%	50	79.6KHz	80.0	45
NLI68C303K_ _ _F	30,000	±10%	50	79.6KHz	91.5	40
NLI68C333K_ _ _F	33,000	±10%	50	79.6KHz	98.5	35
NLI68C393K_ _ _F	39,000	±10%	50	79.6KHz	140	32
NLI68C473K_ _ _F	47,000	±10%	50	79.6KHz	160	30
NLI68C503K_ _ _F	50,000	±10%	50	79.6KHz	170	29
NLI68C563K_ _ _F	56,000	±10%	50	79.6KHz	250	28
NLI68C683K_ _ _F	68,000	±10%	50	79.6KHz	282	25
NLI68C823K_ _ _F	82,000	±10%	50	79.6KHz	312	23
NLI68C104K_ _ _F	100,000	±10%	30	25.2KHz	380	20
NLI68C124K_ _ _F	120,000	±10%	30	25.2KHz	430	18
NLI68C154K_ _ _F	150,000	±10%	30	25.2KHz	520	16

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NPI77C STANDARD VALUES (H = 9.5mm x D = 8.5mm)								
Part Number	Inductance (µH) @ 1KHz	Inductance Tolerance*	Q min.	Q Freq.	SRF (MHz) min.	DCR (Ω) max.	I sat (A)	Irms (A)
NLI77C1R0M_ _ _F	1.0	±20%	10	7.96MHz	70	0.006	6.6	5.0
NLI77C1R5M_ _ _F	1.5	±20%	10	7.96MHz	56	0.008	5.4	4.3
NLI77C2R2M_ _ _F	2.2	±20%	10	7.96MHz	45	0.011	4.0	3.7
NLI77C3R3M_ _ _F	3.3	±20%	10	7.96MHz	36	0.018	3.6	2.9
NLI77C4R7M_ _ _F	4.7	±20%	10	7.96MHz	29	0.022	3.1	2.6
NLI77C6R8M_ _ _F	6.8	±20%	10	7.96MHz	24	0.028	2.5	2.3
NLI77C100K_ _ _F	10	±10%	20	2.52MHz	19	0.043	2.1	1.9
NLI77C150K_ _ _F	15	±10%	20	2.52MHz	15	0.056	1.7	1.6
NLI77C220K_ _ _F	22	±10%	20	2.52MHz	12	0.086	1.4	1.3
NLI77C330K_ _ _F	33	±10%	20	2.52MHz	9.4	0.14	1.1	1.0
NLI77C470K_ _ _F	47	±10%	20	2.52MHz	7.6	0.17	0.96	0.94
NLI77C680K_ _ _F	68	±10%	20	2.52MHz	6.2	0.28	0.79	0.73
NLI77C101K_ _ _F	100	±10%	20	796KHz	5.0	0.33	0.66	0.67
NLI77C151K_ _ _F	150	±10%	20	796KHz	4.0	0.56	0.53	0.52
NLI77C221K_ _ _F	220	±10%	20	796KHz	3.2	0.72	0.44	0.46
NLI77C331K_ _ _F	330	±10%	20	796KHz	2.5	1.1	0.36	0.37
NLI77C471K_ _ _F	470	±10%	20	796KHz	2.0	1.7	0.30	0.30
NLI77C681K_ _ _F	680	±10%	20	796KHz	1.7	2.3	0.25	0.26
NLI77C102K_ _ _F	1,000	±10%	70	252KHz	1.3	4.3	0.20	0.19
NLI77C152K_ _ _F	1,500	±10%	50	252KHz	1.3	5	0.17	0.16

Irm maximum +20°C temperature rise, Isat ΔL -10% max.
* Contact NIC for other tolerance options.

NPI87C STANDARD VALUES (H = 9.5mm x D = 10mm)								
Part Number	Inductance (µH) @ 1KHz	Inductance Tolerance*	Q min.	Q Freq.	SRF (MHz) min.	DCR (Ω) max.	I sat (A)	Irms (A)
NLI87C2R2M_ _ _F	2.2	±20%	10	7.96MHz	60	0.011	5.5	4.0
NLI87C3R3M_ _ _F	3.3	±20%	10	7.96MHz	38	0.013	3.8	3.4
NLI87C4R7M_ _ _F	4.7	±20%	10	7.96MHz	30	0.017	3.7	3.0
NLI87C6R8M_ _ _F	6.8	±20%	10	7.96MHz	24	0.023	2.8	2.6
NLI87C100K_ _ _F	10	±10%	20	2.52MHz	19	0.031	2.5	2.2
NLI87C150K_ _ _F	15	±10%	20	2.52MHz	15	0.042	2.0	1.9
NLI87C220K_ _ _F	22	±10%	20	2.52MHz	12	0.070	1.6	1.5
NLI87C330K_ _ _F	33	±10%	20	2.52MHz	10	0.092	1.3	1.2
NLI87C470K_ _ _F	47	±10%	20	2.52MHz	8.2	0.13	1.1	1.0
NLI87C680K_ _ _F	68	±10%	20	2.52MHz	6.6	0.16	0.91	0.97
NLI87C101K_ _ _F	100	±10%	15	796KHz	5.4	0.23	0.75	0.81
NLI87C151K_ _ _F	150	±10%	15	796KHz	4.3	0.40	0.61	0.61
NLI87C221K_ _ _F	220	±10%	15	796KHz	3.5	0.53	0.50	0.53
NLI87C331K_ _ _F	330	±10%	15	796KHz	2.8	0.78	0.41	0.44
NLI87C471K_ _ _F	470	±10%	10	796KHz	2.3	1.0	0.34	0.39
NLI87C681K_ _ _F	680	±10%	10	796KHz	1.9	1.5	0.28	0.32
NLI87C102K_ _ _F	1,000	±10%	20	252KHz	1.5	2.2	0.23	0.26
NLI87C152K_ _ _F	1,500	±10%	30	252KHz	1.2	3.5	0.18	0.21

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NPI81C STANDARD VALUES (H = 13mm x D = 10mm)							
Part Number	Inductance (µH) @ 1KHz	Inductance Tolerance*	Q min.	Q Freq.	SRF (MHz) min.	DCR (Ω) max.	DC I (mA)
NLI81C3R3M_ _ _F	3.3	±20%	30	7.96MHz	65	0.012	5000
NLI81C3R9K_ _ _F	3.9	±10%	30	7.96MHz	55	0.014	4600
NLI81C4R7K_ _ _F	4.7	±10%	30	7.96MHz	45	0.016	4300
NLI81C5R6K_ _ _F	5.6	±10%	30	7.96MHz	38	0.02	3900
NLI81C6R8K_ _ _F	6.8	±10%	30	7.96MHz	27	0.022	3700
NLI81C8R2K_ _ _F	8.2	±10%	30	7.96MHz	21	0.024	3500
NLI81C100K_ _ _F	10	±10%	50	2.52MHz	17	0.025	3200
NLI81C120K_ _ _F	12	±10%	50	2.52MHz	15	0.027	3000
NLI81C150K_ _ _F	15	±10%	50	2.52MHz	13	0.033	2800
NLI81C180K_ _ _F	18	±10%	50	2.52MHz	12	0.039	2600
NLI81C220K_ _ _F	22	±10%	50	2.52MHz	11	0.047	2400
NLI81C270K_ _ _F	27	±10%	50	2.52MHz	10	0.052	2100
NLI81C330K_ _ _F	33	±10%	50	2.52MHz	8.5	0.075	1900
NLI81C390K_ _ _F	39	±10%	40	2.52MHz	7.7	0.082	1700
NLI81C470K_ _ _F	47	±10%	40	2.52MHz	6.7	0.10	1500
NLI81C560K_ _ _F	56	±10%	40	2.52MHz	6.4	0.15	1300
NLI81C680K_ _ _F	68	±10%	30	2.52MHz	5.8	0.18	1200
NLI81C820K_ _ _F	82	±10%	30	2.52MHz	5.2	0.20	1100
NLI81C101K_ _ _F	100	±10%	30	796KHz	4.4	0.20	900
NLI81C121K_ _ _F	120	±10%	30	796KHz	4.2	0.22	800
NLI81C151K_ _ _F	150	±10%	30	796KHz	3.7	0.24	720
NLI81C181K_ _ _F	180	±10%	30	796KHz	3.5	0.28	650
NLI81C221K_ _ _F	220	±10%	20	796KHz	3.3	0.35	600
NLI81C271K_ _ _F	270	±10%	20	796KHz	2.9	0.40	550
NLI81C331K_ _ _F	330	±10%	20	796KHz	2.6	0.47	500
NLI81C391K_ _ _F	390	±10%	20	796KHz	2.4	0.68	460
NLI81C471K_ _ _F	470	±10%	20	796KHz	2.2	0.8	420
NLI81C561K_ _ _F	560	±10%	20	796KHz	2.0	1.0	380
NLI81C681K_ _ _F	680	±10%	20	796KHz	1.8	1.2	350
NLI81C821K_ _ _F	820	±10%	20	796KHz	1.7	1.5	310
NLI81C102K_ _ _F	1,000	±10%	40	252KHz	1.5	1.8	280
NLI81C122K_ _ _F	1,200	±10%	40	252KHz	1.4	2.0	250
NLI81C152K_ _ _F	1,500	±10%	40	252KHz	1.3	2.4	230
NLI81C182K_ _ _F	1,800	±10%	40	252KHz	1.1	2.8	210
NLI81C222K_ _ _F	2,200	±10%	40	252KHz	1.0	3.3	190
NLI81C272K_ _ _F	2,700	±10%	40	252KHz	0.88	5.0	170
NLI81C332K_ _ _F	3,300	±10%	40	252KHz	0.78	5.6	150
NLI81C392K_ _ _F	3,900	±10%	40	252KHz	0.72	6.2	140
NLI81C472K_ _ _F	4,700	±10%	40	252KHz	0.65	7.0	130
NLI81C562K_ _ _F	5,600	±10%	40	252KHz	0.58	9.1	120
NLI81C682K_ _ _F	6,800	±10%	40	252KHz	0.55	10	110
NLI81C822K_ _ _F	8,200	±10%	20	252KHz	0.50	15	100
NLI81C103K_ _ _F	10,000	±10%	20	79.6KHz	0.42	24	90
NLI81C473K_ _ _F	47,000	±10%	60	79.6KHz	0.20	80	40
NLI81C104K_ _ _F	100,000	±10%	20	79.6KHz	0.14	180	28

DC I maximum +20°C temperature rise, ΔL -10% max.
* Contact NIC for other tolerance options.

NLI-C Series
Radial Leaded Power Inductors

ROHS/REACH COMPLIANT HALOGEN FREE

NIC COMPONENTS Performance Passives By Design

NPI100C STANDARD VALUES (H = 13mm x D = 12mm)								
Part Number	Inductance (µH) @ 1KHz	Inductance Tolerance*	Q min.	Q Freq.	SRF (MHz) min.	DCR (Ω) max.	I sat (A)	Irms (A)
NLI100C3R3M_ _ _F	3.3	±20%	10	7.96MHz	36	0.01	8.8	5.9
NLI100C4R7M_ _ _F	4.7	±20%	10	7.96MHz	28	0.015	7.2	4.8
NLI100C6R8M_ _ _F	6.8	±20%	10	7.96MHz	18	0.016	6.1	4.6
NLI100C100M_ _ _F	10	±20%	20	2.52MHz	16	0.025	5.0	3.7
NLI100C150M_ _ _F	15	±20%	20	2.52MHz	12	0.029	4.2	3.4
NLI100C220K_ _ _F	22	±10%	20	2.52MHz	9.5	0.04	3.4	2.9
NLI100C330K_ _ _F	33	±10%	30	2.52MHz	7.0	0.062	2.8	2.3
NLI100C470K_ _ _F	47	±10%	30	2.52MHz	5.8	0.075	2.3	2.1
NLI100C680K_ _ _F	68	±10%	20	2.52MHz	4.7	0.13	1.9	1.6
NLI100C101K_ _ _F	100	±10%	20	796KHz	3.8	0.16	1.6	1.4
NLI100C151K_ _ _F	150	±10%	20	796KHz	3.1	0.26	1.3	1.1
NLI100C221K_ _ _F	220	±10%	20	796KHz	2.5	0.33	1.1	1.0
NLI100C331K_ _ _F	330	±10%	20	796KHz	2.0	0.52	0.88	0.82
NLI100C471K_ _ _F	470	±10%	10	796KHz	1.6	0.66	0.75	0.72
NLI100C681K_ _ _F	680	±10%	10	796KHz	1.3	1.1	0.61	0.56
NLI100C102K_ _ _F	1,000	±10%	20	252KHz	1.1	1.4	0.51	0.50
NLI100C152K_ _ _F	1,500	±10%	30	252KHz	0.82	2.4	0.43	0.38
NLI100C222K_ _ _F	2,200	±10%	20	252KHz	0.76	3.2	0.35	0.33
NLI100C332K_ _ _F	3,300	±10%	30	252KHz	0.64	4.9	0.28	0.26
NLI100C472K_ _ _F	4,700	±10%	30	252KHz	0.54	7.6	0.24	0.21
NLI100C682K_ _ _F	6,800	±10%	30	252KHz	0.45	9.8	0.20	0.18
NLI100C103K_ _ _F	10,000	±10%	30	79.6KHz	0.38	18	0.17	0.14
NLI100C153K_ _ _F	15,000	±10%	50	79.6KHz	0.29	24	0.13	0.12

Irm maximum +20°C temperature rise, Isat ΔL -10% max.
* Contact NIC for other tolerance options.

NPI102C STANDARD VALUES (H = 15mm x D = 12mm)								
Part Number	Inductance (µH) @ 1KHz	Inductance Tolerance*	Q min.	Q Freq.	SRF (MHz) min.	DCR (Ω) max.	I sat (A)	Irms (A)
NLI102C103K_ _ _F	10,000	±10%	100	79.6KHz	0.35	12	0.18	0.17
NLI102C123K_ _ _F	12,000	±10%	100	79.6KHz	0.31	13	0.16	0.16
NLI102C153K_ _ _F	15,000	±10%	100	79.6KHz	0.28	18	0.14	0.14
NLI102C183K_ _ _F	18,000	±10%	80	79.6KHz	0.26	25	0.13	0.12
NLI102C223K_ _ _F	22,000	±10%	80	79.6KHz	0.22	30	0.12	0.11
NLI102C273K_ _ _F	27,000	±10%	80	79.6KHz	0.20	35	0.11	0.10
NLI102C333K_ _ _F	33,000	±10%	60	79.6KHz	0.19	40	0.10	0.09
NLI102C393K_ _ _F	39,000	±10%	60	79.6KHz	0.17	50	0.09	0.08
NLI102C473K_ _ _F	47,000	±10%	60	79.6KHz	0.15	50	0.080	0.075
NLI102C563K_ _ _F	56,000	±10%	40	79.6KHz	0.13	65	0.075	0.070
NLI102C683K_ _ _F	68,000	±10%	40	79.6KHz	0.12	70	0.070	0.065
NLI102C823K_ _ _F	82,000	±10%	30	79.6KHz	0.10	100	0.060	0.055
NLI102C104K_ _ _F	100,000	±10%	30	79.6KHz	0.10	135	0.055	0.045

Irm maximum +20°C temperature rise, Isat ΔL -10% max.
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COMPONENTS
Performance Passives By Design

NPI108C STANDARD VALUES (H = 21mm x D = 12mm)					
Part Number	Inductance (μH) @ 1KHz	Indutance Tolerance*	DCR (Ω) max.	I sat (A)	Irms (A)
NLI108C4R7K_ _ _F	4.7	±10%	0.008	10	6.0
NLI108C6R8K_ _ _F	6.8	±10%	0.011	8.0	5.5
NLI108C100K_ _ _F	10	±10%	0.017	7.0	4.5
NLI108C150K_ _ _F	15	±10%	0.022	5.5	4.0
NLI108C220K_ _ _F	22	±10%	0.026	4.5	3.7
NLI108C330K_ _ _F	33	±10%	0.032	3.8	3.3
NLI108C470K_ _ _F	47	±10%	0.035	3.2	3.0
NLI108C680K_ _ _F	68	±10%	0.047	2.6	2.6
NLI108C101K_ _ _F	100	±10%	0.090	2.2	2.0
NLI108C151K_ _ _F	150	±10%	0.129	1.8	1.6
NLI108C221K_ _ _F	220	±10%	0.162	1.5	1.5
NLI108C331K_ _ _F	330	±10%	0.212	1.2	1.2
NLI108C471K_ _ _F	470	±10%	0.380	1.0	1.0
NLI108C681K_ _ _F	680	±10%	0.548	0.84	0.84
NLI108C102K_ _ _F	1,000	±10%	0.844	0.66	0.66
NLI108C152K_ _ _F	1,500	±10%	1.18	0.55	0.55
NLI108C222K_ _ _F	2,200	±10%	2.00	0.46	0.44
NLI108C332K_ _ _F	3,300	±10%	2.53	0.38	0.38
NLI108C472K_ _ _F	4,700	±10%	3.19	0.32	0.32
NLI108C682K_ _ _F	6,800	±10%	5.69	0.26	0.25
NLI108C103K_ _ _F	10,000	±10%	7.30	0.22	0.22
NLI108C153K_ _ _F	15,000	±10%	10.5	0.18	0.18
NLI108C223K_ _ _F	22,000	±10%	21.8	0.14	0.13
NLI108C333K_ _ _F	33,000	±10%	25.7	0.12	0.12
NLI108C473K_ _ _F	47,000	±10%	36.1	0.10	0.10
NLI108C683K_ _ _F	68,000	±10%	57.3	0.08	0.08
NLI108C104K_ _ _F	100,000	±10%	89 .7	0.06	0.06

Irm maximum +20°C temperature rise, Isat ΔL -10% max.

* Contact NIC for other tolerance options.

NLI-C Series
Radial Leaded Power Inductors

ROHS/REACH COMPLIANT HALOGEN FREE

COMPONENTS
Performance Passives By Design

NPI123C STANDARD VALUES (H = 16mm x D = 14mm)					
Part Number	Inductance (µH) @ 1KHz	Inductance Tolerance*	DCR (Ω) max.	I sat (A)	Irms (A)
NLI123C100M_ _ _F	10	±10%	0.023	8.0	5.1
NLI123C150K_ _ _F	15	±10%	0.028	6.5	4.5
NLI123C220K_ _ _F	22	±10%	0.035	5.5	4.2
NLI123C330K_ _ _F	33	±10%	0.043	4.5	3.7
NLI123C470K_ _ _F	47	±10%	0.052	3.6	3.4
NLI123C680K_ _ _F	68	±10%	0.068	3.1	3
NLI123C101K_ _ _F	100	±10%	0.097	2.6	2.5
NLI123C151K_ _ _F	150	±10%	0.14	2.1	2.1
NLI123C221K_ _ _F	220	±10%	0.20	1.7	1.7
NLI123C331K_ _ _F	330	±10%	0.30	1.4	1.4
NLI123C471K_ _ _F	470	±10%	0.43	1.1	1.1
NLI123C681K_ _ _F	680	±10%	0.61	0.95	0.99
NLI123C102K_ _ _F	1000	±10%	1.0	0.78	0.78
NLI123C152K_ _ _F	1500	±10%	1.3	0.64	0.68
NLI123C222K_ _ _F	2200	±10%	2.0	0.53	0.55
NLI123C332K_ _ _F	3300	±10%	3.1	0.43	0.44
NLI123C472K_ _ _F	4700	±10%	4.4	0.36	0.37
NLI123C682K_ _ _F	6800	±10%	6.5	0.30	0.3
NLI123C103K_ _ _F	10000	±10%	10	0.24	0.24

Irm maximum +20°C temperature rise, Isat ΔL -10% max.

* Contact NIC for other tolerance options.

PACKAGING QUANTITIY

Series	Bulk (per bag)	Tape & Box (per box)
NLI46C	500	1,000
NLI68C	200	750
NLI77C	200	650
NLI87C	100	600
NLI81C	100	600
NLI100C	100	500
NLI102C	100	500
NLI108C	50	350
NLI123C	50	350

TAPING SPECIFICATIONS

Size	P_1	P_2	H_1	H_2	W_1	W_2	W_3	D	S
NLI46C ~ 100C*	12.7 ± 1.0	12.7 ± 0.3	32.5 ref.	18.5 ± 1.0	18.0 ± 1.0	12.0 min.	9.0 ± 0.8	4.0 ± 0.3	5.0 ± 1.0
NLI102C ~ 108C									6.0 ± 1.0
NLI123C	15.0 ± 1.0	15.0 ± 0.3	32.5 ref.	18.0 ± 2.0					7.5 ± 1.0

*NLI46C ~ 68C parts are taped with leads formed from 2.5mm to 5.0mm lead-spacing as shown in the drawing below. All other sizes are taped with straight leads. Also note, the parts shown in the diagram depict parts with the optional UL sleeving.