

SPECIFICATION FOR APPROVAL

承認書

Description : **Micro Dynamic Speaker**

Kingstate Part No. : **KDSG181308X-BOX1**

Customer's Model No. :

Specification No. : **DOD-S574**

Number Of The Edition :

12

CUSTOMER'S APPROVED SIGNATURE

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



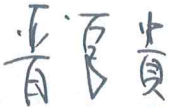
KINGSTATE

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Approved by	Checked by	Issued by
 2018.07.10	 2018.07.10	张新波 07/10/18'

A. SCOPE 範疇

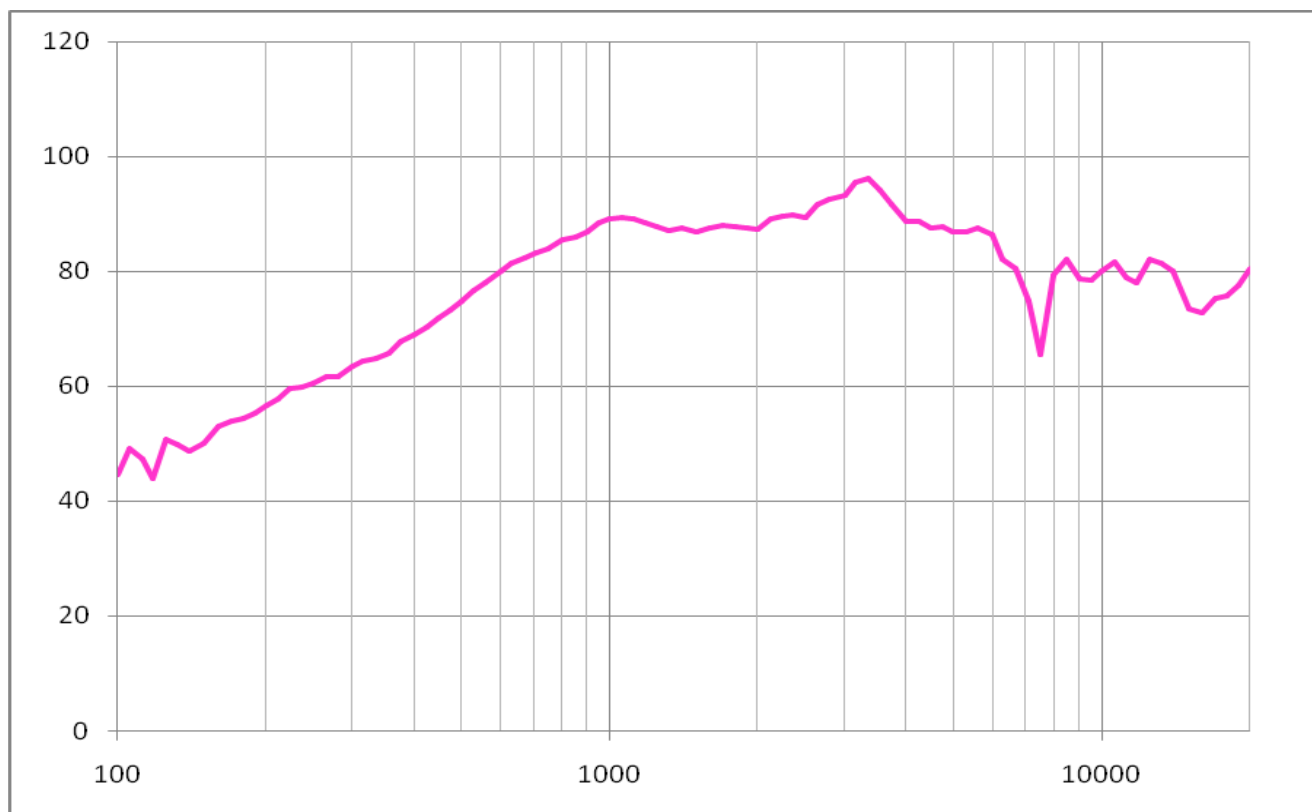
This specification applies speaker, **KDSG181308X-BOX1**

此規格書適用於喇叭音腔, **KDSG181308X-BOX1**

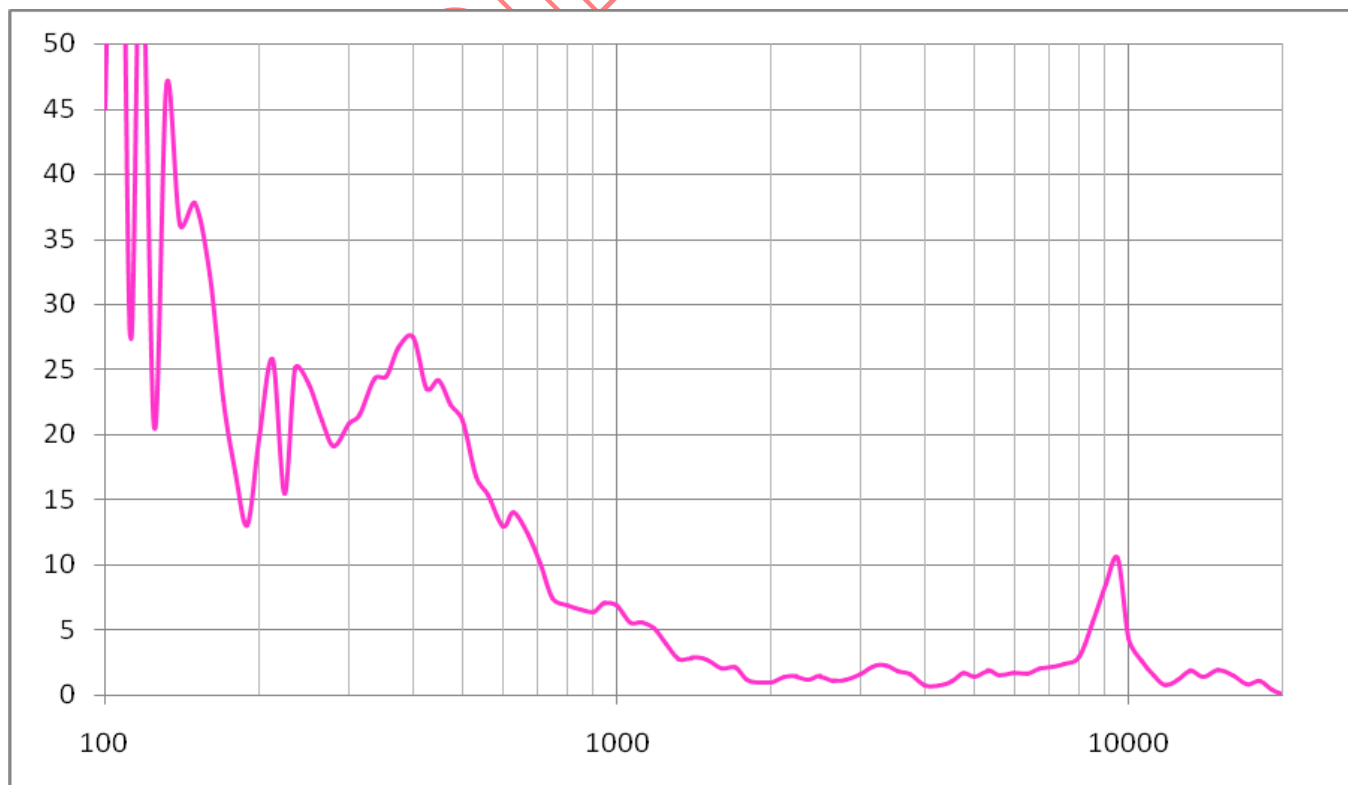
B. SPECIFICATION 規格

No.	Item	Symbol	Unit	Specification	Condition
1	Dimension 尺寸		mm	24*23*4.6	
2	Power Rating 功率		W	Rated. 1.0/ MAX.1.2	Maximum Power:IEC-60268-5 Filter 60s ON/120s Off 10 Cycles(Room Temp)
3	Impedance 阻抗	Ω	ohm	$8 \pm 15\%$	At 2.0KHz
4	Resonance Frequency 低音諧振	Fo	Hz	$900 \pm 20\%$ Hz	At 1.0V
5	Output S.P.L. 音壓位準		dB	$88 \pm 3\text{dB}(1\text{W}/10\text{cm})$	At 0.8、1.0、1.2、1.5KHz AVE
6	Frequency Rang 有效頻寬		Hz	F0---20K	Average SPL - 10db
7	Distortion 失真		%	10% Max.	At 1KHz,1W
8	Diaphragm 振膜			N/A	PEEK
9	Magnet 磁石		mm	N/A	Nd-Fe-B
10	Flux Density 磁通密度		Gauss	N/A	
11	Operating temp. 操作溫度		°C	-20 ~ +60	
12	Storage temp. 儲存溫度		°C	-30 ~ +70	
13	Buzze & Rattle 異常音				Not be audible at 2.83V sine wave between From 100~20K 輸入 2.83V 正弦波 100 到 20K 之間無異常音
14	Piece weight/Out Box weight 單重 / 箱重		g		
15	BOX Material 壳体材質			ABS	
16	Polarity 極性			Diaphragm shall move Forward when Apply a Positive DC. Current to the “+”	
17	Environmental Protection Regulation 環保法規			RoHS 2.0	

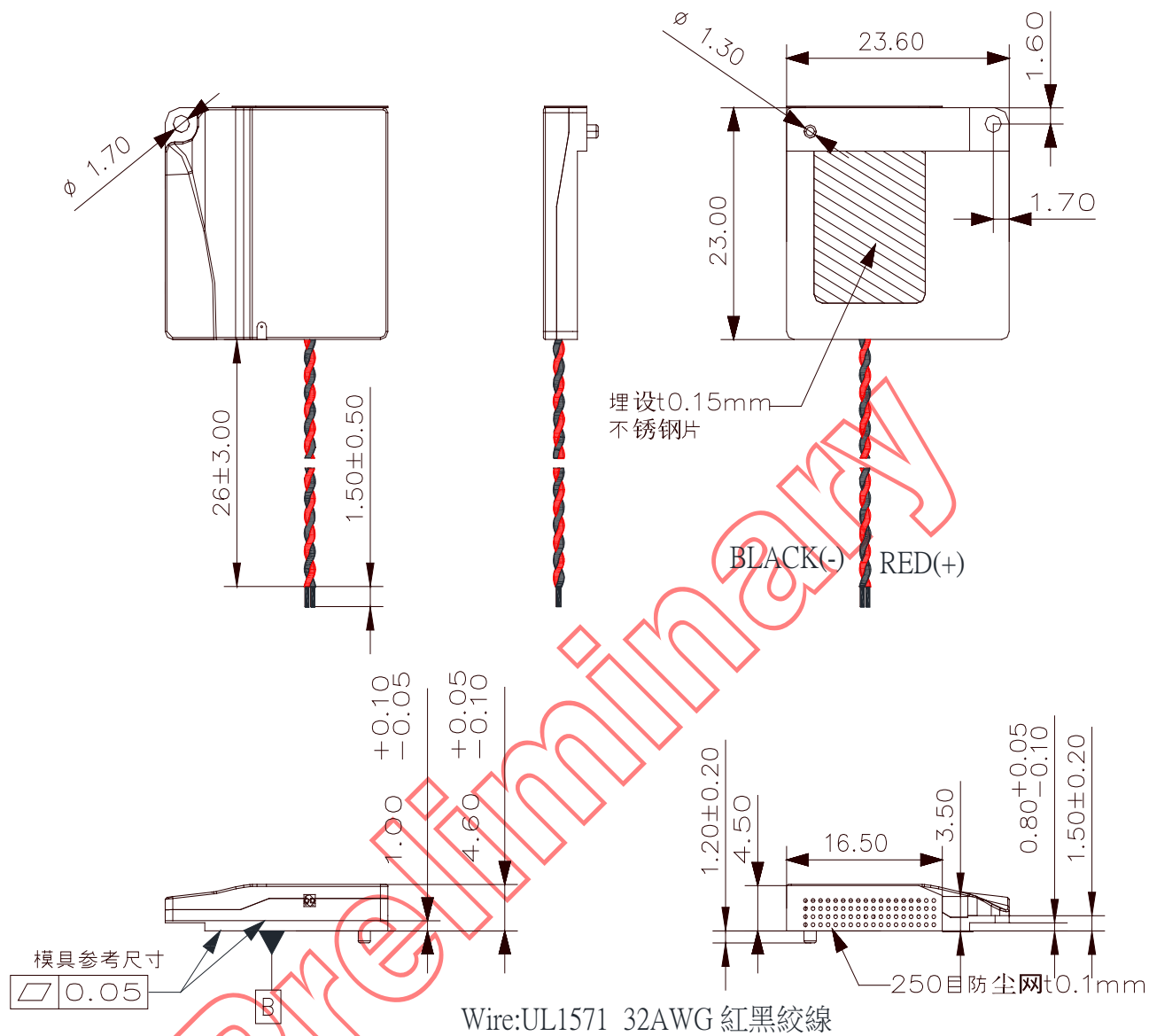
C. TYPICAL FREQUENCY RESPONSE CURVE 頻率響應曲線



D. THD CURVE 失真曲線



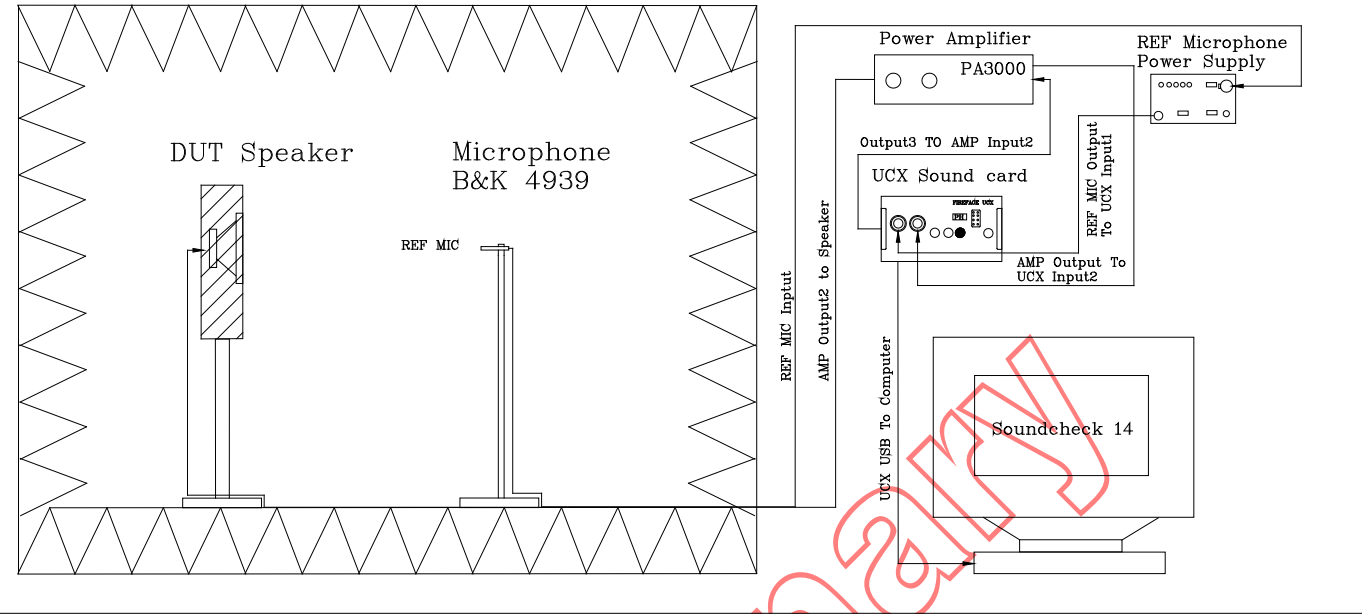
E . APPEARANCE DRAWING 外觀尺寸圖



Tol: ± 0.2
Unit: mm

F. MEASUREMENT CIRCUIT 測量線路

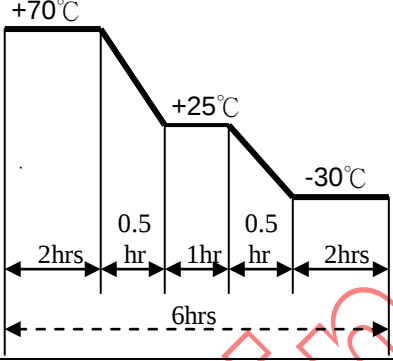
Speaker Testing framework diagram



G. MECHANICAL CHARACTERISTICS 機械特性

No.	Item	Test condition	Evaluation standard
1	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 不鬆動, 不脫落.
2	Lead Wire Pull Strength 線材拉力	The pull force shall be applied to double lead wire : Horizontal 3.0N(0.306kg) for 30 seconds. Vertical 2.0N(0.204kg) for 30 seconds. 雙線材水平方向施以 3.0N(0.306kg)的力量, 垂直方向施以 2.0N(0.204kg)的力量,各 30 秒.	No damage and cutting off 線材不鬆動, 不脫落.
3	Vibration Test 振動測試	Speaker shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55Hz band of vibration frequency to each of 3 per-pendicular directions for 2 hours. 振動週波數 10~55Hz、全振幅 1.5mm 於 X.Y.Z 3 個方向, 各 2 小時.	No obstacle to be harmful to normal operation; damages, cracks, rusts and distortions. Should not be audible at 2.83V sine wave between 100 ~20KHz.
4	Drop Test 落下測試	Drop the speakers contained in normal box onto the board 40mm thick 10 times from the height of 75cm 將揚聲器置於盒中, 自 75 公分高度落在 40mm 木板上共 10 次.	測試後無任何障礙防礙正常操作.輸入 2.83V 正弦波從 100 到 20KHz 之間無異常音.

G. ENVIRONMENTAL TEST 環境試驗

No.	Item	Test conditions	Evaluation standard
1	High temp. Test 高溫測試	After being placed in a chamber at +70°C for 96hours 置於+70°C環境中 96 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 2.83V sine wave between 100 to 20K. 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 6 小時後, 測試後無任何障礙防礙正常操作. 輸入 2.83V 正弦波從 100 到 20K 之間無異常音. Fo 與原規格值相同, 輸出音壓變化量在±3dB 內.
2	Low temp. Test 低溫測試	After being placed in a chamber at -30°C for 96hours. 置於-30°C環境中 96 小時	
3	Humidity test 相對濕度測試	After being placed in a chamber at +40°C and 90~95% RH relative humidity for 96hours. 置於+40°C, 相對濕度 90~95%環境中 96 小時	
4	Temp. cycle test 溫度循環測試	The part shall be subjected to 5 cycles. One cycle shall be consist of: 單體承受溫度循環測試 5 次, 其循環內容如圖示: 	

H. RELIABILITY TEST 信賴性試驗

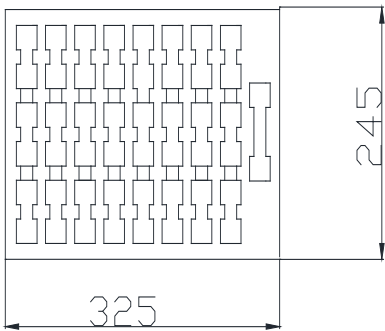
No.	Item	Test conditions	Evaluation standard
1	Load test 連續負荷	1W white noise is applied for 96 hours, at room temp product. 在室溫下, 輸入功率 1W, 白雜音連續操作 96 小時.	Being placed for 1 hours at +25°C, speaker shall be measured. No obstacle to be harmful to normal operation; damages, cracks, rusts, etc. Should not be audible at 2.83V sine wave between 100 to 20K. 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. 輸入 2.83V 正弦波從 100 到 20K 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 : +15 ~ +35°C	b) Humidity : 45-85%	c) Pressure : 860-1060mbar
一般測試條件 :	a) 溫度 : +15 ~ +35°C	b) 濕度 : 45-85%	c) 氣壓 : 860-1060mbar
Judgement Test Condition	a) Temperature : +20 ± 3°C	b) Humidity : 60-70%	c) Pressure : 860-1060mbar
爭議時測試條件:	a) 溫度 : +20 ± 3°C	b) 濕度 : 60-70%	c) 氣壓 : 860-1060mbar

I. PACKING STANDARD 包裝規格

50PCS

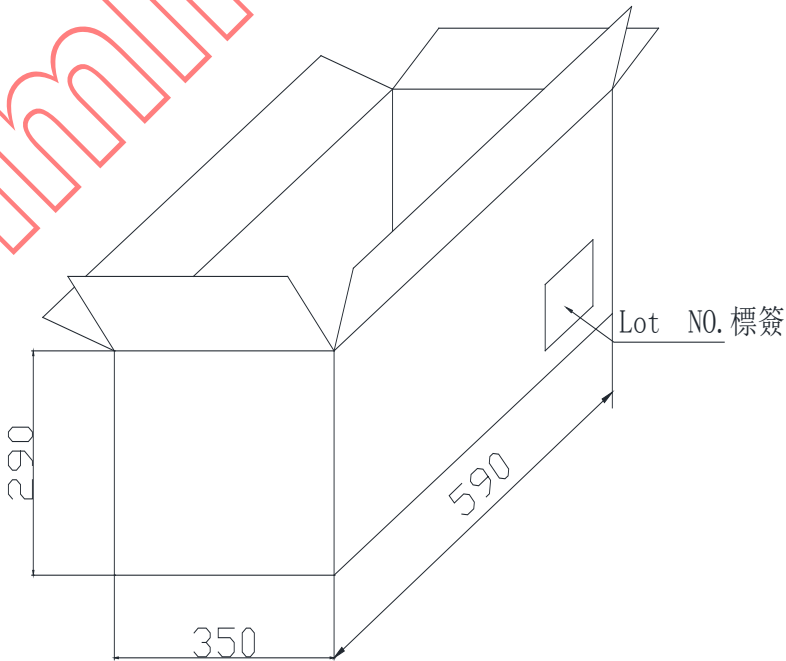
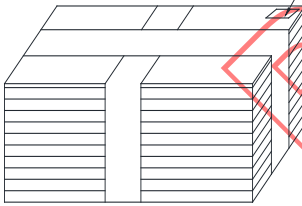


Lot No.	XXXXXXXXXX
Model No.	XXXXXXXXXXXX
Quantity.	XXXX Pcs
Date:	例:0116
 KINGSTATE ELECTRONICS CORP.	



50x10=500PCS

Lot NO. 標籤



Lot NO. 標籤

500x5=2500PCS

Tray	325*245mm	50pcs
Unit	325*245mm	50pcs*10=500pcs
Box	350*590*290mm	500pcs*5=2500pcs