

SPECIFICATION FOR APPROVAL

承 認 書

Description : Micro Dynamic Speaker
Kingstate Part No. : KDSG23050P-06B
Customer's Model No. : _____
Specification No. : DRD-B429
Number Of The Edition : 1.1

CUSTOMER'S APPROVED SIGNATURE		

志豐電子股份有限公司 KINGSTATE ELECTRONICS CORP.

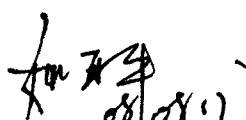
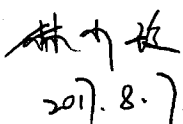


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Approved by	Checked by	Issued by
	 2017.8.7.	王川 2017.08.07

KINGSTATE ELECTRONICS CORPORATION

志豐電子股份有限公司

承認書修訂記錄

圖號： DRD-B429			料號： KDSG23050P-06B
修訂日期	提出者	版次	修訂記錄內容

Preliminary

A. SCOPE 範疇

This specification applies speaker, **KDSG23050P-06B**

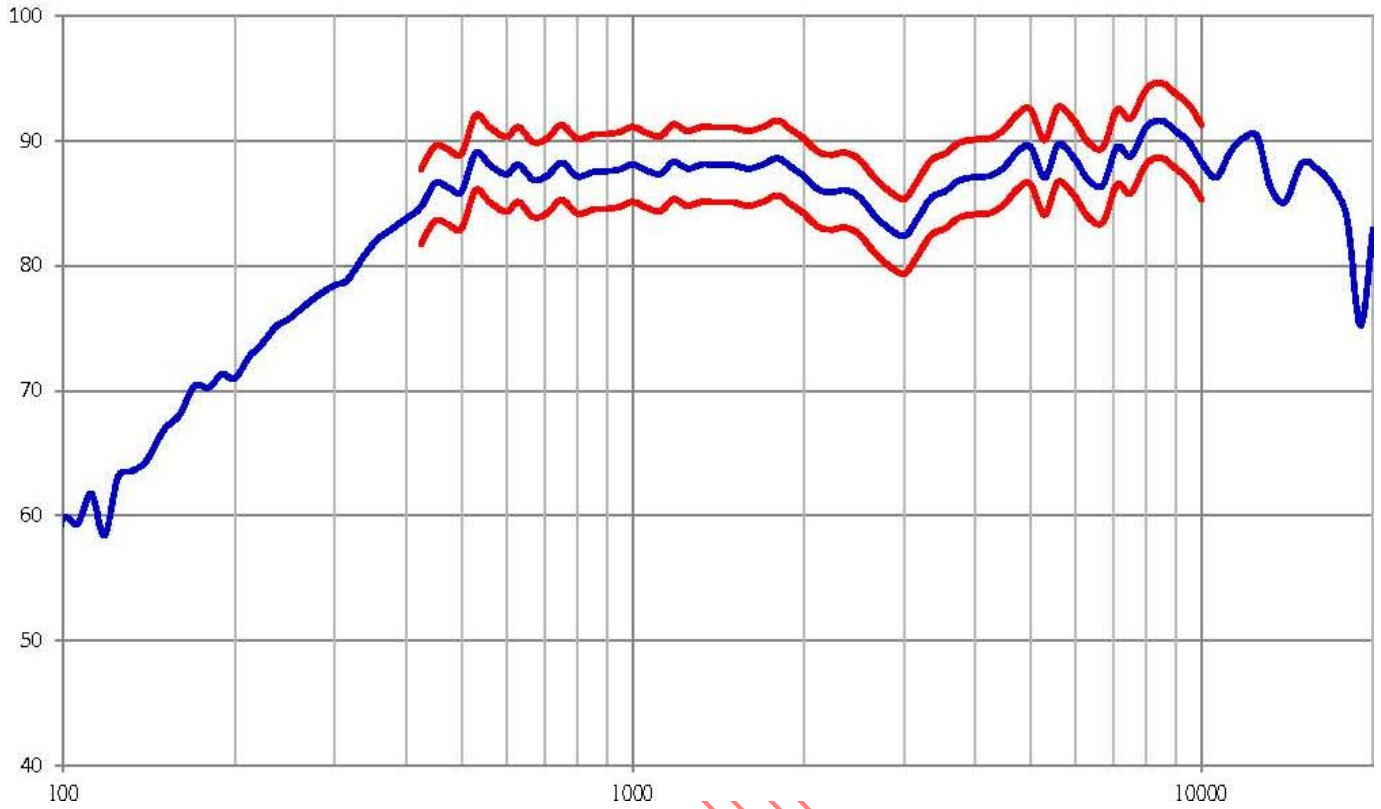
此規格書適用於喇叭, **KDSG23050P-06B**

B. SPECIFICATION 規格

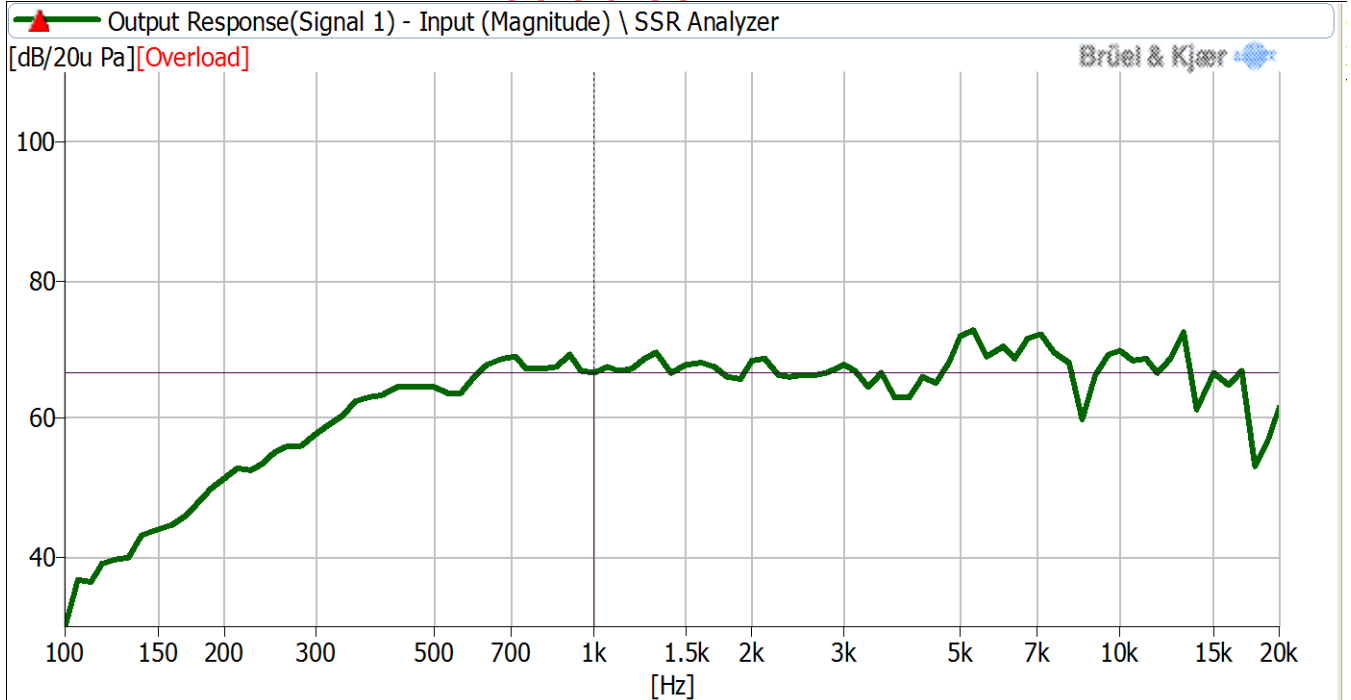
No.	Item	Symbol	Unit	Specification	Condition
1	Dimension 尺寸		mm	ϕ 23.0 x 4.1	
2	Power Rating 功率		W	Rated. 0.6/ MAX.1.0	Maximum Power:IEC-60268-5 Filter 60s On/120s Off 10 Cycles (Room TEMP.)
3	Impedance 阻抗	Ω	ohm	$50 \pm 15\%$	At 1kHz 1.0V
4	Resonance Frequency 低音諧振	Fo	Hz	$500 \pm 15\%$	At ,1.0V
5	Output S.P.L. 音壓位準		dB	$88 \pm 3\text{dB}(0.1\text{w}/10\text{cm})$ $68 \pm 3\text{dB}(0.1\text{w}/1\text{m})$	At 0.8k,1.0k,1.2k,1.5kHz (Average figures)
6	Frequency Rang 有效頻寬		Hz	Fo---10K	
7	Distortion 失真		%	Max.3%	At 1.0kHz , 0.1W
8	Voice Coil 音圈		mm		
9	Magnet 磁石		mm		Nd-Fe-B(鈹鐵鏽)
10	Flux Density 磁通密度		Guess		Min.
11	Operating temp. 操作溫度		$^{\circ}\text{C}$	-40 ~ +85	
12	Buzze & Rattle 異常音				Not be audible at 5.48V sine wave between Fo ~ 20KHz 輸入 5.48V 正弦波從 Fo 到 20KHz 之 間無異常音
13	Weight 重量		g	3.6	
14	Material 材質			Metal	
15	Environmental Protection Regulation 環保法規			RoHS 2.0	

C. TYPICAL FREQUENCY RESPONSE CURVE 頻率響應曲線

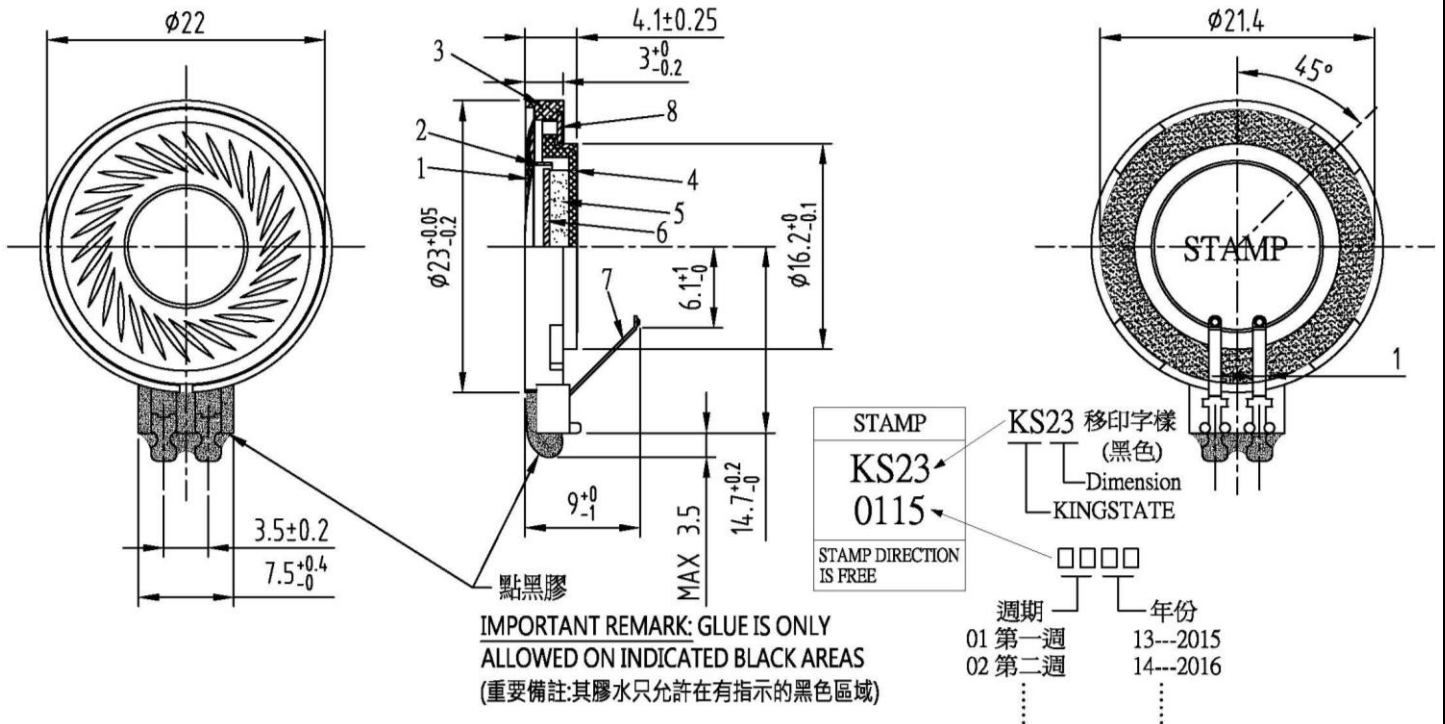
A: Frequency Response. Magn dB re 20.00 μ A (at 0.1w/10cm) 425~10KHz \pm 3dB



A: Frequency Response. Magn dB re 20.00 μ A (at 0.1w/1m)



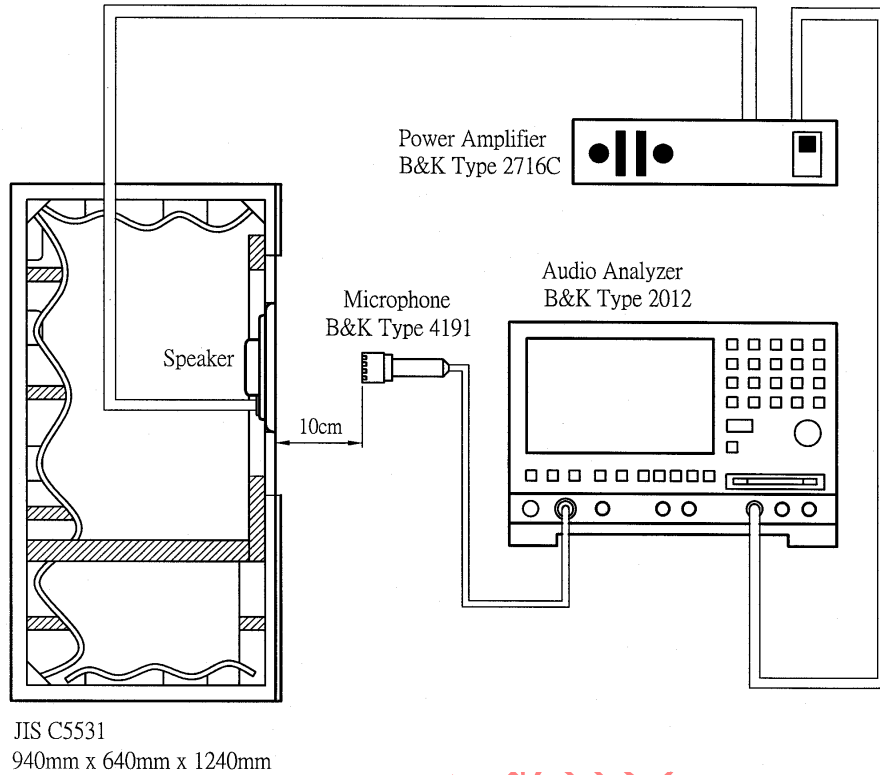
D. APPEARANCE DRAWING 外觀尺寸圖



Tol: ± 0.3
Unit: mm

No.	部件 Parts	材質 Material	備注 Comments
1	膜片 Diaphragm	PEI	/
2	音圈 Voice Coil	COPPER	/
3	支架 Frame	PBT+15%GF	/
4	U鐵 Yoke	SPCC	鍍鎳 Ni plating
5	磁鐵 Magnet	NdFeB	鍍鋅 Zn plating
6	華司 Washer	SPCC	鍍鎳 Ni plating
7	彈片 Spring	SUS301 T=0.2	表面鍍金 Au plating
8	不織布 DAMP CLOTH	CLOTH	/

E. MEASUREMENT CIRCUIT 測量線路



F. MECHANICAL CHARACTERISTICS 機械特性

No.	Item	Test condition	Evaluation standard
1	Solderability 焊錫附著性 (Spring Contact excepted) 彈 PIN 類不適用此項	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $+270\pm 5^{\circ}\text{C}$ for 3 ± 1 seconds. 端子部份浸入松香溶液 5 秒後,再浸入 $+270\pm 5^{\circ}\text{C}$ 熔融焊錫槽中 3 ± 1 秒.	90% min. lead terminals shall be wet with solder. (Except the edge of terminal) 浸入端子部份附著焊錫 90%以上.(末端斷面不算)
2	Soldering Heat Resistance 焊錫耐熱性 (Spring Contact excepted) 彈 PIN 類不適用此項	Lead terminal are immersed up to 1.5mm from sounder's body in solder bath of $+260\pm 5^{\circ}\text{C}$ for 3 ± 1 seconds. 距離端子根部 1.5mm 的位置,浸入 $+260\pm 5^{\circ}\text{C}$ 的焊錫槽 3 ± 1 秒.	No interference in operation 操作無任何不良
3	PCB Wire Pull Strength PCB 線材拉力	The pull force shall be applied to double lead wire : Horizontal 3.0N(0.306kg) for 30 seconds. 雙線材水平方向施以 3.0N(0.306kg) 的力量,30 秒.	No damage and cutting off. 線材不鬆動,不脫落.
4	Random vibration 随机振动	Random vibration (Based on MIL STD 781C) PSD $\text{tol}\pm 3\text{dB}$; 30min/plane 20Hz $\rightarrow 0.013\text{g}^2/\text{Hz}$ 20-80Hz $\rightarrow +3\text{dB/octave}$ 80-350Hz $\rightarrow 0.053\text{g}^2/\text{Hz}$ 0.35-2kHz $\rightarrow -3\text{dB/octave}$ 2kHz $\rightarrow 0.009\text{g}^2/\text{Hz}$ 依據標準 MIL STD 781C,試驗方向:XYZ 三軸向 試驗時間:30 分鐘/軸向,共 90 分鐘	No obstacle to be harmful to normal operation; damages, cracks, rusts and distortions. Should not be audible at 5.48V sine wave between $F_0 \sim 20\text{KHz}$
5	Mechanical shock 机械冲击	Half sine wave pulse $3000\text{g}'\pm 15\%$, $0.3\text{ms}+20\%/-0$ All axis direct° (6shocks) 波形:半正弦波,加速度: $3000\text{g}'\pm 15\%$,脉寬: $0.3\text{ms}+20\%/-0$,衝擊次數:1 次/軸向,共 6 次.	測試後無任何障礙防礙正常操作.且在輸入 5.48V 正弦波從 F_0 到 20KHz 之間無異常音

G. ENVIRONMENTAL TEST 環境試驗

No.	Item	Test conditions	Evaluation standard
1	Humidity test 高溫高濕測試	After being placed in a chamber at +85°C and 95% RH relative humidity for 120 hours. 置於+85°C, 相對濕度 95%環境中 120 小時	Being placed for 6 hours at +25°C, speaker shall be measured. No obstacle to be harmful to normal operation; damages, cracks, rusts, etc. Should not be audible at 5.48V sine wave between Fo ~ 20KHz. Fo should meet initial one. S.P.L. deviation of unit should be within ±3dB
2	Temp. shock test 溫度沖擊測試	(IEC 68-2-14) -40°C;+85°C,30min.dwell,20sec. transition, 32 cycles 依據(IEC 68-2-14) 於-40°C~+85°C 各 30 分鐘共 32 個循環。	經測試後, 靜置於+25°C (室溫)環境中 6 小時後, 測試後無任何障礙防礙正常操作.且在輸入 5.48V 正弦波從 Fo 到 20KHz 之間無異常音. Fo 與原規格值相同,輸出音壓變化量在±3dB 內.

H. Recommended Temperature Profile For Hand Soldering 建議手焊溫度

Hand Soldering
370±10°C / 3±1 Sec

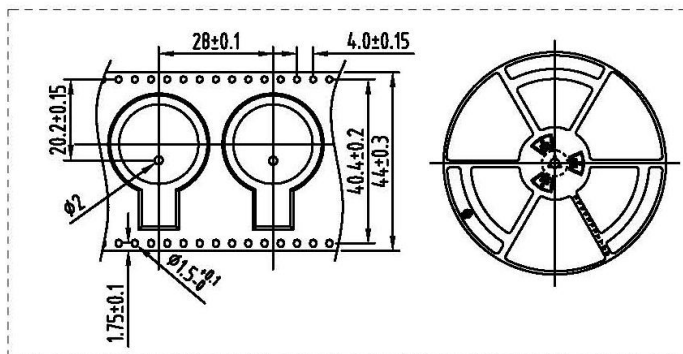
I. RELIABILITY TEST 信賴性試驗

No.	Item	Test conditions	Evaluation standard
1	Load test 連續負荷	0.6W pink noise is applied for 96 hours, at 85°C temperature. 在+85°C環境下,輸入功率 0.6W, 粉雜音連續操作 96 小時	Being placed for 1 hours at +25°C, speaker shall be measured. No obstacle to be harmful to normal operation; damages, cracks, rusts, etc. Should not be audible at 5.48V sine wave between Fo ~ 20KHz. Fo should meet initial one. S.P.L. deviation of unit should be within ±3dB 經測試後,靜置於+25°C (室溫)環境中 1 小時後,測試後無任何障礙防礙正常操作.且在輸入 5.48V 正弦波從 Fo 到 20KHz 之間無異常音.Fo 與原規格值相同,輸出音壓變化量在±3dB 內.

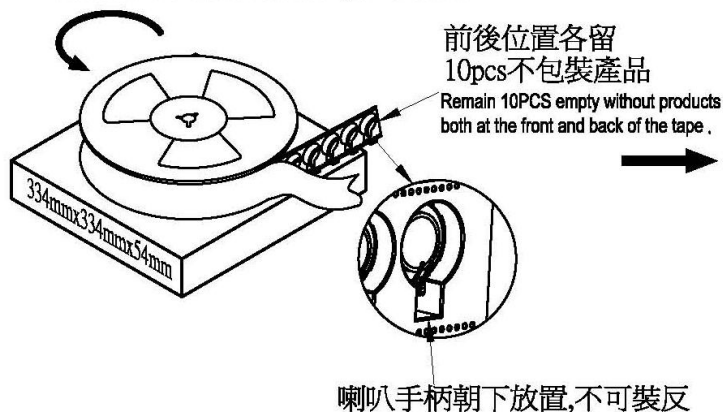
TEST CONDITION.

Standard Test Condition :	a) Temperature : +5 ~ +35°C	b) Humidity : 45-85%	c) Pressure : 860-1060mbar
一般測試條件 :	a) 溫度 : +5 ~ +35°C	b) 濕度 : 45-85%	c) 氣壓 : 860-1060mbar
Judgement Test Condition	a) Temperature : +25 ± 2°C	b) Humidity : 60-70%	c) Pressure : 860-1060mbar
爭議時測試條件:	a) 溫度 : +25 ± 2°C	b) 濕度 : 60-70%	c) 氣壓 : 860-1060mbar

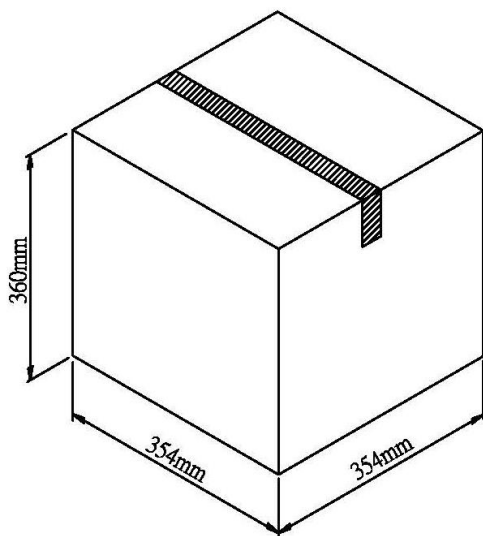
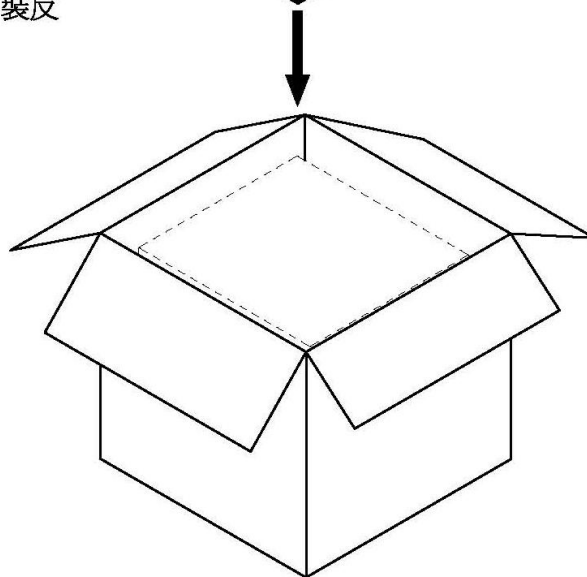
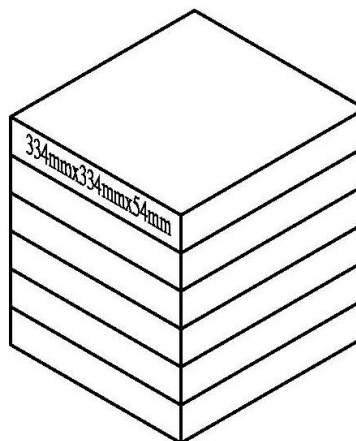
I. PACKING STANDARD 包裝規格



料帶按下圖箭頭方向卷,不可卷反

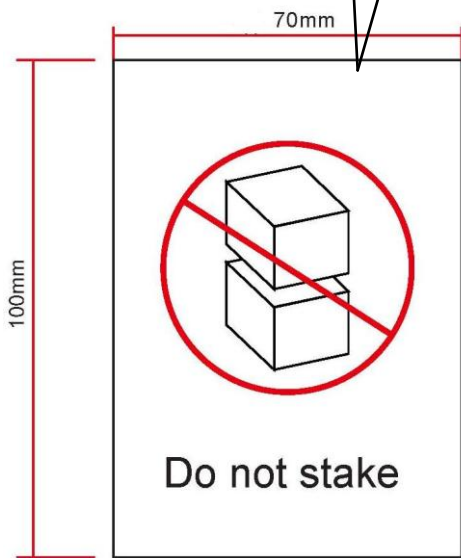
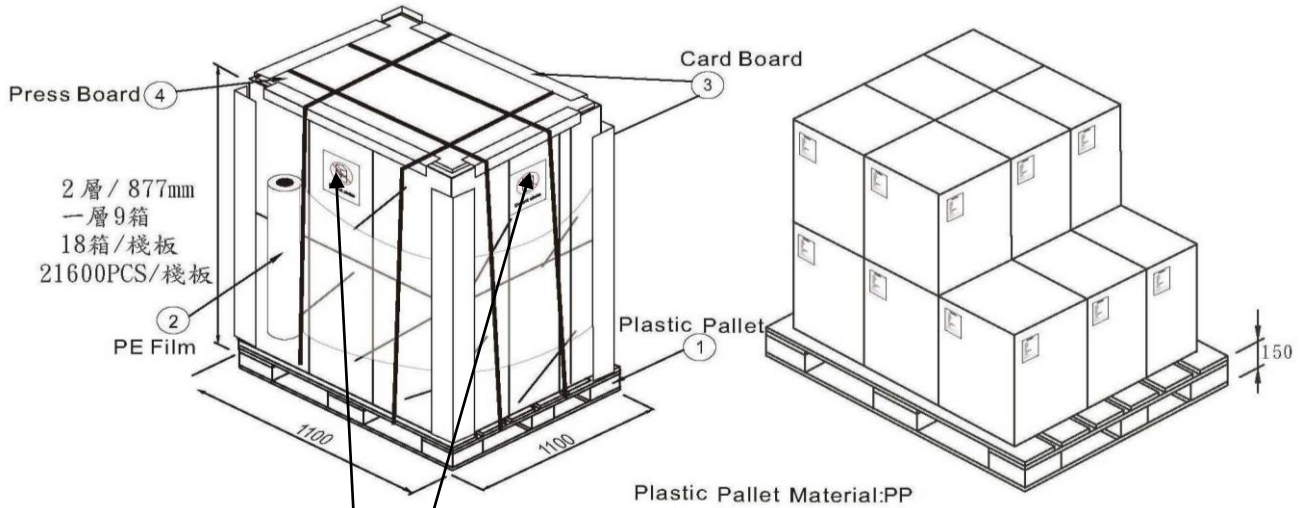


喇叭手柄朝下放置,不可裝反



1. 200pcs/卷
2. 1卷(1147g) 1盒:1269g
紙盒(334mm*334mm*54mm) 材質:瓦楞紙
3. 6盒/箱:9000g
外箱:(354mm*354mm*324mm) 材質:AXA t=9±1mm
4. 27箱/棧板:(251)kg
棧板:(1200*1100*133mm) 材質:瓦楞紙

Carton Box	334mmx334mmx54mm	1x200PCS=200PCS
Carton Box	354mmx354mmx360mm	200PCSx6=1200PCS



Eliminary