

SUNLEI TECHNOLOGY CORP.

Wire Wound Ferrite Chip Inductors- NLF Series

NLF series Open Type for High Frequency & Low Loss Applications

NLF Series is the newest combo in open type ferrite wire wound chip inductors. The wire wound ferrite construction provides higher SRF, lower DCR and superior Q values than other ferrite chip inductors

Features

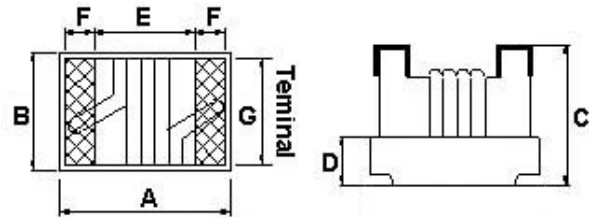
- Highly accurate dimensions can be mounted automatically.
- Terminals are highly resistant to pull forces.
- Highly resistant to mechanical shocks and pressure.
- Highly reliable in environments of sudden temperature change and humidity.
- Lowest DCR & better Q value in ferrite Series.



Applications

Telecom and datacom applications such as xDSL, Cable Modem, Set-top Box, CATV filter/tuner, wireless LAN and so on.

Dimensions (mm)



Product Identification

NLF 0805 – 100 K -PF

NLF: SERIES NAME

0805:Dimensions CODE

100: INDUCTANCE CODE.

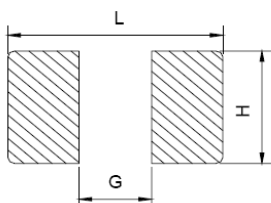
K: TOLERANCE, G=2% J=5%

K=10% M=20%.

PF: Pb-Free

PART NO.	A(Max)	B(Max)	C(Max)	D(Ref)	E(Ref)	F(Ref)	G(Ref)
NLF0603	1.8	1.25	1.02	0.38	0.86	0.33	0.76
NLF0805	2.4	1.72	1.52	0.7	1.02	0.5	1.27
NLF1008	2.92	2.5	2.2	0.7	1.52	0.51	2.03

Recommended Pattern(mm)



PART NO.	L	G	H
NLF0603	1.92	0.64	1.02
NLF0805	2.80	0.76	1.78
NLF1008	3.30	1.30	2.54

Wire Wound Ferrite Chip Inductors- NLF Series

NLF series Open Type for High Frequency & Low Loss Applications

Electrical Characteristics

Part Number	Inductance (nH)	Test Frequency (MHz)	Tolerance (±%)	Q Min	SRF Min (MHz)	Rdc Max (Ω)	Idc Max (mA)	Color
NLF0603-47N□-PF	47	7.9	10/5	17	1700	0.08	1500	Black
NLF0603-72N□-PF	72	7.9	10/5	17	1700	0.12	1500	Brown
NLF0603-R10□-PF	100	7.9	10/5	17	1650	0.13	1500	Red
NLF0603-R12□-PF	120	7.9	10/5	17	1350	0.15	1500	Orange
NLF0603-R15□-PF	150	7.9	10/5	17	1350	0.15	1450	Yellow
NLF0603-R18□-PF	180	7.9	10/5	17	1150	0.15	1400	Green
NLF0603-R22□-PF	220	7.9	10/5	17	1050	0.16	1350	Blue
NLF0603-R24□-PF	240	7.9	10/5	17	1050	0.19	1300	Violet
NLF0603-R27□-PF	270	7.9	10/5	17	1050	0.30	1050	Gray
NLF0603-R33□-PF	330	7.9	10/5	17	850	0.46	1200	White
NLF0603-R39□-PF	390	7.9	10/5	17	810	0.51	1200	Black
NLF0603-R47□-PF	470	7.9	10/5	17	720	0.62	1050	Brown
NLF0603-R56□-PF	560	7.9	10/5	17	600	0.44	850	Red
NLF0603-R68□-PF	680	7.9	10/5	17	600	0.52	850	Orange
NLF0603-R78□-PF	780	7.9	10/5	17	460	0.83	850	Yellow
NLF0603-R82□-PF	820	7.9	10/5	17	480	0.69	750	Green
NLF0603-1R0□-PF	1000	7.9	10/5	18	310	0.81	600	Blue
NLF0603-1R2□-PF	1200	7.9	10/5	17	270	0.87	550	Violet
NLF0603-1R5□-PF	1500	7.9	10/5	17	270	1.06	540	Gray
NLF0603-1R8□-PF	1800	7.9	10/5	17	230	1.10	520	White
NLF0603-2R2□-PF	2200	7.9	10/5	17	140	1.20	500	Black
NLF0603-2R7□-PF	2700	7.9	10/5	17	105	1.50	480	Brown
NLF0603-3R3□-PF	3300	7.9	10/5	17	84	1.50	440	Red
NLF0603-3R9□-PF	3900	7.9	10/5	17	80	1.60	430	Orange
NLF0603-4R7□-PF	4700	7.9	10/5	18	69	2.10	420	Yellow
NLF0603-5R6□-PF	5600	7.9	10/5	18	65	2.60	400	Green
NLF0603-6R8□-PF	6800	7.9	10/5	19	55	3.10	400	Blue
NLF0603-7R8□-PF	7800	7.9	10/5	17	47	3.50	400	Violet
NLF0603-8R2□-PF	8200	7.9	10/5	17	42	3.60	400	Gray
NLF0603-100□-PF	10000	7.9	10/5	19	40	4.80	300	White

NOTE:

□-tolerance J=±5% / K=±10% / M=±20%

1. Operating temperature range – 25°C ~ 85°C

2. IDC: Applied the current to coils, the inductance shall be less than 10% initial value.

Wire Wound Ferrite Chip Inductors- NLF Series

NLF series Open Type for High Frequency & Low Loss Applications

Electrical Characteristics

Part Number	Inductance (nH)	Test Frequency (MHz)	Tolerance (±%)	Q Min	SRF Min (MHz)	Rdc Max (Ω)	Idc Max (mA)	Color
NLF0805-78N□-PF	78	7.9	10/5	19	1440	0.06	2000	Black
NLF0805-R11□-PF	110	7.9	10/5	19	1200	0.07	2000	Brown
NLF0805-R47□-PF	470	7.9	10/5	19	480	0.40	800	Red
NLF0805-R68□-PF	680	7.9	10/5	20	480	0.40	800	Orange
NLF0805-1R0□-PF	1000	7.9	10/5	20	400	0.69	700	Yellow
NLF0805-1R5□-PF	1500	7.9	10/5	20	330	0.83	700	Green
NLF0805-1R8□-PF	1800	7.9	10/5	20	300	1.00	650	Blue
NLF0805-2R2□-PF	2200	7.9	10/5	20	250	1.10	650	Violet
NLF0805-2R7□-PF	2700	7.9	10/5	23	200	1.25	650	Gray
NLF0805-3R3□-PF	3300	7.9	10/5	23	160	1.45	650	White
NLF0805-3R9□-PF	3900	7.9	10/5	23	90	1.50	600	Black
NLF0805-4R7□-PF	4700	7.9	10/5	20	70	1.60	530	Brown
NLF0805-5R6□-PF	5600	7.9	10/5	20	65	1.70	500	Red
NLF0805-6R8□-PF	6800	7.9	10/5	20	45	1.95	470	Orange
NLF0805-8R2□-PF	8200	2.5	10/5	16	45	2.10	450	Yellow
NLF0805-100□-PF	10000	2.5	10/5	16	40	2.40	400	Green
NLF0805-120□-PF	12000	2.5	10/5	16	38	3.20	360	Red
NLF0805-150□-PF	15000	2.5	10/5	16	35	3.55	350	Blue
NLF0805-180□-PF	18000	2.5	10/5	16	25	4.90	300	Orange
NLF0805-220□-PF	22000	2.5	10/5	16	20	5.45	270	Violet
NLF0805-270□-PF	27000	2.5	10/5	16	19	7.80	240	Gray
NLF0805-470□-PF	47000	2.5	10/5	16	15	14.50	180	Brown

NOTE:

□-tolerance J=±5% / K=±10% / M=±20%

1. Operating temperature range – 25 °C ~ 85 °C

2. IDC: Applied the current to coils, the inductance shall be less than 10% initial value.

Wire Wound Ferrite Chip Inductors- NLF Series

NLF series Open Type for High Frequency& Low Loss Applications

Electrical Characteristics

Part Number	Inductance (nH)	Test Frequency (MHz)	Tolerance (±%)	Q Min	SRF Min (MHz)	Rdc Max (Ω)	Idc Max (mA)
NLF1008-1R2□-PF	1200	7.9	10/5	35	350	0.50	1200
NLF1008-1R5□-PF	1500	7.9	10/5	38	300	0.65	1200
NLF1008-1R8□-PF	1800	7.9	10/5	34	280	0.75	1050
NLF1008-2R2□-PF	2200	7.9	10/5	34	250	0.90	950
NLF1008-2R7□-PF	2700	7.9	10/5	38	200	1.00	950
NLF1008-3R3□-PF	3300	7.9	10/5	42	200	1.15	900
NLF1008-3R9□-PF	3900	7.9	10/5	37	170	1.25	850
NLF1008-4R7□-PF	4700	7.9	10/5	37	130	1.35	700
NLF1008-5R6□-PF	5600	7.9	10/5	36	110	1.45	700
NLF1008-6R8□-PF	6800	7.9	10/5	33	105	1.60	600
NLF1008-8R2□-PF	8200	2.5	10/5	40	90	1.80	550
NLF1008-100□-PF	10000	2.5	10/5	40	85	2.40	500

NOTE:

□-tolerance J=±5% / K=±10% / M=±20%

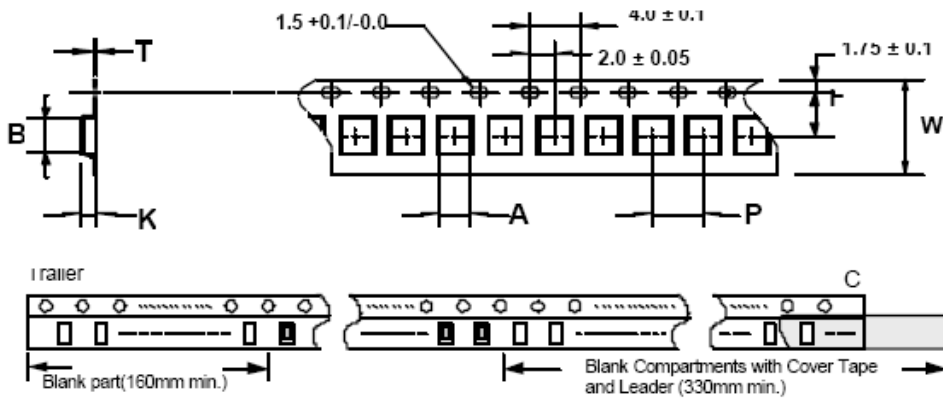
1.Operating temperature range – 25℃~ 85℃

2.IDC:Applied the current to coils, the inductance shall be less than 10% initial value.

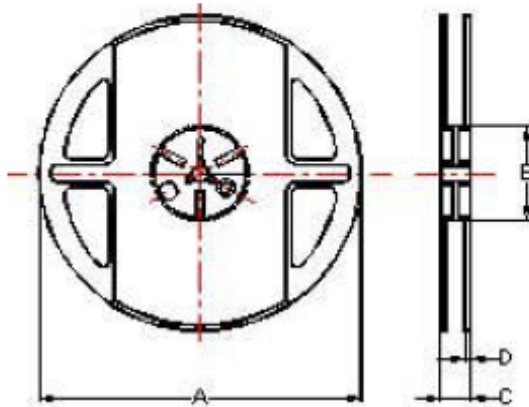
Wire Wound Ferrite Chip Inductors-NLF-Series

PACKAGING

Tape Dimensions



Reel Dimensions



TYPE	Tape Dimensions							FIG	F(Ref)				Quantity/Reel
	A	B	T	W	P	F	K		A	B	C	D	
NLF0603	1.15	1.83	0.26	8	4	3.5	0.95	2	178	60	12	1.5	4000
NLF0805	1.60	2.42	0.22	8	4	3.5	1.45	2	178	60	12	1.5	2000
NLF1008	2.61	2.93	0.26	8	4	3.5	2.25	2	178	60	12	1.5	2000