

PAGE	
REV. NO	

APPROVAL SHEET

CUSTOMER : _____

ITEM : SMD POWER INDUCTOR

PART NAME : NS1580-SERRIES

SPEC : NS1580-SERIES

APPROVED	REFEERENCE

(Date : 2025-12-23)

TESTED	CHECKED BY	APPROVED BY



NAMSUN ELECTRONICS CO.,LTD



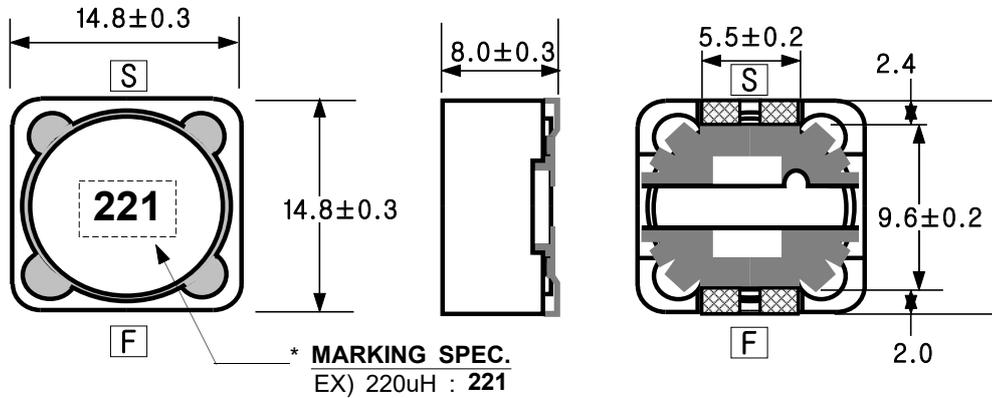
Na-3506, CHUNG ANG CIRCULATION COMPLEX 15
 GYUNGINRO 53-GIL GURO-GU SEOUL 08217 ,KOREA
 TEL: 02-2689-9418/02-6679-9418 , FAX: 02-2689-8628
 Homepage : www.nsn.co.kr / E-mail : sun@nsn.co.kr

개정이력 LIST

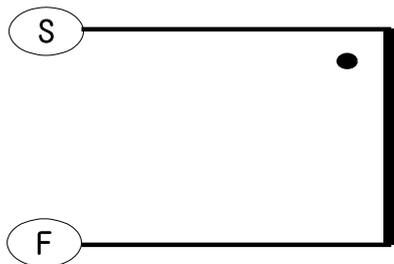
REV NO.	개정일자	개정항목	개정내용	관련근거
0	2019-07-01	NEW	초도발행	
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改訂 REV.	設計變更 ENG.CHANGE	日付 DATE	作成 DRAWN	檢認 APPD.
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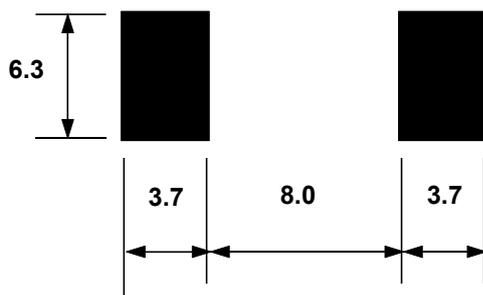
1. DIMENSION (UNIT : mm)



2. CONNECTION



3. PCB-LAND PATTERN



QUALITY & DEVELOPMENT TEAM				尺圖	SCALE	SMD INDUCTOR
擔當 DRAWN	設計 DESIGNED	檢認 CHECKED	承認 APPROVED	/	NTS	
				DIM.	mm	
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4. ELECTRICAL PERFORMANCE

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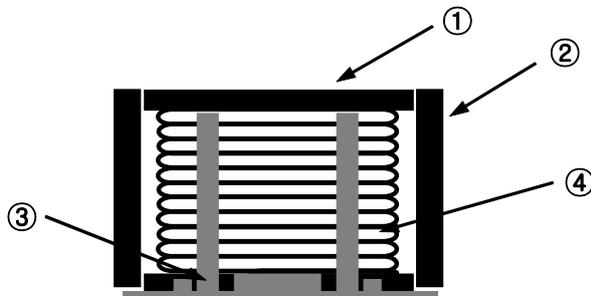
P/NO.	INDUCTANCE [uH±20%]	DC RESISTANCE [Ω MAX]	RATED CURRENT [A MAX]	MARKING
NS1580-220M	22	0.048	5.50	220
NS1580-330M	33	0.050	4.60	330
NS1580-680M	68	0.090	3.80	680
NS1580-221M	220	0.220	2.00	221
NS1580-471M	470	0.500	1.50	471
NS1580-102M	1000	2.250	0.900	102
NS1580-222M	2200	2.600	0.750	222
NS1580-332M	3300	3.100	0.530	332
NS1580-472M	4700	4.000	0.440	472
NS1580-682M	6800	5.500	0.350	682

* INDUCTANCE : HIOKI 3531 LCR METER at 1kHz, 1V.

* DC RESISTANCE : HIOKI 3220mΩHI TESTER.

* RATED CURRENT : The maximum DC value having inductance decrease within 20%
and Temperature increase within 40℃ by the application of DC bias.

5. INTERNAL CONSTRUCTION & MATERIAL LIST

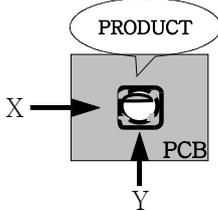
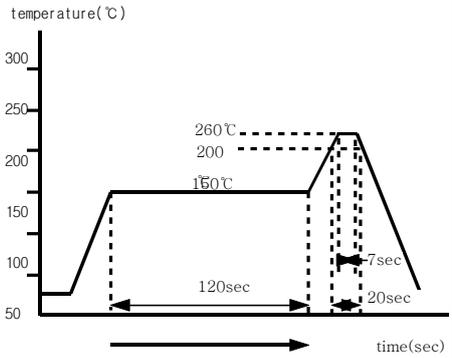


NO.	PART NAME	MATERIAL	MAKER
1	DR CORE	MN FERRITE	SAMHWA CO.,LTD. or eqv.
2	RI CORE	NI FERRITE	SAMHWA CO.,LTD. or eqv.
3	BASE	STEEL	FORES HITECH , or eqv.
4	WIRE	UEW or eqv.	YOUNG HWA SA ELECTRONICS or eqv.
5	SOLDER	SOLDER BAR	DAE KIL METAL
6	EPOXY	SW-150	SUNG WOO CHEMICAL
		SK-021 SK-031F	SE KYE CHEMICAL

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				DIM. mm	
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6. RELIABILITY DATA

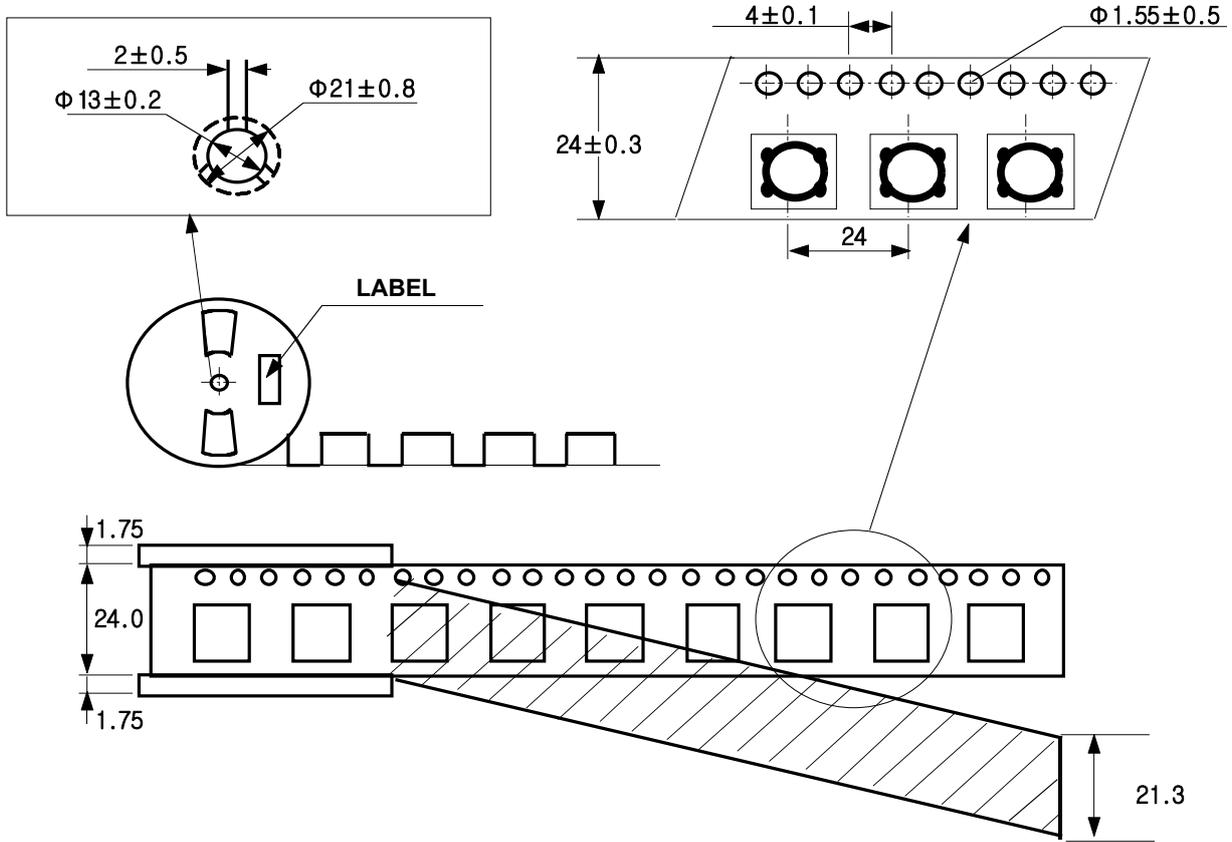
NO	ITEM	SPECIFICATION	TEST METHOD & CONDITION
1	Operating temperature range	-25 to +85℃	Including temperature rise due to self-generated heat.
2	Storage temperature range	-40 to +85℃	
3	Insulation resistance	100MΩmin.	100VDC for 1min. between coil & core.
4	High Temperature	Inductance change : within ±10%	120℃ 96 Hours.
5	Low Temperature		-40℃ 96 Hours.
6	Humidity		50±2℃ 90~96% 120 Hours.
7	Thermal shock		-40±3℃ 30 Minutes Room Temp. Within 5 Minutes 120±2℃ 30 Minutes : 5 cycle
8	Vibration	Inductance change : within ±5%	vibration for 2hours in each of three orientations at sweep vibration 10 to 55 to 10Hz with 1.5mm P-P amplitude .
9	Solderability	Wetting shall cover less than 75% of each terminal	Solder temperature : 260 ±5℃ Duration : 3 ±2sec.
10	Resistance to soldering heat	No mechanical defect and Inductance change : within ±5%	Soler temperature : 260 ±5℃ Duration : 10 ±2sec.
11	Terminal strength	0.5kg for 10 ±1 seconds. Terminal should not peel off	 <p>After soldering between copper plate and terminals of x,y with standing at below conditions</p>
12	Reflow condition	No mechanical defect and No Inductance defect	 <p>Reflow condition</p>

※ Measure after leave 2hours in standard condition(No 4~8).

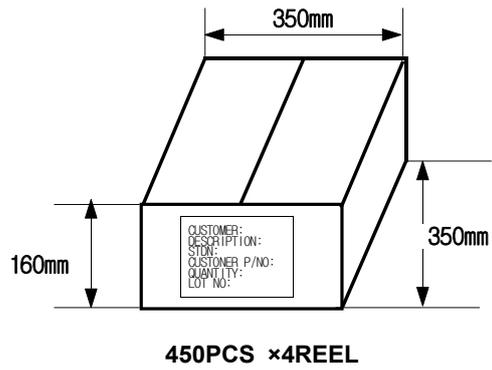
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NS1580						4 / 5

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7. PACKING SPEC.



TAPE PITCH	24mm
EMBOSE TAPE	24mm
REEL	Φ 330 ±2mm
QUANTITY	350pcs
REEL TAPE	START : 200mm MIN
MARGIN	FINISH : 200mm MIN
COVER TAPE	21.3mm



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NS1580						5 / 5