

# NL/NLC Series

Wound Chip Inductors

## APPLICATIONS

Microtelevisions, liquid crystal televisions, video cameras, portable VCRs, car radios, car stereos, thin tape radios, television tuners, mobile telephones, radio and other electronic devices.

## OUTLINE

These revolutionary, highly reliable wound chip inductors for automatic mounting have been developed in response to the trend toward high density in electronic equipment.

With metal terminals and a body of heat resistant resin, these inductors offer many superior features.

## FEATURES

Very strong solderability by flow soldering, soldering iron or wave soldering.

Highly accurate dimensions; can be mounted automatically.

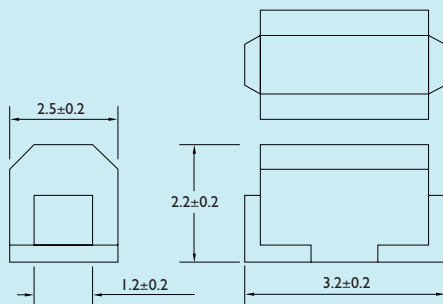
Terminals are highly resistant to pull forces.

Highly resistant to mechanical shocks and pressure.

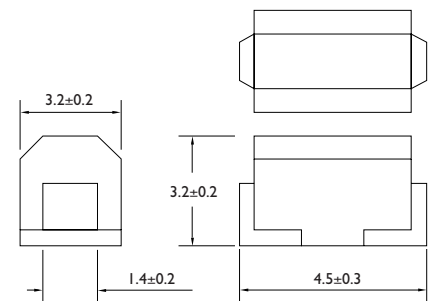
Highly reliable in environments of sudden temperature change and humidity. Super Q characteristics.

## SHAPES AND DIMENSIONS

NL322522



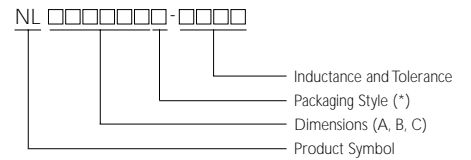
NL453232



Dimensions : mm



## PRODUCT IDENTIFICATION



\* B: Bulk ; T: Tape and Reel



## ELECTRICAL CHARACTERISTICS NL322522 SERIES

PART NO.	L ( $\mu$ H)	TOLERANCE ( $\pm$ %)	Q Min.	TEST FREQUENCY (MHz)	SRF Min. (MHz)	RDC Max. ( $\Omega$ )	IDC (mA)
NL322522T-R12M-S	0.12	20	30	25.20	500	0.22	450
NL322522T-R22M-S	0.22	20	30	25.20	350	0.32	450
NL322522T-R33M-S	0.33	20	30	25.20	300	0.40	450
NL322522T-R39M-S	0.39	20	30	25.20	250	0.45	450
NL322522T-R68M-S	0.68	20	30	25.20	160	0.60	450
NL322522T-1R0K-S	1.00	10	30	7.960	120	0.70	400
NL322522T-1R2K-S	1.20	10	30	7.960	100	0.75	390
NL322522T-1R5K-S	1.50	10	30	7.960	85	0.85	370
NL322522T-1R8K-S	1.80	10	30	7.960	80	0.90	350
NL322522T-2R2K-S	2.20	10	30	7.960	75	1.00	320
NL322522T-2R7K-S	2.70	10	30	7.960	70	1.10	290
NL322522T-3R3K-S	3.30	10	30	7.960	60	1.20	260
NL322522T-3R9K-S	3.90	10	30	7.960	55	1.30	250
NL322522T-4R7K-S	4.70	10	30	7.960	50	1.50	220
NL322522T-5R6K-S	5.60	10	30	7.960	45	1.60	200
NL322522T-6R8K-S	6.80	10	30	7.960	40	1.80	180
NL322522T-8R2K-S	8.20	10	30	7.960	35	2.00	170
NL322522T-100K-S	10	10	30	2.520	30	2.10	150
NL322522T-120K-S	12	10	30	2.520	20	2.50	140
NL322522T-150K-S	15	10	30	2.520	20	2.80	130
NL322522T-180K-S	18	10	30	2.520	20	3.30	120
NL322522T-220K-S	22	10	30	2.520	20	3.70	110
NL322522T-270K-S	27	10	30	2.520	20	5.00	80
NL322522T-330K-S	33	10	30	2.520	17	5.60	70
NL322522T-390K-S	39	10	30	2.520	16	6.40	65
NL322522T-470K-S	47	10	30	2.520	15	7.00	60
NL322522T-560K-S	56	10	30	2.520	13	8.00	55
NL322522T-680K-S	68	10	30	2.520	12	9.00	50
NL322522T-820K-S	82	10	30	2.520	11	10.0	45
NL322522T-101K-S	100	10	20	0.796	10	10.0	40
NL322522T-121K-S	120	10	20	0.796	10	11.0	70
NL322522T-151K-S	150	10	20	0.796	8	15.0	65
NL322522T-181K-S	180	10	20	0.796	7	17.0	60
NL322522T-221K-S	220	10	20	0.796	7	21.0	50

Test Instruments : HP4286A RF Impedance Analyzer for L, Q, SRF  
HP4285A LF Impedance Analyzer for L, Q

Digital Multimeter SC-7401 for RDC  
Chen-Hwa 1061+Chen-Waha 301A for IDC

## ELECTRICAL CHARACTERISTICS NL453232 SERIES

PART NO.	L ( $\mu\text{H}$ )	TOLERANCE ( $\pm\%$ )	Q Min.	TEST FREQUENCY (MHz)	SRF Min. (MHz)	RDC Max. ( $\Omega$ )	IDC (mA)
NL453232T-R10M-S	0.10	20	28	25.20	700	0.44	450
NL453232T-R12M-S	0.12	20	30	25.20	500	0.22	450
NL453232T-R15M-S	0.15	20	30	25.20	450	0.25	450
NL453232T-R18M-S	0.18	20	30	25.20	400	0.28	450
NL453232T-R22M-S	0.22	20	30	25.20	350	0.32	450
NL453232T-R27M-S	0.27	20	30	25.20	320	0.36	450
NL453232T-R33M-S	0.33	20	30	25.20	300	0.40	450
NL453232T-R39M-S	0.39	20	30	25.20	350	0.45	450
NL453232T-R47M-S	0.47	20	30	25.20	220	0.50	450
NL453232T-R56M-S	0.56	20	30	25.20	180	0.55	450
NL453232T-R68M-S	0.68	20	30	25.20	160	0.60	450
NL453232T-R82M-S	0.82	20	30	25.20	140	0.67	450
NL453232T-1R0K-S	1.00	10	50	7.960	100	0.50	450
NL453232T-1R2K-S	1.20	10	50	7.960	80	0.55	430
NL453232T-1R5K-S	1.50	10	50	7.960	70	0.60	410
NL453232T-1R8K-S	1.80	10	50	7.960	60	0.65	390
NL453232T-2R2K-S	2.20	10	50	7.960	55	0.70	380
NL453232T-2R7K-S	2.70	10	50	7.960	50	0.75	370
NL453232T-3R3K-S	3.30	10	50	7.960	45	0.80	355
NL453232T-3R9K-S	3.90	10	50	7.960	40	0.90	330
NL453232T-4R7K-S	4.70	10	50	7.960	35	1.00	315
NL453232T-5R6K-S	5.60	10	50	7.960	33	1.10	300
NL453232T-6R8K-S	6.80	10	50	7.960	27	1.20	285
NL453232T-8R2K-S	8.20	10	50	7.960	25	1.40	270
NL453232T-100K-S	10	10	50	2.520	20	1.60	250
NL453232T-120K-S	12	10	50	2.520	18	2.00	225
NL453232T-150K-S	15	10	50	2.520	17	2.50	200
NL453232T-180K-S	18	10	50	2.520	15	2.80	190
NL453232T-220K-S	22	10	50	2.520	13	3.20	180
NL453232T-270K-S	27	10	50	2.520	12	3.60	170
NL453232T-330K-S	33	10	50	2.520	11	4.00	160
NL453232T-390K-S	39	10	50	2.520	10	4.50	150
NL453232T-470K-S	47	10	50	2.520	10	5.00	140
NL453232T-560K-S	56	10	50	2.520	9	5.50	135
NL453232T-680K-S	68	10	50	2.520	9	6.00	130
NL453232T-820K-S	82	10	50	2.520	8	7.00	120
NL453232T-101K-S	100	10	40	0.796	8	8.00	110
NL453232T-121K-S	120	10	40	0.796	6	8.00	110
NL453232T-151K-S	150	10	40	0.796	5	9.00	105
NL453232T-181K-S	180	10	40	0.796	5	9.50	102
NL453232T-221K-S	220	10	40	0.796	4	12.00	100
NL453232T-271K-S	270	10	30	0.796	4	18.00	92
NL453232T-331K-S	330	10	30	0.796	3.5	20.00	85
NL453232T-391K-S	390	10	30	0.796	3	23.00	80
NL453232T-471K-S	470	10	30	0.796	3	26.00	62
NL453232T-561K-S	560	10	30	0.796	3	30.00	50
NL453232T-681K-S	680	10	30	0.796	3	40.00	50
NL453232T-821K-S	820	10	30	0.796	2.5	45.00	30
NL453232T-102K-S	1000	10	30	0.796	2.5	50.00	30



## NL565050 TYPE

Shapes and Dimensions / Recommended PC Board Patterns



## ELECTRICAL CHARACTERISTICS

Dimensions : mm

PART NO.	L (mH)	TOLERANCE (±%)	Q Min.	TEST FREQUENCY (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	IDC (mA)
NL565050T-122J-S	1.2	5, 10	30	0.252	1.5	17	75
NL565050T-152J-S	1.5	5, 10	30	0.252	1.4	20	70
NL565050T-182J-S	1.8	5, 10	30	0.252	1.3	30	60
NL565050T-222J-S	2.2	5, 10	30	0.252	1.2	35	55
NL565050T-272J-S	2.7	5, 10	30	0.252	1.1	55	45
NL565050T-332J-S	3.3	5, 10	30	0.252	1	60	40
NL565050T-392J-S	3.9	5, 10	30	0.252	1	70	38
NL565050T-472J-S	4.7	5, 10	30	0.252	0.9	78	36
NL565050T-562J-S	5.6	5, 10	30	0.252	0.8	85	33
NL565050T-682J-S	6.8	5, 10	30	0.252	0.7	110	30
NL565050T-822J-S	8.2	5, 10	30	0.252	0.6	125	28
NL565050T-103J-S	10	5, 10	20	0.0796	0.5	150	25

Test Instruments : HP4286A RF Impedance Analyzer for L, Q, SRF

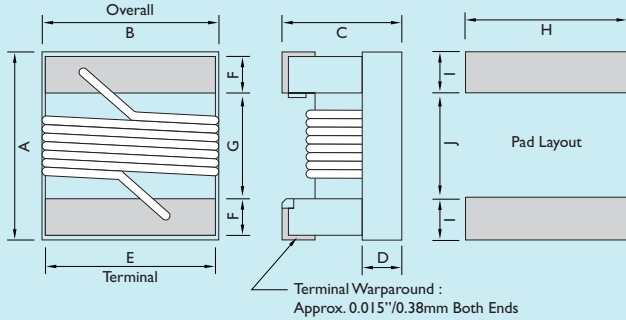
Digital Multimeter SC-7401 for RDC

HP4285A LF Impedance Analyzer for L, Q

Chen-Hwa 1061+Chen-Wha 301A for IDC

## NL201614 SERIES

Ferrite body and wire wound construction provide highest current.



UNIT	A	B	C	D	E	F	G	H	I	J
	Max.	Max.	Max.	Ref.						
in	0.09	0.068	0.06	0.02	0.05	0.02	0.04	0.07	0.04	0.03
mm	2.29	1.73	1.52	0.51	1.27	0.51	1.02	1.78	1.02	0.76

## ELECTRICAL CHARACTERISTICS

PART NO.	L ( $\mu$ H)	TOLERANCE ( $\pm$ %)	Q Min.	TEST FREQUENCY (MHz)	SRF (MHz) Min.	RDC ( $\Omega$ ) Max.	IDC (mA)
NL201614T-1R0J-S	1.0	5	15	7.96	80	1.2	400
NL201614T-1R5J-S	1.5	5	15	7.96	75	1.45	350
NL201614T-2R2J-S	2.2	5	15	7.96	70	1.8	300
NL201614T-3R3J-S	3.3	5	15	7.96	68	2.3	250
NL201614T-4R7J-S	4.7	5	15	7.96	55	2.8	200
NL201614T-6R8J-S	6.8	5	15	7.96	40	3.4	180
NL201614T-100J-S	10	5	10	2.52	38	4.7	150
NL201614T-150J-S	15	5	10	2.52	30	6.5	140
NL201614T-220J-S	22	5	10	2.52	25	8.0	120
NL201614T-330J-S	33	5	10	2.52	20	10.7	100

When ordering, please specify tolerance and packaging code. Ex : NL201614T-100J

Tolerance : J = 5%

Packaging : Clear Tape and Reel (Standard)

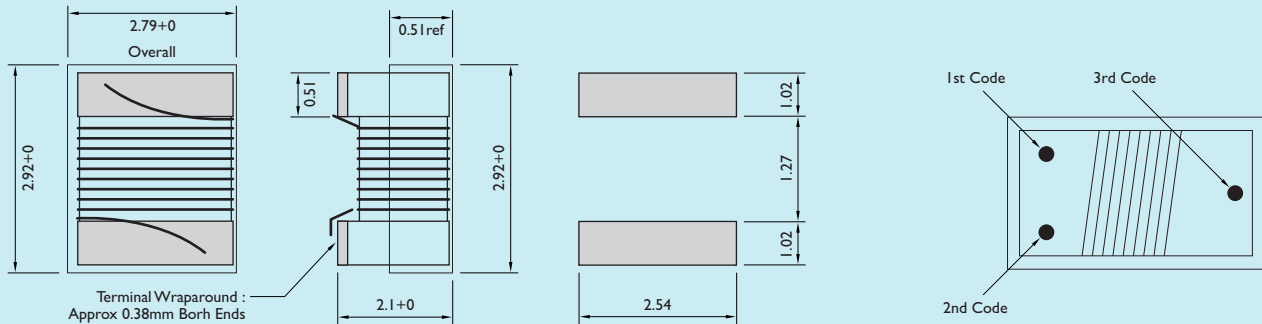
L, Q, RDC : HP4286A

SRF : HP8753D / HP4286A

Operating Temperature Range : -25°C to +85°C



## SHAPES AND DIMENSIONS NL252018 SERIES



## ELECTRICAL CHARACTERISTICS

PART NO.	L ( $\mu$ H)	TOLERANCE ( $\pm$ %)	Q ( $\mu$ H)	TEST FREQUENCY (MHz)	SRF (MHz) Min.	RDC ( $\Omega$ ) Max.	IDC (mA)	COLOR CODING		
								1 <sup>ST</sup>	2 <sup>ND</sup>	3 <sup>RD</sup>
NL252018T-5N0□-S	0.005	10	10	100	3000	0.25	2000	Black	Green	Black
NL252018T-10N□-S	0.010	10	10	100	2500	0.25	1800	Brown	Black	Black
NL252018T-12N□-S	0.012	10	15	100	2400	0.26	1700	Brown	Red	Black
NL252018T-15N□-S	0.015	10	15	100	2300	0.28	1600	Brown	Green	Black
NL252018T-18N□-S	0.018	10	15	100	2200	0.30	1550	Brown	Gray	Black
NL252018T-22N□-S	0.022	5, 10	20	100	2100	0.35	1500	Red	Red	Black
NL252018T-27N□-S	0.027	5, 10	20	100	2000	0.40	1450	Red	Violet	Black
NL252018T-33N□-S	0.033	5, 10	30	100	1600	0.42	1400	Orange	Orange	Black
NL252018T-39N□-S	0.039	5, 10	35	100	1500	0.45	1350	Orange	White	Black
NL252018T-47N□-S	0.047	5, 10	35	100	1400	0.50	1300	Yellow	Violet	Black
NL252018T-56N□-S	0.056	5, 10	35	100	1300	0.60	1250	Green	Blue	Black
NL252018T-68N□-S	0.068	5, 10	35	100	1200	0.65	1240	Blue	Gray	Black
NL252018T-82N□-S	0.082	5, 10	35	100	1100	0.75	1230	Gray	Red	Black
NL252018T-R10□-S	0.10	5, 10	35	100	800	0.80	1220	Brown	Black	Brown
NL252018T-R12□-S	0.12	5, 10	30	25.2	700	0.30	900	Brown	Red	Brown
NL252018T-R15□-S	0.15	5, 10	30	25.2	550	0.35	900	Brown	Green	Brown
NL252018T-R18□-S	0.18	5, 10	30	25.2	500	0.40	850	Brown	Gray	Brown
NL252018T-R22□-S	0.22	5, 10	30	25.2	450	0.50	840	Red	Red	Brown
NL252018T-R27□-S	0.27	5, 10	30	25.2	425	0.55	830	Red	Violet	Brown
NL252018T-R33□-S	0.33	5, 10	30	25.2	400	0.60	820	Orange	Orange	Brown
NL252018T-R39□-S	0.39	5, 10	30	25.2	375	0.65	810	Orange	White	Brown
NL252018T-R47□-S	0.47	5, 10	30	25.2	350	0.68	800	Yellow	Violet	Brown

## ELECTRICAL CHARACTERISTICS

PART NO.	L ( $\mu$ H)	TOLERANCE ( $\pm$ %)	Q ( $\mu$ H)	TEST FREQUENCY (MHz)	SRF (MHz) Min.	RDC ( $\Omega$ ) Max.	IDC (mA) Max.	COLOR CODING		
								1 <sup>ST</sup>	2 <sup>ND</sup>	3 <sup>RD</sup>
NL252018T-R56□-S	0.560	5, 10	30	25.2	325	0.75	800	Green	Blue	Brown
NL252018T-R68□-S	0.680	5, 10	30	25.2	300	0.85	800	Blue	Gray	Brown
NL252018T-R82□-S	0.820	5, 10	30	25.2	260	1.0	800	Gray	Red	Brown
NL252018T-1R0□-S	1.000	5, 10	25	7.96	245	1.1	800	Brown	Black	Red
NL252018T-1R2□-S	1.200	5, 10	25	7.96	230	1.2	790	Brown	Red	Red
NL252018T-1R5□-S	1.500	5, 10	25	7.96	182	1.3	750	Brown	Green	Red
NL252018T-1R8□-S	1.800	5, 10	25	7.96	135	1.45	750	Brown	Gray	Red
NL252018T-2R2□-S	2.200	5, 10	25	7.96	105	1.55	750	Red	Red	Red
NL252018T-2R7□-S	2.700	5, 10	25	7.96	70	1.7	740	Red	Violet	Red
NL252018T-3R3□-S	3.300	5, 10	25	7.96	55	1.9	730	Orange	Orange	Red
NL252018T-3R9□-S	3.900	5, 10	25	7.96	48	2.1	700	Orange	White	Red
NL252018T-4R7□-S	4.7	5, 10	25	7.96	43	2.3	650	Yellow	Violet	Red
NL252018T-5R6□-S	5.6	5, 10	20	7.96	42	2.5	640	Green	Blue	Red
NL252018T-6R8□-S	6.8	5, 10	20	7.96	39	2.7	630	Blue	Gray	Red
NL252018T-8R2□-S	8.2	5, 10	20	7.96	36	3.05	600	Gray	Red	Red
NL252018T-100□-S	10	5, 10	15	2.52	33	3.5	680	Brown	Black	Orange
NL252018T-120□-S	12	5, 10	15	2.52	30	3.8	650	Brown	Red	Orange
NL252018T-150□-S	15	5, 10	15	2.52	26	4.4	500	Brown	Green	Orange
NL252018T-180□-S	18	5, 10	15	2.52	24	4.8	450	Brown	Gray	Orange
NL252018T-220□-S	22	5, 10	15	2.52	22	5.5	450	Red	Red	Orange
NL252018T-270□-S	27	5, 10	15	2.52	21	6.3	430	Red	Violet	Orange
NL252018T-330□-S	33	5, 10	15	2.52	20	7.1	380	Orange	Orange	Orange
NL252018T-390□-S	39	5, 10	10	2.52	18	9.5	330	Orange	White	Orange
NL252018T-470□-S	47	5, 10	10	2.52	17	11.1	300	Yellow	Violet	Orange
NL252018T-560□-S	56	5, 10	10	2.52	16	12.1	270	Green	Blue	Orange
NL252018T-680□-S	68	5, 10	10	2.52	15	16.6	250	Blue	Gray	Orange
NL252018T-820□-S	82	5, 10	10	2.52	13	19	200	Gray	Red	Orange
NL252018T-101□-S	100	5, 10	8	0.796	12	21	120	Brown	Black	Orange

\* UV Color : Blue / Core Color : Black

When ordering, please specify tolerance and packaging code. Ex : NL201614T-100J

Tolerance :  J = 5%       K = 10%

Packaging : Clear Tape and Reel (Standard)

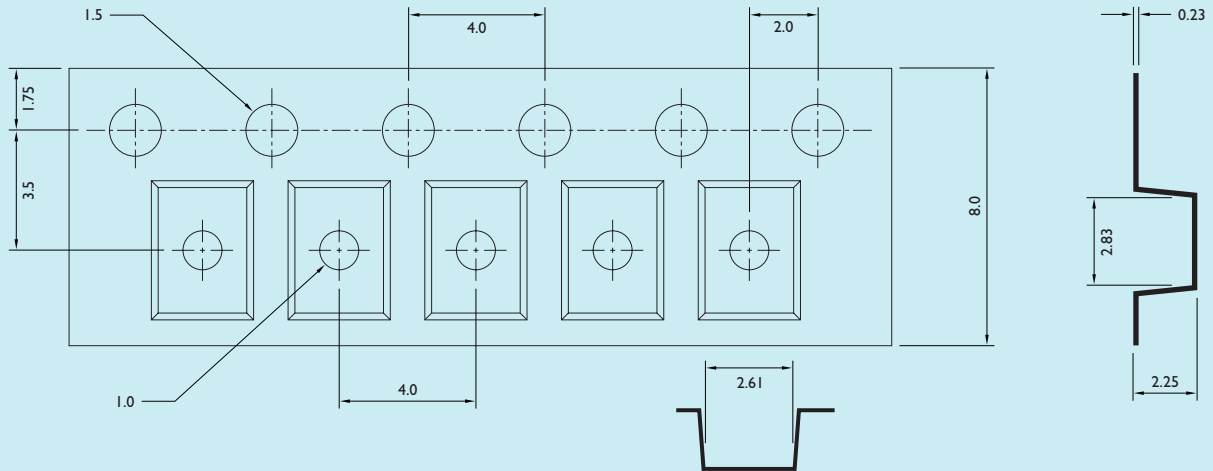
L, Q, RDC : HP4286A

SRF : HP8753D / HP4286A

Operating Temperature Range : -25°C to +85°C

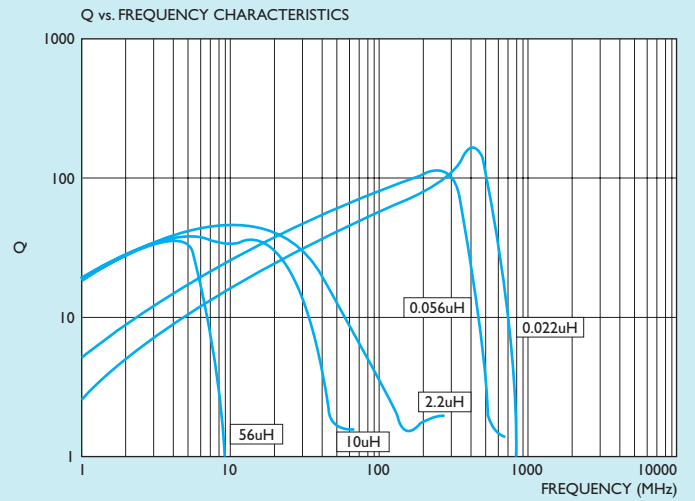
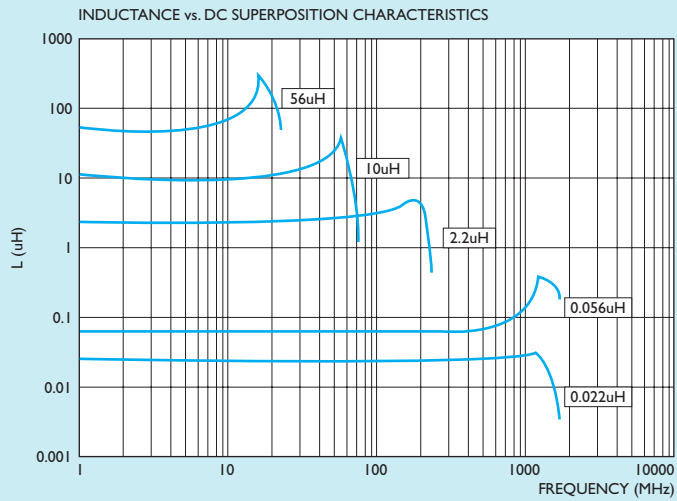


## TAPE DIMENSIONS



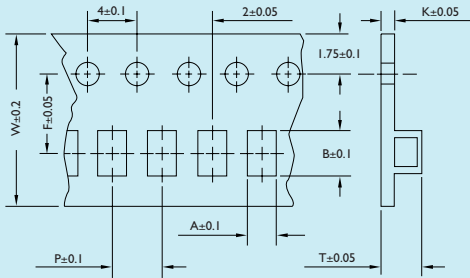
## TAPE DIMENSIONS

Test Instruments : HP4291A Impedance / Material Analyzer



## TAPE DIMENSIONS

Dimensions : mm



TYPE	A	B	T	W	P	F	K
NL252018	2.61	2.83	2.25	8	4	3.5	0.25
NL322522	2.94	3.64	2.52	8	4	3.5	0.2
NL453232	3.64	5.14	3.6	12	8	5.5	0.3
NL565050	4.9	5.65	5.3	16.15	12.2	5.5	0.5

## REEL DIMENSIONS

Dimensions : mm

Figure 1

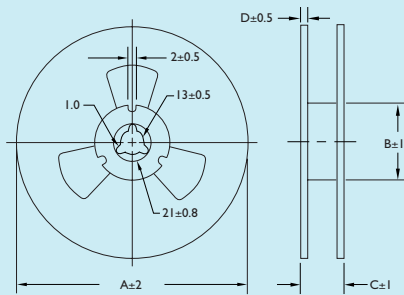
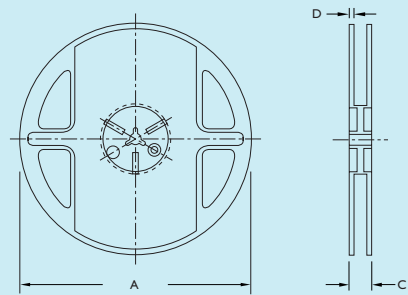


Figure 2

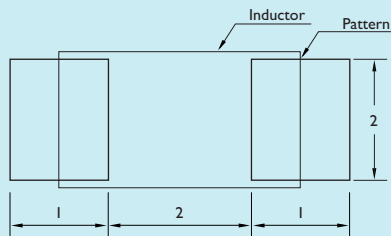


TYPE	FIGURE	A	B	C	D
NL252018	2	178	60	12	1.5
NL322522	1	178	60	10	1.5
NL453232	1	250	80	14	1.5
NL565050	2	330	80	20	2

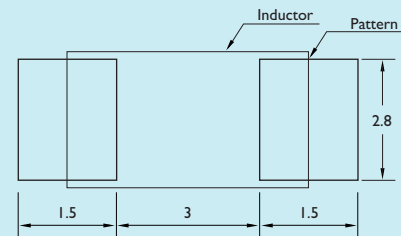
## RECOMMENDED PATTERN

Dimensions : mm

NL32



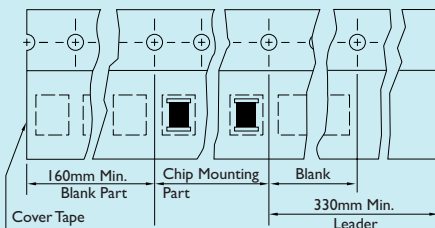
NL45



## TAPE MATERIAL

Carrier Tape : Polystyrene

Cover Type : Polyethyene

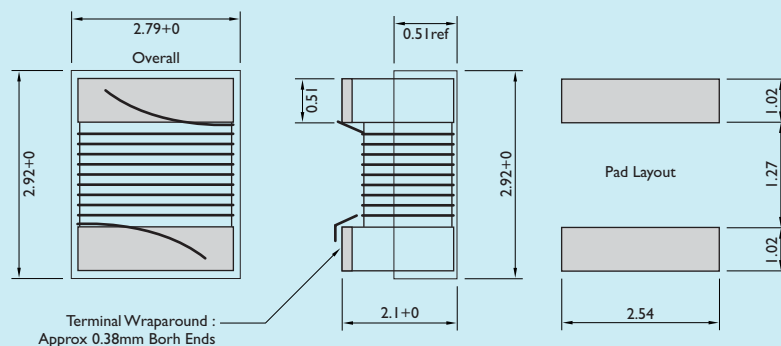


## PACKAGING QUANTITY

TYPE	BULK	CHIP/REEL
NL252018	✓	2000
NL322522	✓	2000
NL453232	✓	500
NL565050	✓	400



## SHAPES AND DIMENSIONS NLC252018 SERIES



## ELECTRICAL CHARACTERISTICS

PART NO.	L ( $\mu$ H)	TOLERANCE ( $\pm$ %)	Q Min.	TEST FREQUENCY L, Q (MHz)	SRF (MHz) Min.	RDC ( $\Omega$ ) Max.	IDC (mA) Max.
NLC252018T-1R0□-S	1.0	20	20	7.96	200	0.34	475
NLC252018T-1R5□-S	1.5	20	20	7.96	165	0.42	435
NLC252018T-2R2□-S	2.2	20	20	7.96	95	0.50	390
NLC252018T-3R3□-S	3.3	20	20	7.96	55	0.65	340
NLC252018T-4R7□-S	4.7	20	20	7.96	43	0.80	285
NLC252018T-6R8□-S	6.8	20	20	7.96	39	1.00	275
NLC252018T-100□-S	10	10	20	2.52	32	1.69	210
NLC252018T-150□-S	15	10	22	2.52	21	2.20	175
NLC252018T-220□-S	22	10	18	2.52	18	2.80	160
NLC252018T-330□-S	33	10	18	2.52	16	4.20	120

When ordering, please specify tolerance and packaging code. Ex : NLC252018T-6R8J-S

Tolerance : J = 5%

K = 10%

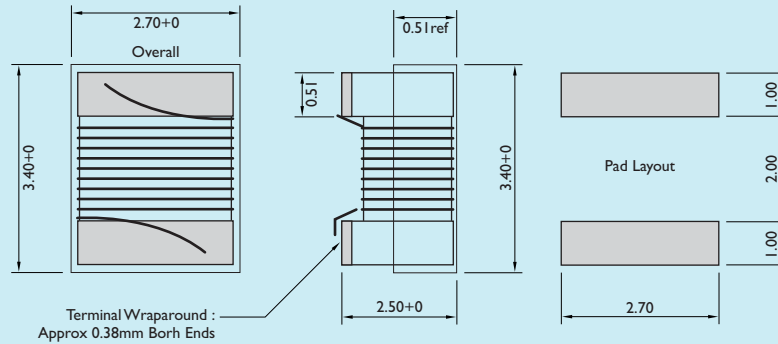
Packaging : Clear Tape and Reel (Standard)

L, Q, RDC : HP4286A

SRF : HP8753D / HP4286A

Operating Temperature Range : -25°C to +85°C

## SHAPES AND DIMENSIONS NLC322522 SERIES



## ELECTRICAL CHARACTERISTICS

PART NO.	L ( $\mu$ H)	TOLERANCE ( $\pm$ %)	Q Min.	TEST FREQUENCY L, Q (MHz)	SRF Min. (MHz)	RDC $\pm$ 30% ( $\Omega$ )	IDC Min. (mA)
NLC322522T-1R0□-S	1.0	5, 10	10	7.96	100	0.08	1500
NLC322522T-1R5□-S	1.5	5, 10	10	7.96	80	0.11	1125
NLC322522T-2R2□-S	2.2	5, 10	10	7.96	68	0.13	970
NLC322522T-3R3□-S	3.3	5, 10	10	7.96	54	0.16	837
NLC322522T-4R7□-S	4.7	5, 10	15	7.96	46	0.20	675
NLC322522T-6R8□-S	6.8	5, 10	15	7.96	38	0.27	600
NLC322522T-100□-S	10	5, 10	15	2.52	30	0.36	520
NLC322522T-150□-S	15	5, 10	15	2.52	26	0.56	480
NLC322522T-220□-S	22	5, 10	15	2.52	21	0.77	310
NLC322522T-330□-S	33	5, 10	15	2.52	17	1.10	270
NLC322522T-470□-S	47	5, 10	15	2.52	14	1.64	210
NLC322522T-680□-S	68	5, 10	15	2.52	12	2.80	189
NLC322522T-101□-S	100	5, 10	15	0.796	10	3.70	145
NLC322522T-151□-S	150	5, 10	15	0.796	8	6.10	120
NLC322522T-221□-S	220	5, 10	15	0.796	7	8.40	100
NLC322522T-331□-S	330	5, 10	15	0.796	6	12.3	80
NLC322522T-471□-S	470	5, 10	15	0.796	4	22.0	75
NLC322522T-681□-S	680	5, 10	15	0.796	3	28.0	65

When ordering, please specify tolerance and packaging code. Ex : NLC322522T-101J-S

Tolerance : J = 5%

K = 10%

Packaging : Clear Tape and Reel (Standard)

L, Q, RDC : HP4286A

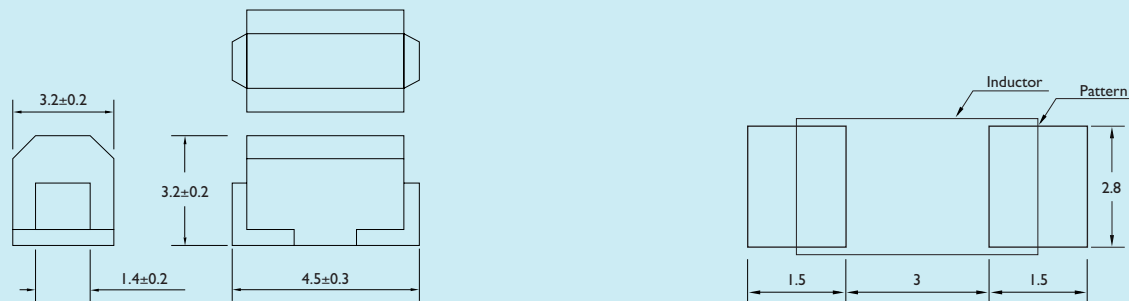
SRF : HP8753D / HP4286A

Operating Temperature Range : -25°C to +85°C



## NLC453232 TYPE

Shapes and Dimensions / Recommended PC Board Patterns



## ELECTRICAL CHARACTERISTICS

Dimensions : mm

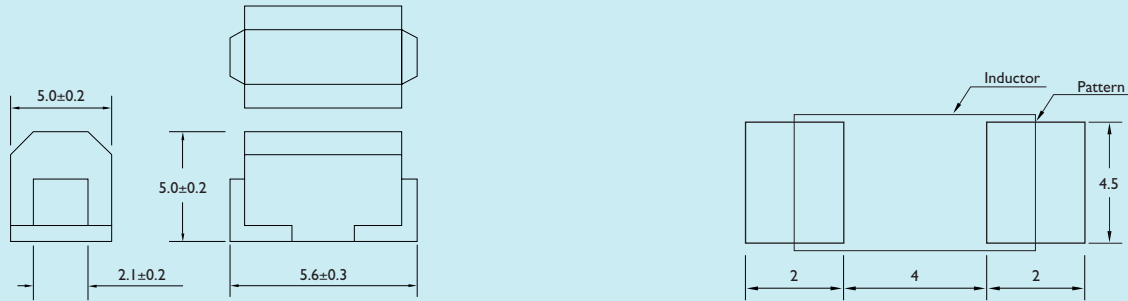
PART NO.	L ( $\mu$ H)	TOLERANCE ( $\pm$ %)	Q Min.	TEST FREQUENCY (MHz)	SRF Min. (MHz)	RDC Max. ( $\Omega$ )	IDC (mA)
NLC453232T-1R0K-S	1.0	10	10	7.96	200	0.11	1050
NLC453232T-1R2K-S	1.2	10	10	7.96	160	0.12	1000
NLC453232T-1R5K-S	1.5	10	10	7.96	130	0.15	950
NLC453232T-1R8K-S	1.8	10	10	7.96	100	0.16	900
NLC453232T-2R2K-S	2.2	10	10	7.96	80	0.18	850
NLC453232T-2R7K-S	2.7	10	10	7.96	60	0.20	800
NLC453232T-3R3K-S	3.3	10	10	7.96	45	0.22	750
NLC453232T-3R9K-S	3.9	10	10	7.96	40	0.24	700
NLC453232T-4R7K-S	4.7	10	10	7.96	35	0.27	650
NLC453232T-5R6K-S	5.6	10	10	7.96	30	0.30	650
NLC453232T-6R8K-S	6.8	10	10	7.96	28	0.35	600
NLC453232T-8R2K-S	8.2	10	10	7.96	25	0.40	600
NLC453232T-100K-S	10	10	10	2.52	22	0.50	550
NLC453232T-120K-S	12	10	10	2.52	21	0.60	500
NLC453232T-150K-S	15	10	10	2.52	20	0.70	450
NLC453232T-180K-S	18	10	10	2.52	19	0.80	400
NLC453232T-220K-S	22	10	10	2.52	18	0.90	370
NLC453232T-270K-S	27	10	10	2.52	16	1.20	330
NLC453232T-330K-S	33	10	10	2.52	14	1.40	300
NLC453232T-390K-S	39	10	10	2.52	12	1.60	280
NLC453232T-470K-S	47	10	10	2.52	11.5	1.90	260
NLC453232T-560K-S	56	10	10	2.52	11	2.20	240
NLC453232T-680K-S	68	10	10	2.52	10	2.60	220
NLC453232T-820K-S	82	10	10	2.52	9	3.50	200
NLC453232T-101K-S	100	10	20	0.796	8	4.00	180
NLC453232T-121K-S	120	10	20	0.796	7.5	4.50	160
NLC453232T-151K-S	150	10	20	0.796	7	6.50	140
NLC453232T-181K-S	180	10	20	0.796	6.5	7.50	120
NLC453232T-221K-S	220	10	20	0.796	5.5	9.00	120
NLC453232T-271K-S	270	10	20	0.796	5	11.0	100
NLC453232T-331K-S	330	10	20	0.252	4	13.0	90

Test Instruments : HP4286A RF Impedance Analyzer for L, Q, SRF  
HP4285A LF Impedance Analyzer for L, Q

Digital Multimeter SC-7401 for RDC  
Chen-Hwa 1061+Chen-Wha 301A for IDC

## NLC565050 TYPE

Shapes and Dimensions / Recommended PC Board Patterns



## ELECTRICAL CHARACTERISTICS

Dimensions : mm

PART NO.	L ( $\mu$ H)	TOLERANCE ( $\pm$ %)	Q Min.	TEST FREQUENCY (MHz)	SRF Min. (MHz)	RDC Max. ( $\Omega$ )	IDC (mA)
NLC565050T-1R0K-S	1.0	10	10	7.96	95	0.03	1800
NLC565050T-1R2K-S	1.2	10	10	7.96	70	0.035	1700
NLC565050T-1R5K-S	1.5	10	10	7.96	55	0.04	1600
NLC565050T-1R8K-S	1.8	10	10	7.96	47	0.05	1400
NLC565050T-2R2K-S	2.2	10	10	7.96	42	0.06	1300
NLC565050T-2R7K-S	2.7	10	10	7.96	37	0.07	1200
NLC565050T-3R3K-S	3.3	10	10	7.96	34	0.08	1120
NLC565050T-3R9K-S	3.9	10	10	7.96	32	0.09	1050
NLC565050T-4R7K-S	4.7	10	10	7.96	29	0.11	950
NLC565050T-5R6K-S	5.6	10	10	7.96	26	0.13	880
NLC565050T-6R8K-S	6.8	10	10	7.96	24	0.15	810
NLC565050T-8R2K-S	8.2	10	10	7.96	22	0.18	750
NLC565050T-100K-S	10	10	10	2.52	19	0.21	690
NLC565050T-120K-S	12	10	10	2.52	17	0.25	630
NLC565050T-150K-S	15	10	10	2.52	16	0.30	580
NLC565050T-180K-S	18	10	10	2.52	14	0.36	530
NLC565050T-220K-S	22	10	10	2.52	13	0.43	480
NLC565050T-270K-S	27	10	10	2.52	11.5	0.52	440
NLC565050T-330K-S	33	10	10	2.52	10.5	0.62	400
NLC565050T-390K-S	39	10	10	2.52	9.5	0.72	370
NLC565050T-470K-S	47	10	10	2.52	8.5	0.85	340
NLC565050T-560K-S	56	10	10	2.52	7.8	1.00	310
NLC565050T-680K-S	68	10	10	2.52	7	1.2	290
NLC565050T-820K-S	82	10	10	2.52	6.4	1.4	270
NLC565050T-101K-S	100	10	20	0.796	6	1.6	250
NLC565050T-121K-S	120	10	20	0.796	5.4	1.9	230
NLC565050T-151K-S	150	10	20	0.796	4.8	2.2	210
NLC565050T-181K-S	180	10	20	0.796	4.4	2.8	190
NLC565050T-221K-S	220	10	20	0.796	3.9	3.4	170
NLC565050T-271K-S	270	10	20	0.796	3.6	4.2	155
NLC565050T-331K-S	330	10	20	0.796	3.2	4.9	140
NLC565050T-391K-S	390	10	20	0.796	2.9	5.8	130
NLC565050T-471K-S	470	10	20	0.796	2.6	7	120
NLC565050T-561K-S	560	10	20	0.796	2.4	8.5	110
NLC565050T-681K-S	680	10	20	0.796	2.2	10	100
NLC565050T-821K-S	820	10	20	0.796	2	13	90
NLC565050T-102K-S	1000	10	20	0.252	1.8	15	85

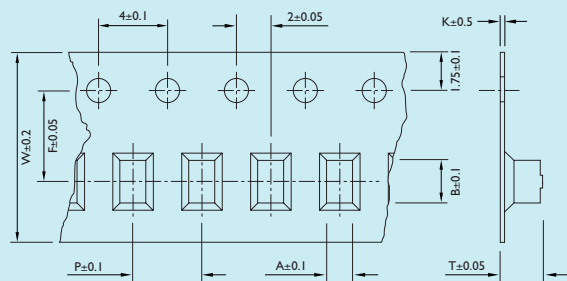
Test Instruments : HP4286A RF Impedance Analyzer for L, Q, SRF  
HP4285A LF Impedance Analyzer for L, Q

Digital Multimeter SC-7401 for RDC  
Chen-Hwa 1061+Chen-Wha 301A for IDC



## TAPE DIMENSIONS

Dimensions : mm



TYPE	A	B	T	W	P	F	K
NLC252018	2.61	2.83	2.25	8	4	3.5	0.25
NLC322522	2.61	2.83	2.25	8	4	3.5	0.2
NLC453232	3.64	5.14	3.6	12	8	5.5	0.3
NLC565050	4.9	5.65	5.3	16.15	12.2	5.5	0.5

## REEL DIMENSIONS

Dimensions : mm

Figure 1

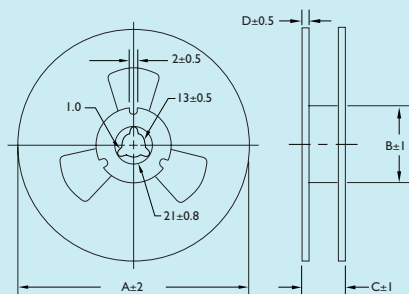
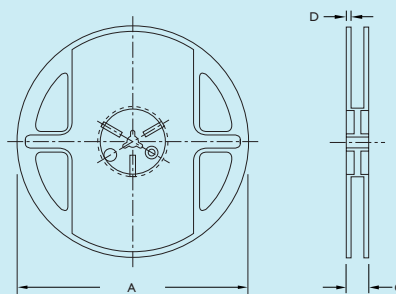


Figure 2

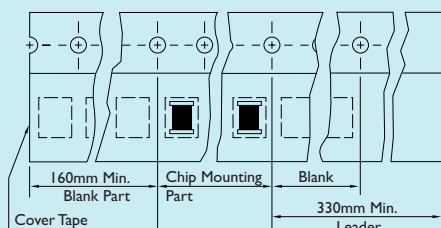


TYPE	FIGURE	A	B	C	D
NLC252018	2	178	60	12	1.5
NLC322522	1	178	60	10	2
NLC453232	1	250	80	14	2
NLC565050	2	330	80	20	2

## TAPE MATERIAL

Carrier Tape : Polystyrene

Cover Type : Polyethylene

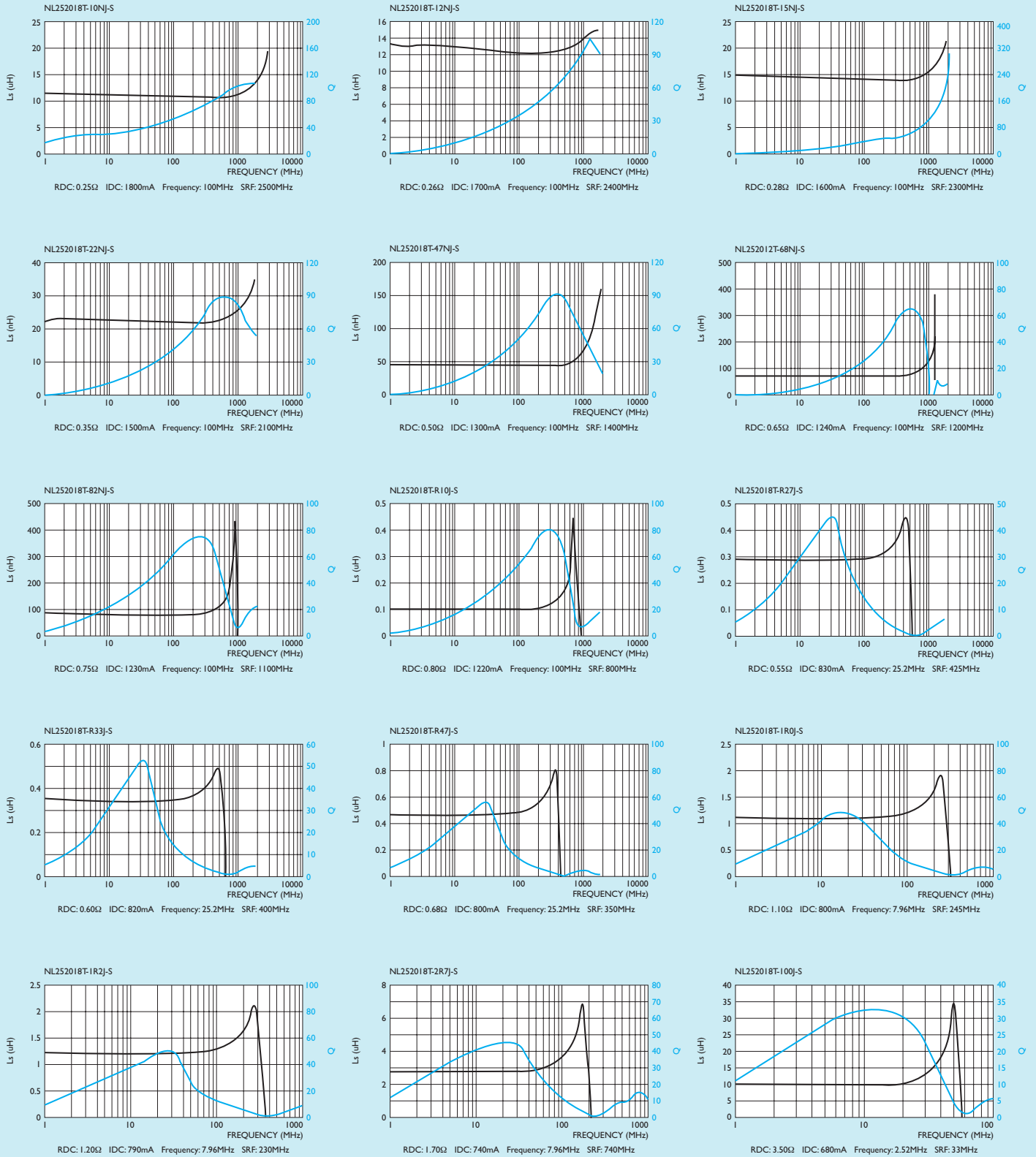


## PACKAGING QUANTITY

TYPE	BULK	CHIP/REEL
NLC252018	✓	2000
NLC322522	✓	2000
NLC453232	✓	500
NLC565050	✓	400

# TYPICAL ELECTRICAL CHARACTERISTICS

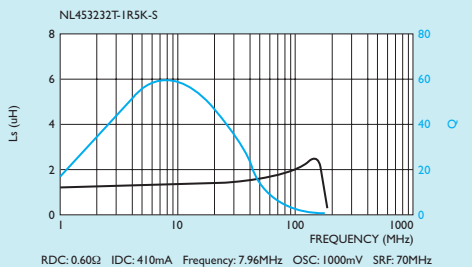
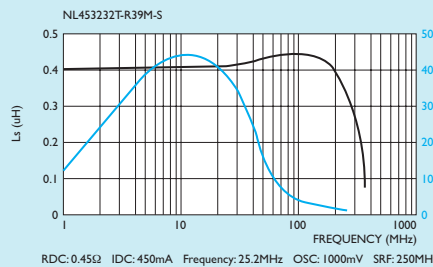
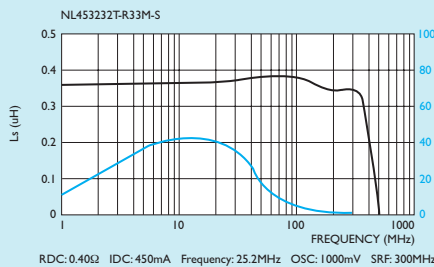
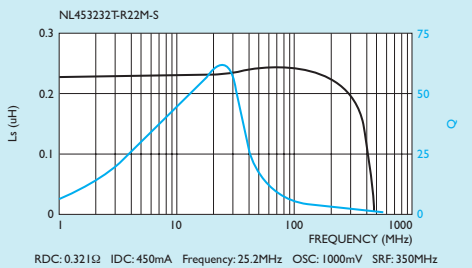
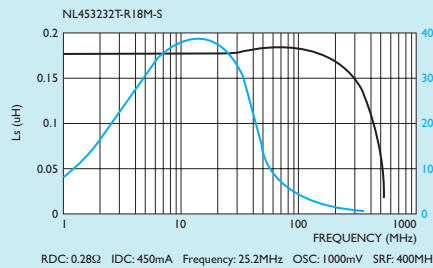
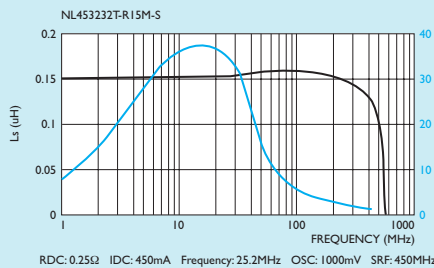
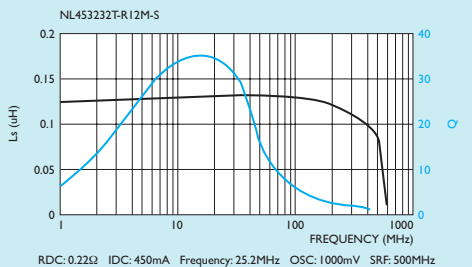
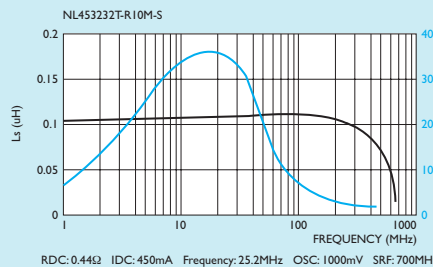
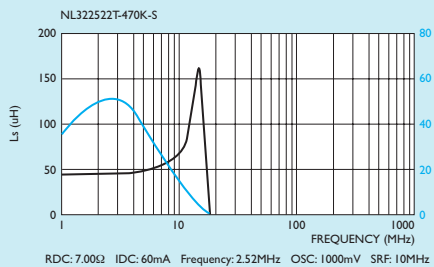
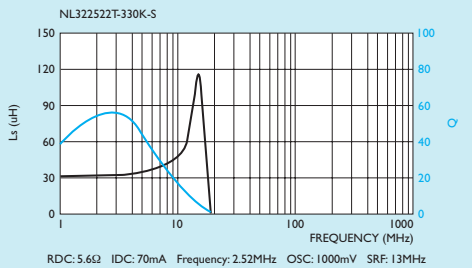
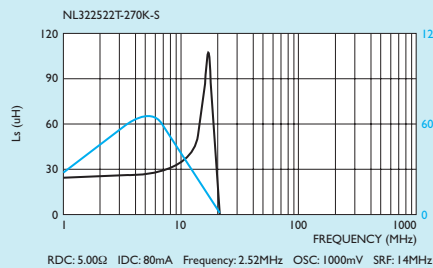
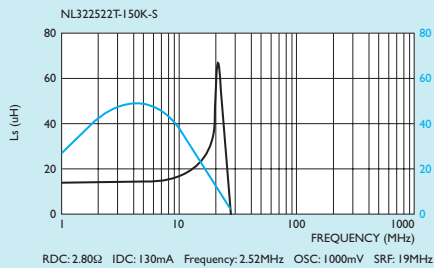
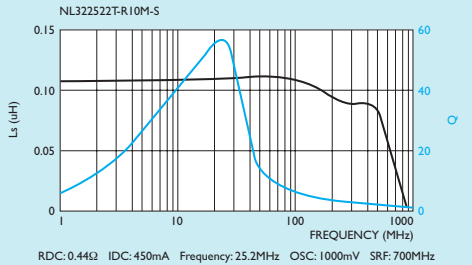
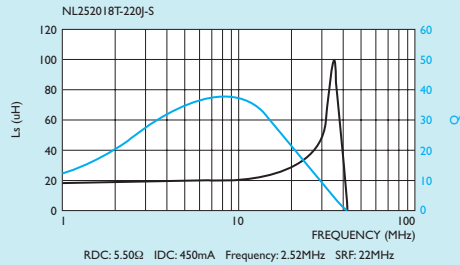
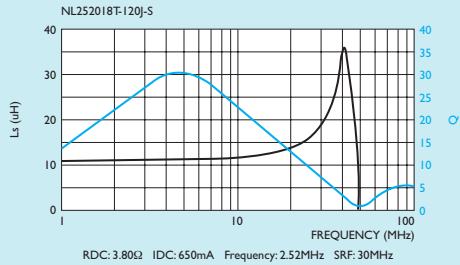
Test Instruments : HP4291A Impedance / Material Analyzer





## TYPICAL ELECTRICAL CHARACTERISTICS

Test Instruments : HP4291A Impedance / Material Analyzer



## TYPICAL ELECTRICAL CHARACTERISTICS

Test Instruments : HP4291A Impedance / Material Analyzer

