NIC Components Corp.

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Issued: June 19th 2015

SUB: EOL Notice

Product Type: SMT Chip Inductors
NIC Series: NIS Series
Product Specification: www.niccomp.com/catalog/nis.pdf
Notification: End of Life

The following is notice of end of life, for the below EOL part numbers, as shown in Table 1 below

Last Order Date: December 19th 2015 for existing business from established customers
Last Ship Date: June 19th 2016 for existing business from established customers

Reason for Discontinuation: Reduced demand from market

Table #1

EOL Part Number	*Case Size*	*Inductance Value (nH)*	*Suggested Replacement Alternate Part Numbers*	
NIS04D1N0TRF	0402	1.0 ±0.3nH	NML04D1N0TRF	Compare
NIS04D1N2TRF	0402	1.2 ±0.3nH	NML04D1N2TRF	Compare
NIS04D1N5TRF	0402	1.5 ±0.3nH	NML04D1N5TRF	Compare
NIS04D1N8TRF	0402	1.8 ±0.3nH	NML04D1N8TRF	Compare
NIS04D2N0TRF	0402	2.0 ±0.3nH	NML04D2N0TRF	Compare
NIS04D2N2TRF	0402	2.2 ±0.3nH	NML04D2N2TRF	Compare
NIS04D2N4TRF	0402	2.4 ±0.3nH	NML04D2N7TRF	Compare
NIS04D2N7TRF	0402	2.7 ±0.3nH	NML04D2N7TRF	Compare
NIS04D3N0TRF	0402	3.0 ±0.3nH	NML04D3N0TRF	Compare
NIS04D3N3TRF	0402	3.3 ±0.3nH	NML04D3N3TRF	Compare
NIS04D3N6TRF	0402	3.6 ±0.3nH	NML04D3N6TRF	Compare
NIS04D3N9TRF	0402	3.9 ±0.3nH	NML04D3N9TRF	Compare
NIS04D4N3TRF	0402	4.3 ±0.3nH	NML04D4N3TRF	Compare
NIS04D4N7TRF	0402	4.7 ±0.3nH	NML04D4N7TRF	Compare
NIS04D5N1TRF	0402	5.1 ±0.3nH	NML04D5N1TRF	Compare
NIS04D5N6TRF	0402	5.6 ±0.3nH	NML04D5N6TRF	Compare
NIS04D6N2TRF	0402	6.2 ±0.3nH	NML04D6N2TRF	Compare
NIS04J6N8TRF	0402	6.8 ±5%	NML04J6N8TRF	Compare
NIS04J7N5TRF	0402	7.5 ±5%	NML04J7N5TRF	Compare
NIS04J8N2TRF	0402	8.2 ±5%	NML04J8N2TRF	Compare
NIS04J9N1TRF	0402	9.1 ±5%	NML04J9N1TRF	Compare
NIS04J10NTRF	0402	10 ±5%	NML04J10NTRF	Compare
NIS04J11NTRF	0402	11 ±5%	** Use QuickBUILDER for best alternate*	
NIS04J12NTRF	0402	12 ±5%	NML04J12NTRF	Compare
NIS04J13NTRF	0402	13 ±5%	** Use QuickBUILDER for best alternate*	
NIS04J15NTRF	0402	15 ±5%	NML04J15NTRF	Compare
NIS04J16NTRF	0402	16 ±5%	** Use QuickBUILDER for best alternate*	
NIS04J18NTRF	0402	18 ±5%	NML04J18NTRF	Compare
NIS04J20NTRF	0402	20 ±5%	** Use QuickBUILDER for best alternate*	
NIS04J22NTRF	0402	22 ±5%	NML04J22NTRF	Compare
NIS04J24NTRF	0402	24 ±5%	** Use QuickBUILDER for best alternate*	
NIS04J27NTRF	0402	27 ±5%	NML04J27NTRF	Compare
NIS04J30NTRF	0402	30 ±5%	** Use QuickBUILDER for best alternate*	
NIS04J33NTRF	0402	33 ±5%	NML04J33NTRF	Compare
NIS04J36NTRF	0402	36 ±5%	** Use QuickBUILDER for best alternate*	
NIS04J39NTRF	0402	39 ±5%	NML04J39NTRF	Compare
NIS04J43NTRF	0402	43 ±5%	** Use QuickBUILDER for best alternate*	
NIS04J47NTRF	0402	47 ±5%	NML04J47NTRF	Compare
NIS04J56NTRF	0402	56 ±5%	NML04J56NTRF	Compare
NIS04J68NTRF	0402	68 ±5%	NML04J68NTRF	Compare
NIS04J82NTRF	0402	82 ±5%	NML04J82NTRF	Compare
NIS04JR10TRF	0402	100 ±5%	NML04JR10TRF	Compare

EOL Part Number	Case Size	Inductance Value (nH)	Suggested Replacement Alternate Part Numbers	
NIS06D1N0TRF	0603	1.0 ±0.3nH	NML06D1N0TRF	Compare
NIS06D1N2TRF	0603	1.2 ±0.3nH	NML06D1N2TRF	Compare
NIS06D1N5TRF	0603	1.5 ±0.3nH	NML06D1N5TRF	Compare
NIS06D1N8TRF	0603	1.8 ±0.3nH	NML06D1N8TRF	Compare
NIS06D2N2TRF	0603	2.2 ±0.3nH	NML06D2N2TRF	Compare
NIS06D2N7TRF	0603	2.7 ±0.3nH	NML06D2N7TRF	Compare
NIS06D3N3TRF	0603	3.3 ±0.3nH	NML06D3N3TRF	Compare
NIS06J3N9TRF	0603	3.9 ±5%	NML06D3N9TRF	Compare
NIS06J4N7TRF	0603	4.7 ±5%	NML06D4N7TRF	Compare
NIS06J5N6TRF	0603	5.6 ±5%	NML06D5N6TRF	Compare
NIS06J6N8TRF	0603	6.8 ±5%	NML06J6N8TRF	Compare
NIS06J8N2TRF	0603	8.2 ±5%	NML06J8N2TRF	Compare
NIS06J10NTRF	0603	10 ±5%	NML06J10NTRF	Compare
NIS06J12NTRF	0603	12 ±5%	NML06J12NTRF	Compare
NIS06J15NTRF	0603	15 ±5%	NML06J15NTRF	Compare
NIS06J18NTRF	0603	18 ±5%	NML06J18NTRF	Compare
NIS06J22NTRF	0603	22 ±5%	NML06J22NTRF	Compare
NIS06J27NTRF	0603	27 ±5%	NML06J27NTRF	Compare
NIS06J33NTRF	0603	33 ±5%	NML06J33NTRF	Compare
NIS06J39NTRF	0603	39 ±5%	NML06J39NTRF	Compare
NIS06J47NTRF	0603	47 ±5%	NML06J47NTRF	Compare
NIS06J56NTRF	0603	56 ±5%	NML06J56NTRF	Compare
NIS06J68NTRF	0603	68 ±5%	NML06J68NTRF	Compare
NIS06J82NTRF	0603	82 ±5%	NML06J82NTRF	Compare
NIS06JR10TRF	0603	100 ±5%	NML06JR10TRF	Compare
NIS06JR12TRF	0603	120 ±5%	NML06JR12TRF	Compare
NIS06JR15TRF	0603	150 ±5%	NML06JR15TRF	Compare
NIS06JR18TRF	0603	180 ±5%	NML06JR18TRF	Compare
NIS06JR22TRF	0603	220 ±5%	NML06JR22TRF	Compare

Select & Compare Alternate Components
NIC QuickBUILDER
www.niccomp.com/qb-rfind

**Additional Alternate Replacement Series:*

0402 Case Size

- **NIN-HK** - *Open Frame Chip Wirewound Inductors*
- **NTI04** - *Thin Film Chip Inductors*
- **NMLQ** – *High Q Multilayer Ceramic Inductor*

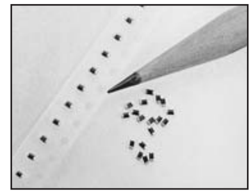
0603 Case Size

- **NIN-HJ** - *Open Frame Chip Wirewound Inductors*

For help with replacement or alternate products, please review your requirements with NIC technical support: tpmg@niccomp.com

→Follow NIC PCN alerts to get email notifications of EOL and PCN announcements at www.niccomp.com/pcn

FEATURES
- LASER CUT SPIRAL COIL OVER ALUMINA CORE
- SUPER MINIATURE EIA 0402 & 0603 SIZE IN RESIN ENCLOSED BODY
- HIGH Q AND SRF FOR HIGH FREQUENCY APPLICATIONS
- TIGHT TOLERANCES (D ± 0.3nH, G ± 2% or J ± 5%)
- BOTH FLOW AND REFLOW SOLDERING APPLICABLE
- EMBOSSED PLASTIC TAPE PACKAGE FOR AUTOMATIC PICK-PLACE



RoHS Compliant
includes all homogeneous materials
*See Part Number System for Details

SPECIFICATIONS

Inductance Range	1.0 ~ 220nH
Inductance Tolerance	D (±0.3nH), J (±5%)
Operating Temperature Range	-40°C ~ +85°C
Q-Factor, Self Resonant Frequency, DC Resistance, Rated DC Current and INductance Tolerance	See Individual Product Listings

ENVIRONMENTAL CHARACTERISTICS

Test	Specification	Test Method & Condition
Solderability	90% Min. Coverage	After 3 Sec. Dip in +230°C Solder Pot (Post Flux)
Humidity Resistance	(1) No Evidence of Damage (2) Inductance Shall Be Within ±5% of Initial Value (3) Q Factor Shall Be Within ±20% of Initial Value (±25% for 0201 Size)	After 500 Hrs. at +60°C & 90-95% RH (No Load)
Soldering Effect		After 10 Sec. at +260°C (5 Min., 120°C Pre-Heat)
Low Frequency Vibration		After 2 Hrs per Axis, 10~55Hz, 1.5mm Amplitude
Thermal Shock		After 100 Cycles (-40°C ~ +85°C) 30 Min. Each
Low Temperature Storage		After 500 Hrs. at -40°C
High Temperature Load Life	(1) No Evidence of Damage (2) Inductance Shall Be Within ±10% of Initial Value (3) Q Factor Shall Be Within ±20% of Initial Value	After 500 Hrs. at +85°C with Rated DC Current
Humidity Load Life		After 500 Hrs. at +60°C & 90-95% RH with Rated DC Current

PART NUMBER SYSTEM

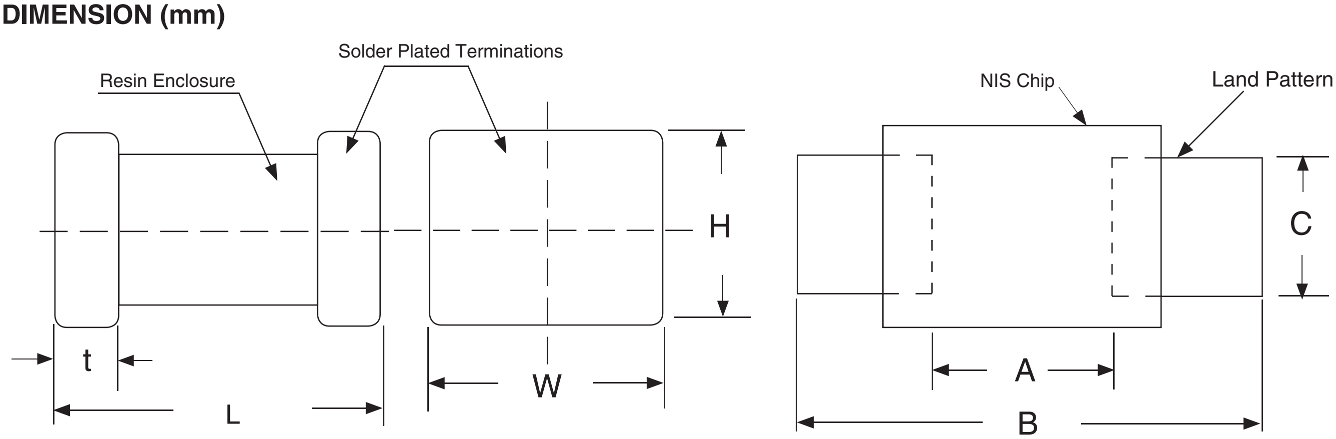
NIS04 J 22N TR F
- F: RoHS compliant
- TR: Packaging: TR = Tape & Reel
- 22N: Inductance Code (N=decimal point) (Ex. 2N2=2.2nH, 33N=33nH)
- J: Tolerance Code (D=±0.3nH, G=±2%, J=±5%)
- NIS04: Series (04=0402, 06=0603)

PART AND LAND PATTERN DIMENSIONS (mm)

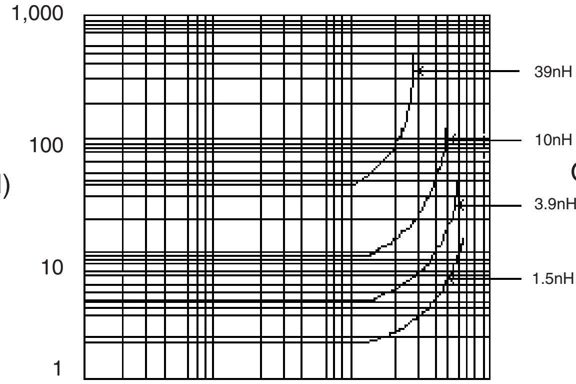
Series	L	W	H	t	A	B	C
NIS04	1.0±0.05	0.5±0.05	0.5±0.05	0.2±0.05	0.5~0.6	1.5~1.7	0.5~0.6
NIS06	1.6 0.05	0.8±0.15	0.8±0.15	0.3±0.2	0.8~1.0	2.0~2.6	0.7~0.9

Recommended land patterns for flow and reflow soldering

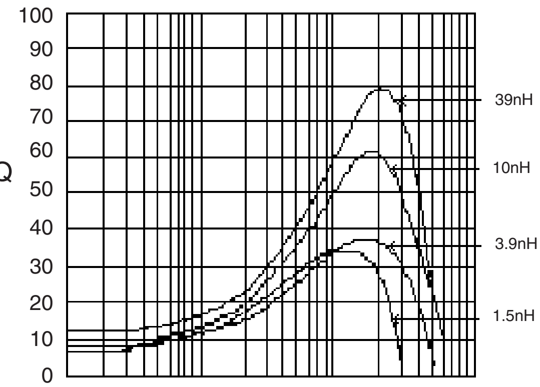
DIMENSION (mm)



L vs. Frequency Characteristics



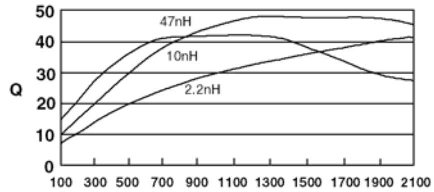
Q vs. Frequency Characteristics



SERIES **HIGH FREQUENCY TYPE**

NIC P/N	'L' Inductance (nH)	Tolerance (std)	'Q' Factor (min.)	L & Q Test Freq.	SRF MHz (min.)	DC Resistance (ohms) Max.	Rated DC Current (mA) Max.
NIS04D1N0TRF	1.0	±0.3nH(D)	8.0	100 MHz	6000	0.05	400
NIS04D1N2TRF	1.2	±0.3nH(D)	8.0	100 MHz	6000	0.06	400
NIS04D1N5TRF	1.5	±0.3nH(D)	8.0	100 MHz	6000	0.07	400
NIS04D1N8TRF	1.8	±0.3nH(D)	8.0	100 MHz	6000	0.08	400
NIS04D2N0TRF	2.0	±0.3nH(D)	8.0	100 MHz	6000	0.08	400
NIS04D2N2TRF	2.2	±0.3nH(D)	8.0	100 MHz	6000	0.09	400
NIS04D2N4TRF	2.4	±0.3nH(D)	8.0	100 MHz	6000	0.09	400
NIS04D2N7TRF	2.7	±0.3nH(D)	8.0	100 MHz	5500	0.10	400
NIS04D3N0TRF	3.0	±0.3nH(D)	8.0	100 MHz	5500	0.11	400
NIS04D3N3TRF	3.3	±0.3nH(D)	8.0	100 MHz	5500	0.12	400
NIS04D3N6TRF	3.6	±0.3nH(D)	8.0	100 MHz	5300	0.14	380
NIS04D3N9TRF	3.9	±0.3nH(D)	8.0	100 MHz	5200	0.15	360
NIS04D4N3TRF	4.3	±0.3nH(D)	8.0	100 MHz	5000	0.16	360
NIS04D4N7TRF	4.7	±0.3nH(D)	8.0	100 MHz	4800	0.17	360
NIS04D5N1TRF	5.1	±0.3nH(D)	8.0	100 MHz	4700	0.18	350
NIS04D5N6TRF	5.6	±0.3nH(D)	8.0	100 MHz	4600	0.19	340
NIS04D6N2TRF	6.2	±0.3nH(D)	8.0	100 MHz	4300	0.25	330
NIS04J6N8TRF	6.8	±5% (J)	8.0	100 MHz	4000	0.35	320
NIS04J7N5TRF	7.5	±5% (J)	8.0	100 MHz	3700	0.33	320
NIS04J8N2TRF	8.2	±5% (J)	8.0	100 MHz	3500	0.30	320
NIS04J9N1TRF	9.1	±5% (J)	8.0	100 MHz	3100	0.38	320
NIS04J10NTRF	10	±5% (J)	8.0	100 MHz	2800	0.41	320
NIS04J11NTRF	11	±5% (J)	8.0	100 MHz	2800	0.43	320
NIS04J12NTRF	12	±5% (J)	8.0	100 MHz	2800	0.45	320
NIS04J13NTRF	13	±5% (J)	8.0	100 MHz	2600	0.53	280
NIS04J15NTRF	15	±5% (J)	8.0	100 MHz	2500	0.60	240
NIS04J16NTRF	16	±5% (J)	8.0	100 MHz	2300	0.65	240
NIS04J18NTRF	18	±5% (J)	8.0	100 MHz	2200	0.70	240
NIS04J20NTRF	20	±5% (J)	8.0	100 MHz	2100	0.75	220
NIS04J22NTRF	22	±5% (J)	8.0	100 MHz	2000	0.80	200
NIS04J24NTRF	24	±5% (J)	8.0	100 MHz	1900	1.00	200
NIS04J27NTRF	27	±5% (J)	8.0	100 MHz	1800	1.20	200
NIS04J30NTRF	30	±5% (J)	8.0	100 MHz	1800	1.30	190
NIS04J33NTRF	33	±5% (J)	8.0	100 MHz	1800	1.40	170
NIS04J36NTRF	36	±5% (J)	8.0	100 MHz	1800	1.60	160
NIS04J39NTRF	39	±5% (J)	8.0	100 MHz	1800	1.70	150
NIS04J43NTRF	43	±5% (J)	8.0	100 MHz	1800	1.90	150
NIS04J47NTRF	47	±5% (J)	8.0	100 MHz	1800	2.10	140
NIS04J56NTRF	56	±5% (J)	8.0	100 MHz	1500	2.50	130
NIS04J68NTRF	68	±5% (J)	8.0	100 MHz	1500	4.00	120
NIS04J82NTRF	82	±5% (J)	8.0	100 MHz	1400	4.50	110
NIS04JR10TRF	100	±5% (J)	8.0	100 MHz	1200	5.50	90

Q vs. Frequency
NIS Series (0603 size)
High Frequency Type

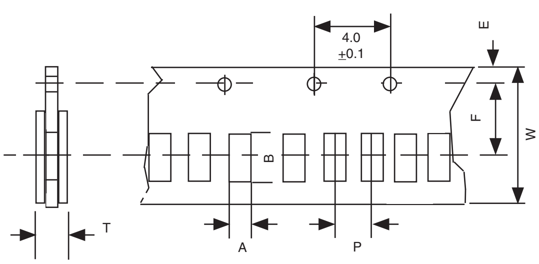


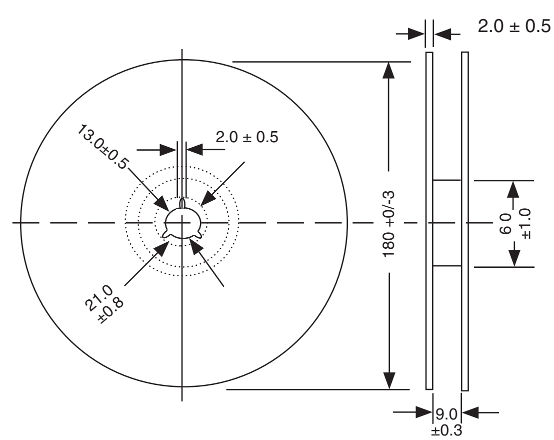
For Quality Factor (**Q**) and Inductance (**L**) over Frequency curves see **www.RFpassives.com**

SERIES HIGH FREQUENCY TYPE

NIC P/N	'L' Inductance (nH)	Tolerance (std)	'Q' Factor (min.)	L & Q Test Freq.	SRF MHz (min.)	DC Resistance (ohms) Max.	Rated DC Current (mA) Max.
NIS06D1N0TRF	1.0	±0.3nH(D)	8.0	100 MHz	6000	0.05	500
NIS06D1N2TRF	1.2	±0.3nH(D)	8.0	100 MHz	6000	0.06	500
NIS06D1N5TRF	1.5	±0.3nH(D)	8.0	100 MHz	6000	0.07	500
NIS06D1N8TRF	1.8	±0.3nH(D)	8.0	100 MHz	6000	0.08	500
NIS06D2N2TRF	2.2	±0.3nH(D)	8.0	100 MHz	6000	0.09	500
NIS06D2N7TRF	2.7	±0.3nH(D)	8.0	100 MHz	6000	0.10	500
NIS06D3N3TRF	3.3	±0.3nH(D)	8.0	100 MHz	5500	0.12	500
NIS06J3N9TRF	3.9	±5% (J)	8.0	100 MHz	5500	0.15	450
NIS06J4N7TRF	4.7	±5% (J)	8.0	100 MHz	4800	0.17	450
NIS06J5N6TRF	5.6	±5% (J)	8.0	100 MHz	4600	0.18	430
NIS06J6N8TRF	6.8	±5% (J)	8.0	100 MHz	3550	0.20	430
NIS06J8N2TRF	8.2	±5% (J)	8.0	100 MHz	3500	0.28	400
NIS06J10NTRF	10	±5% (J)	8.0	100 MHz	2800	0.32	400
NIS06J12NTRF	12	±5% (J)	8.0	100 MHz	2800	0.35	400
NIS06J15NTRF	15	±5% (J)	8.0	100 MHz	2500	0.41	350
NIS06J18NTRF	18	±5% (J)	8.0	100 MHz	2300	0.45	350
NIS06J22NTRF	22	±5% (J)	8.0	100 MHz	2000	0.50	300
NIS06J27NTRF	27	±5% (J)	8.0	100 MHz	2000	0.55	300
NIS06J33NTRF	33	±5% (J)	8.0	100 MHz	1800	0.60	300
NIS06J39NTRF	39	±5% (J)	8.0	100 MHz	1800	0.80	300
NIS06J47NTRF	47	±5% (J)	8.0	100 MHz	1800	0.95	250
NIS06J56NTRF	56	±5% (J)	8.0	100 MHz	1800	1.20	250
NIS06J68NTRF	68	±5% (J)	8.0	100 MHz	1500	1.30	250
NIS06J82NTRF	82	±5% (J)	8.0	100 MHz	1500	1.50	250
NIS06JR10TRF	100	±5% (J)	8.0	100 MHz	1300	1.80	200
NIS06JR12TRF	120	±5% (J)	8.0	100 MHz	1200	3.00	130
NIS06JR15TRF	150	±5% (J)	8.0	100 MHz	1100	4.50	100
NIS06JR18TRF	180	±5% (J)	8.0	100 MHz	1000	6.50	80
NIS06JR22TRF	220	±5% (J)	8.0	100 MHz	900	7.50	70

TAPE AND REEL PACKAGING





Series	A	B	E	F	P	W	T	Reel Quantity
NIS04	0.71 ± 0.1	1.21 ± 0.13	1.75 ± 0.2	3.5 ± 0.05	2.0 ± 0.05	8.0 ± 0.3	1.0 max.	10,000
NIS06	1.00 ± 0.2	1.80 ± 0.05	1.75 ± 0.2	3.5 ± 0.05	4.0 ± 0.10	8.0 ± 0.3	1.2 max.	3,000