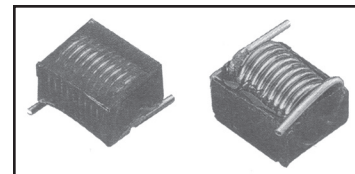


### FEATURES

- High Q Over Wide Frequency Range
- Available in 0403, 0504, 0703 and 1006 Case Sizes
- Mold Flat Top for Automatic Pick & Place

**RoHS Compliant**  
includes all homogeneous materials

\*See Part Number System for Details

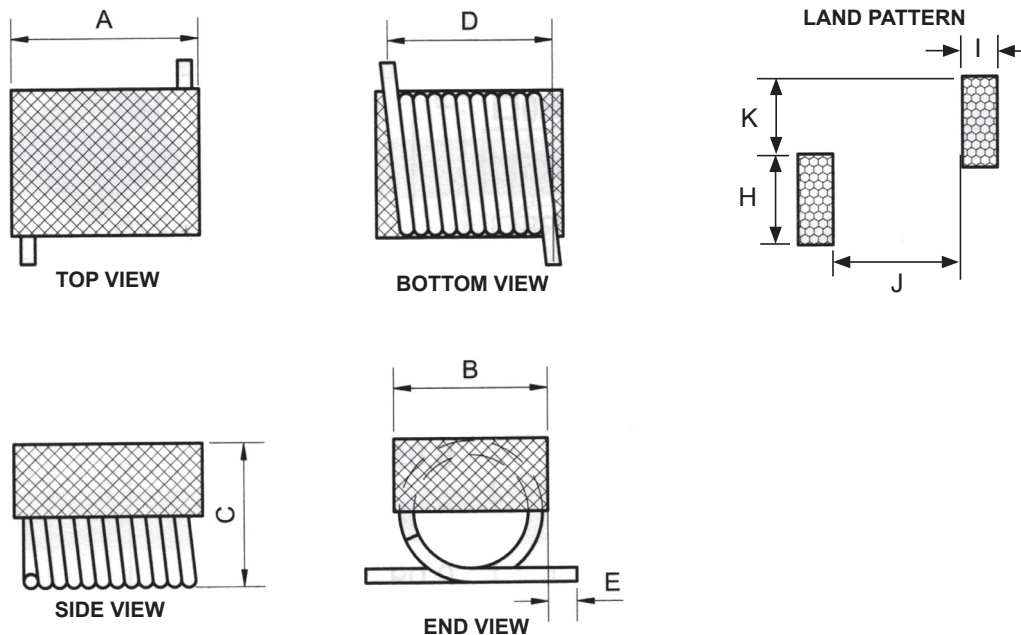


### SPECIFICATIONS

NLA Wound Air Core Inductors				
Specifications	0403	0504	0703	1006
Inductance Range	2.5 ~ 18.5nH	22 ~ 120nH	17.5 ~ 43nH	90 ~ 538nH
Operating Temperature Range	-40°C ~ +125°C			
Q-Factor, Self Resonant Frequency, DC Resistance, Rated DC Current and Inductance Tolerance	See Individual Product Listings			

### COMPONENT AND LAND PATTERN DIMENSIONS

Series	A	B	C	D	E	H	I	J	K
NLA0403	3.68 ref.	3.05 ref.	3.18 ref.	2.92 ± 0.25	0.58 ± 0.38	3.30	1.27	1.65	2.79
NLA0504	4.95 ref.	3.81 ref.	4.20 ref.	4.32 ± 0.39	1.53 ± 0.39	5.16	1.48	2.85	2.62
NLA0703	6.86 ref.	3.05 ref.	3.18 ref.	5.84 ± 0.25	0.58 ± 0.38	3.30	1.27	4.70	2.79
NLA1006	10.55 ref.	6.35 ref.	5.97 ref.	7.98 ± 0.51	1.27 ± 0.39	4.70	2.04	5.95	2.42



### PART NUMBER SYSTEM

NLA 0403 K 2N5 TR E

- Series
- Size Code: 0403, 0504, 0703 or 1006
- Tolerance Code (J=±5%, K=±10%)
- Inductance Code (N=decimal point) in nano-henries (Ex. 2N5 = 2.5nH, 18N=18nH, R10=100nH)
- Packaging: TR = Tape/Reel
- RoHS compliant

## NLA0403 SERIES VALUES AND SPECIFICATIONS

NIC P/N	'L' Inductance (nH)	Tolerance	'Q' Factor (min.)	Test Freq.	SRF MHz (min.)	DC Resistance (mΩ) Max.	Rated DC Current (A) Max.
NLA0403K2N5TRF	2.5	±10%	145	150MHz	12500	1.1	4.0
NLA0403K5N0TRF	5.0	±10%	140		6500	1.8	4.0
NLA0403J8N0TRF	8.0	±5%	140		5000	2.6	4.0
NLA0403J12N5TRF	12.5	±5%	137		3300	3.4	4.0
NLA0403J18N5TRF	18.5	±5%	132		2500	3.9	4.0

Maximum temperature rise at maximum rated current is +15°C

## NLA0504 SERIES VALUES AND SPECIFICATIONS

NIC P/N	'L' Inductance (nH)	Tolerance	'Q' Factor (min.)	Test Freq.	SRF MHz (min.)	DC Resistance (mΩ) Max.	Rated DC Current (A) Max.
NLA0504J22NTRF	22	±5%	100	150MHz	3200	4.2	3.0
NLA0504J27NTRF	27	±5%	100		2700	4.0	3.5
NLA0504J33NTRF	33	±5%	100		2500	4.8	3.0
NLA0504J39NTRF	39	±5%	100		2100	4.4	3.0
NLA0504J47NTRF	47	±5%	100		2100	5.6	3.0
NLA0504J56NTRF	56	±5%	100		1500	6.2	3.0
NLA0504J68NTRF	68	±5%	100		1500	8.2	2.5
NLA0504J82NTRF	82	±5%	100		1300	9.4	2.5
NLA0504JR10TRF	100	±5%	100		1200	12.3	1.7
NLA0504JR12TRF	120	±5%	100		1100	17.3	1.5

Maximum temperature rise at maximum rated current is +15°C

## NLA0703 SERIES VALUES AND SPECIFICATIONS

NIC P/N	'L' Inductance (nH)	Tolerance	'Q' Factor (min.)	Test Freq.	SRF MHz (min.)	DC Resistance (mΩ) Max.	Rated DC Current (A) Max.
NLA0703J17N5TRF	17.5	±5%	100	150MHz	2200	4.5	4.0
NLA0703J22NTRF	22	±5%	102		2100	5.2	4.0
NLA0703J28NTRF	28	±5%	105		1800	6.0	4.0
NLA0703J35N5TRF	35.5	±5%	112		1500	6.8	4.0
NLA0703J43NTRF	43	±5%	106		1200	7.9	4.0

Maximum temperature rise at maximum rated current is +15°C

## NLA1006 SERIES VALUES AND SPECIFICATIONS

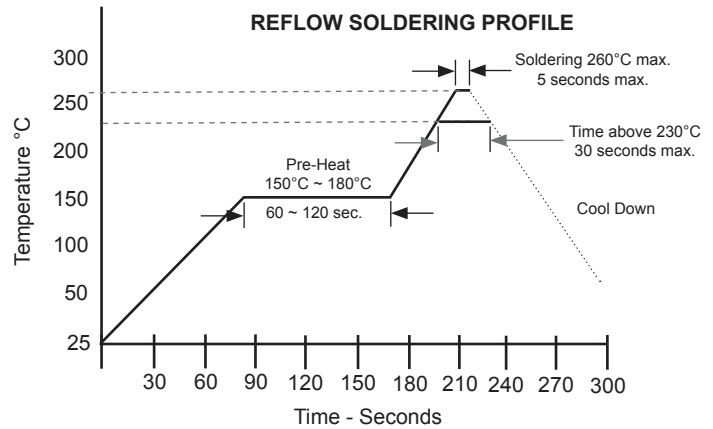
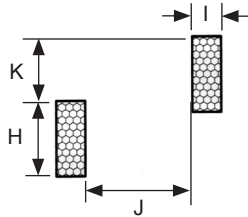
NIC P/N	'L' Inductance (nH)	Tolerance	'Q' Factor (min.)	Test Freq.	SRF MHz (min.)	DC Resistance (mΩ) Max.	Rated DC Current (A) Max.
NLA1006J90NTRF	90	±5%	95	50MHz	1140	15.0	3.5
NLA1006JR111TRF	111	±5%	87		1020	15.0	3.5
NLA1006JR130TRF	130	±5%	87		900	20.0	3.0
NLA1006JR169TRF	169	±5%	95		875	25.0	3.0
NLA1006JR206TRF	206	±5%	95		800	30.0	3.0
NLA1006JR222TRF	222	±5%	92		730	35.0	3.0
NLA1006JR246TRF	246	±5%	95		685	35.0	3.0
NLA1006JR307TRF	307	±5%	95		660	35.0	3.0
NLA1006JR380TRF	380	±5%	95		590	50.0	2.5
NLA1006JR422TRF	422	±5%	95		540	60.0	2.5
NLA1006JR491TRF	491	±5%	95		535	65.0	2.0
NLA1006JR538TRF	538	±5%	87		490	90.0	2.0

Maximum temperature rise at maximum rated current is +15°C

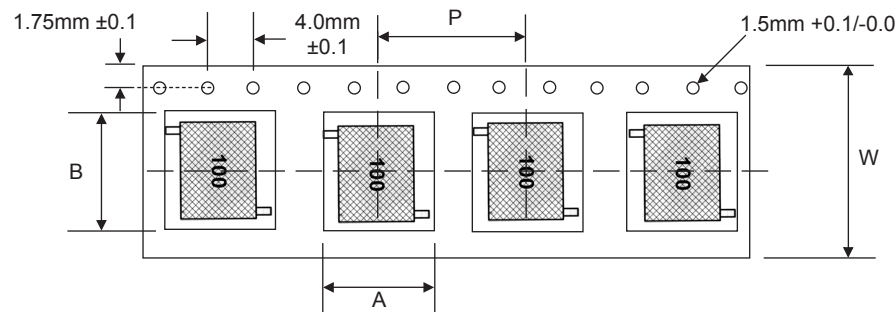
## RECOMMENDED LAND PATTERN DIMENSIONS

Series	H	I	J	K
NLA0403	3.30	1.27	1.65	2.79
NLA0504	5.16	1.48	2.85	2.62
NLA0703	3.30	1.27	4.70	2.79
NLA1006	4.70	2.04	5.95	2.42

### LAND PATTERN



Case Size	TAPING DIMENSIONS (mm)			
	A	B	P	W
NLA0403	4.3 ± 0.1	4.3 ± 0.1	8.0	12.0
NLA0504	7.3 ± 0.1	5.5 ± 0.1	8.0	16.0
NLA0703	4.8 ± 0.1	7.3 ± 0.1	12.0	16.0
NLA1006	8.0 ± 0.1	9.6 ± 0.1	12.0	24.0



Tape Width	REEL DIMENSIONS (mm)		
	A(mm)	B(mm)	C(mm)
12mm	23 ± 1.0	13 ± 1.0	178 ± 2.0
16mm			
24mm			

