SUNLEI

FOR APPROVAL

樣 品 承 認 書

客戶名稱
CUSTOMER

產品名稱
PRODUCT **SMD Inductance for High Power Line**

產品型號
PART NO. **NLSM2012H-SERIES**

客戶型號
PART NO.

承認印 APPROVED BY	發行單位 ISSUE BY
	昕磊科技 承認書發行章 工程部 昕磊科技有限公司

日期
DATE **2025/07/16**

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E-MAIL:andy.h@sunlei.com.tw WEB:http://www.sunlei.com.tw

Factory:
東莞創頂電子有限公司 CHAINTK ELECTRONICS CORP.
ADD:東莞市虎門鎮樹田村樹安路樹安工業區
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RECORD OF REVISION

CUSTOMER:		PART NO.:	NLSM2012H-SERIES
DESCRIPTION:	SMD Inductance for High Power Line	CUSTOMER P/N:	

REV	DESCRIPTION ITEMS BE CHANGED OVER, (FROM / T0)	DATE	MADE BY	CHOKE BY
A1	INITIAL	2025/07/16	Yan	Aiji li

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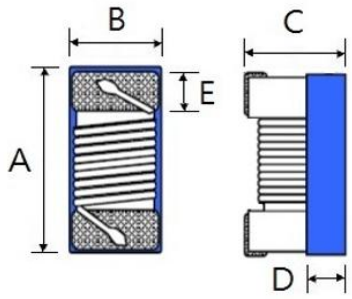
APPROVED	CHECKED	DRAWN
Andy 2025/07/16	Aiji 2025/07/16	Yan 2025/07/16

SPECIFICATION FOR APPROVAL

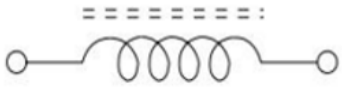
CUSTOMER:		PART NO.:	NLSM2012H-SERIES
DESCRIPTION:	SMD Inductance for High Power Line	CUSTOMER P/N:	

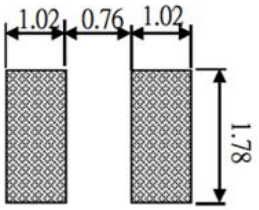
1.CONFIGURATION DIMENSIONS(UNIT:mm)



NLSM2012	mm
A	2.40MAX
B	1.65MAX
C	1.20±0.10
D	0.65REF
E	0.44±0.10

■Recommended Footprint





2.ELECTRICAL CHARACTERISTICS

Part Number	Inductance (μH)@1MHZ	Q,Test Freq @1MHZ TYP	SRF (MHz) TYP	DCR (Ω) TYP	IRMS (mA) TYP	IDC (mA) TYP	Color Coding
NLSM2012H-100K-PF	10±10%	25	450	1.3	820	800	NA
NLSM2012H-220K-PF	22±10%	25	360	2.5	620	600	NA
NLSM2012H-330K-PF	33±10%	25	250	4.5	500	480	NA
NLSM2012H-470K-PF	47±10%	20	130	5.0	450	440	NA
NLSM2012H-560K-PF	56±10%	20	75	6.5	400	390	NA
NLSM2012H-680K-PF	68±10%	20	40	8.0	330	320	NA
NLSM2012H-820K-PF	82±10%	20	20	9.0	310	300	NA
NLSM2012H-101K-PF	100±10%	10	9	9.5	260	250	NA

※Operating temperature : -55 to +150℃
※Storage temp. and humidity: Less than 40℃ and 60% RH.
※If Use Wave soldering is there will be some risk
※Re-flow soldering temperatures below 240 degrees, there will be unwitting risk

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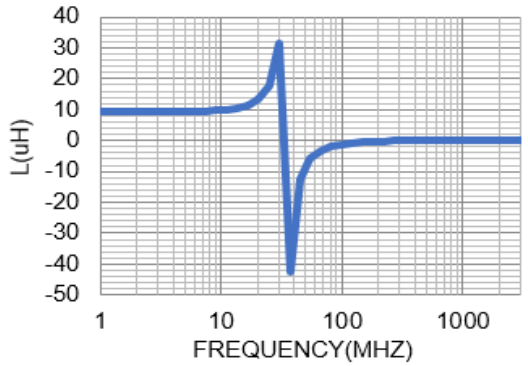
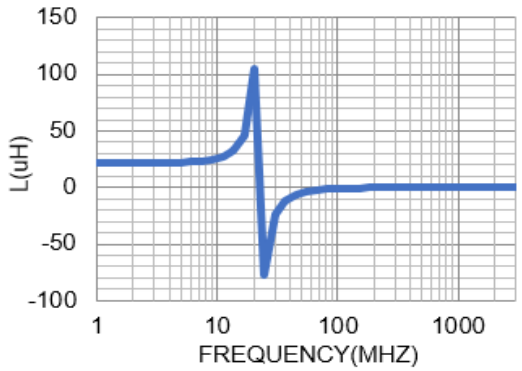
■Performance Curves(FREQ&L)

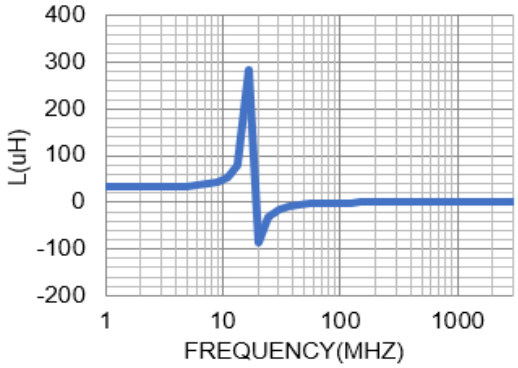
NLSM2012H-100



NLSM2012H-220



NLSM2012H-330



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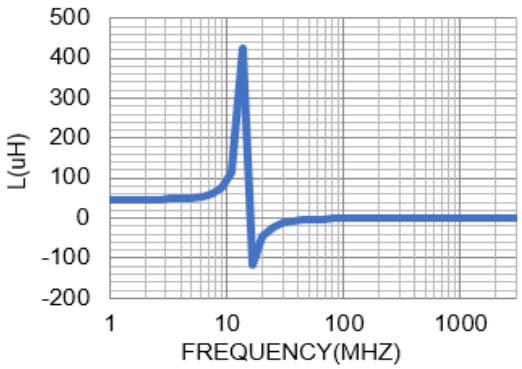

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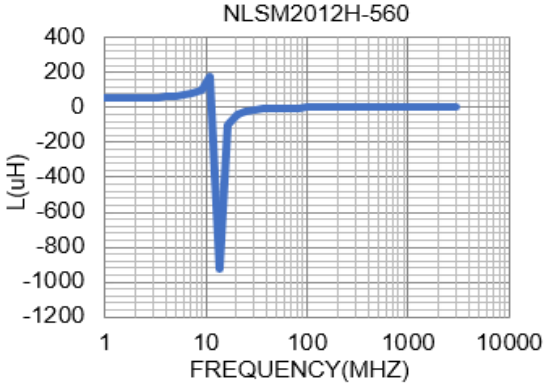

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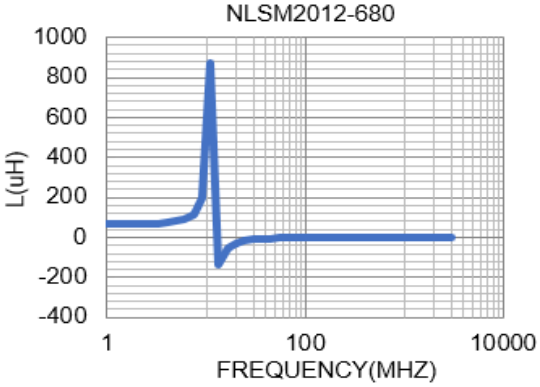

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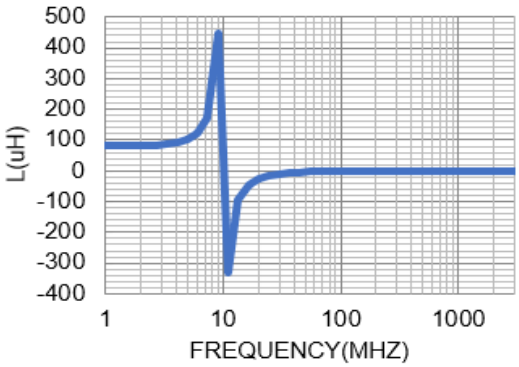
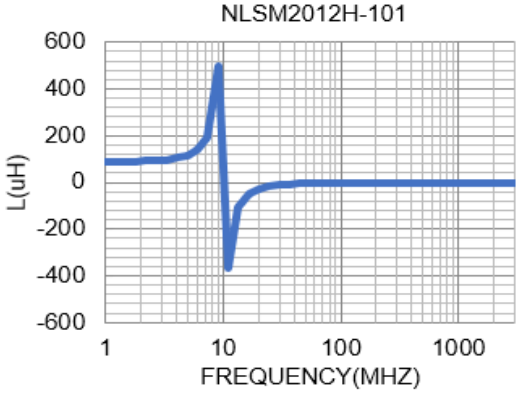


NLSM2012H-101



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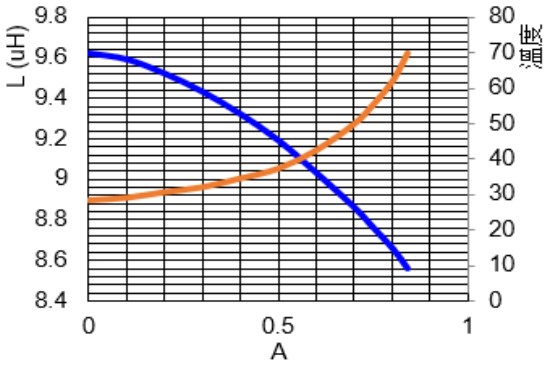
■Performance Curves

NLSM2012H-100



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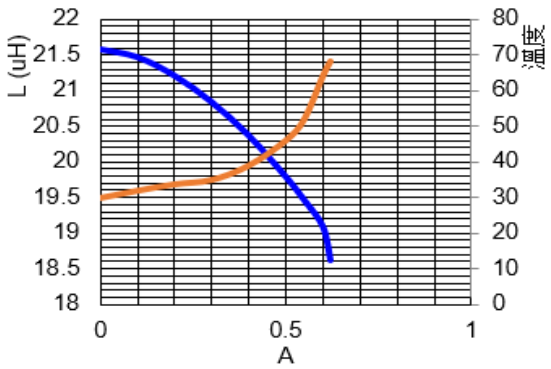

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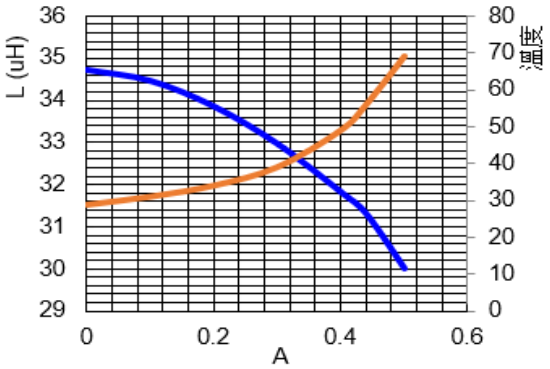

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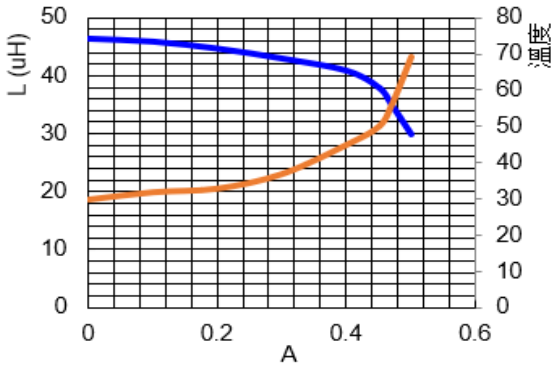

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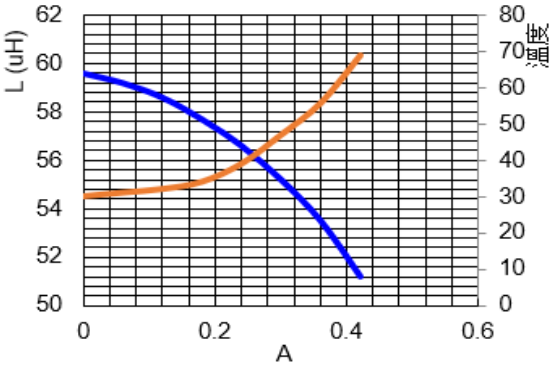

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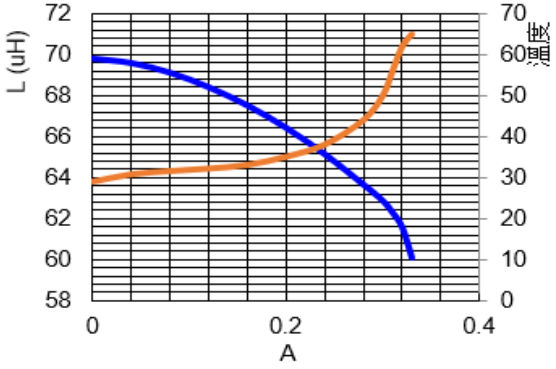

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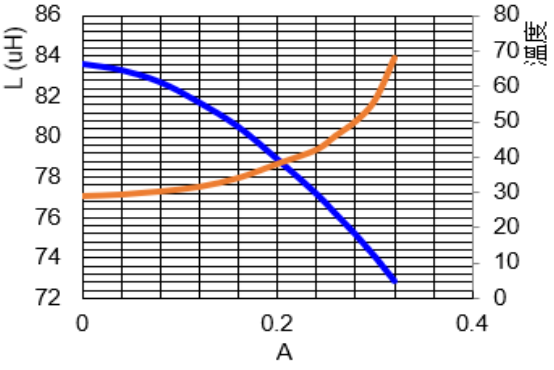

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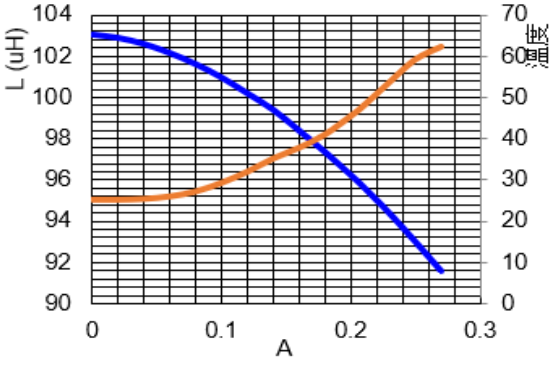

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PACKAGING

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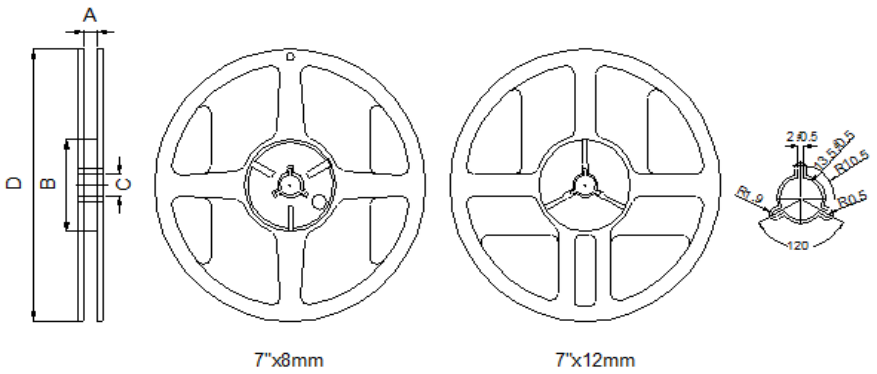
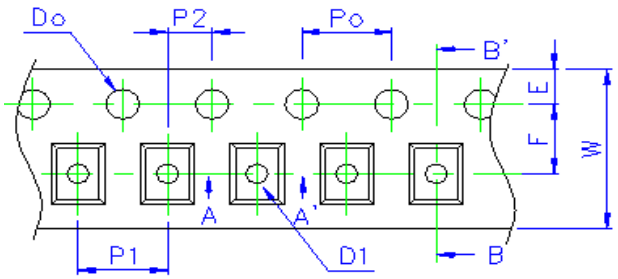
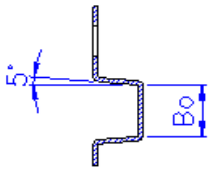
■ Reel Dimension & Tape Dimension



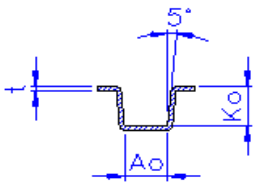
7"x8mm　　7"x12mm

Type	A(mm)	B(mm)	C(mm)	D(mm)
7"x8mm	9.5±0.5	60±0.5	13.5±0.5	178±1
7"x12mm	13.5±0.5	60±0.5	13.5±0.5	178±1





SEC: B－B'



SEC: A－A'

Size	t(mm)	Ao(mm)	Bo(mm)	Ko(mm)	W(mm)	E(mm)	F(mm)	Po(mm)	P1(mm)	P2(mm)	Do(mm)
NLSM2012	0.22±0.05	1.75±0.10	2.55±0.10	1.30±0.10	8.00±0.20	1.75±0.10	3.50±0.05	4.00±0.05	4.00±0.10	2.00±0.05	1.50+0.1 -0

■ Packaging Quantity

Chip Size	1210	1608	2012	3216	3225	4532
7"/ Reel	3000	4000	2000	2000	1000	500

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RELIABILITTY

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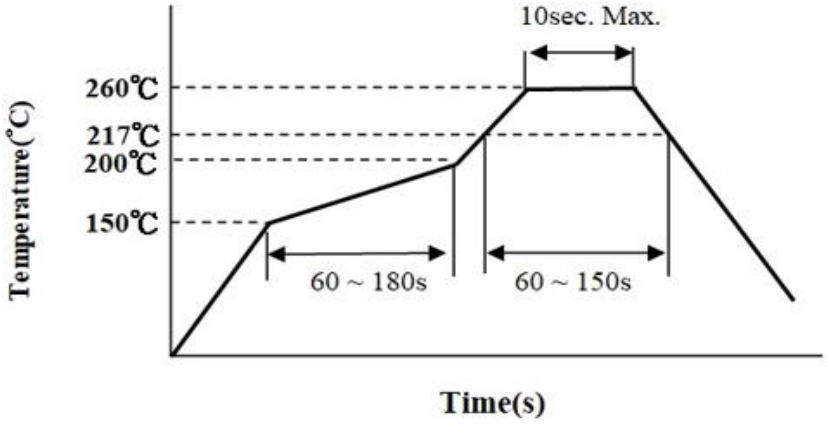
■Recommended Soldering Temp. Graph



■ **Mechanical Reliability**

TEST	Specification & Requirement	Method Used
Solderability	The metalized area must have 90% minimum solder coverage.	Solder temperature: 245 ± 5℃ Soldering time: 4 ± 1 sec
Resistance to soldering heat	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Solder temperature: 260 ± 5℃ Soldering time: 10 ± 1 sec
Temperature cycle		Step1. 30 ± 5 minutes at -50℃ ± 5℃ Step2. 30 ± 5 minutes at +150℃ ± 5℃ Total 100 continuous cycles Measurement to be made after keeping at room temperature for 24 ± 2 hours
High Temp Exposure		Temperature: 150 ± 5℃ Test duration: 250 ± 12 hours Measurement to be made after keeping at room temperature for 24 ± 2 hours
Humidity	Inductors must not have a shorted or open winding.	Humidity: 85 ± 5% R.H Temperature: 85 ± 5℃ Test duration: 250 ± 12 hours Measurement to be made after keeping at room temperature for 24 ± 2 hours