

SPECIFICATION FOR APPROVAL

承 認 書

Description : Dynamic Telephone Receiver

Kingstate Part No. : KDRG1506Q-32PF1

Customer's Model No. : _____

Specification No. : DOD-6401

Number Of The Edition : 1.2

CUSTOMER'S APPROVED SIGNATURE

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Approved by	Checked by	Issued by

A. SCOPE 範疇

This specification applies receiver, KDRG1506Q-32PF1

此規格書適用於受話器, KDRG1506Q-32PF1

B. SPECIFICATION 規格

No.	Item	Symbol	Unit	Specification	Condition
1	Dimension 尺寸		mm	15* 6 *2.2	Refer to attached drawing in details
2	Ratred Power 額定功率		W	20m	
3	Max. Input Power 最大輸入功率		W	30m	must be normal at Signal IEC268-5 (20mW) for one minute
4	Impedance 阻抗	Ω	ohm	$32 \pm 15\%$	At 1kHz 179mVrms input
5	S.P.L. 音壓位準		dB	108 ± 3	at 1.0KHz, 0dBSPL = 20 μ Pa Input179mVrms, with B&K artificial ear 4153
6	Frequency Rang 有效頻寬		Hz	200~3.4K	
7	Distortion 失真		%	5% Max.	at 1KHz
8	Operating temp. 操作溫度		°C	-20~+60	
9	Storage temp. 存儲溫度		°C	-30~+70	
10	Buzzer & Rattle 異常音				Must be free audible noise (buzzes and rattles)(300~3.4KHz frequency range , input level up to 0.8Vrms) 无杂音和异常音(输入信号频率范围 300Hz~3.4KHz 输入电压 0.8 Vrms)
11	Weight 重量		g	About 0.4	
12	Material 材質			PPA	
13	Environmental Protection Regulation 環保法規			HSF	

C. TYPICAL FREQUENCY RESPONSE CURVE 頻率響應曲線

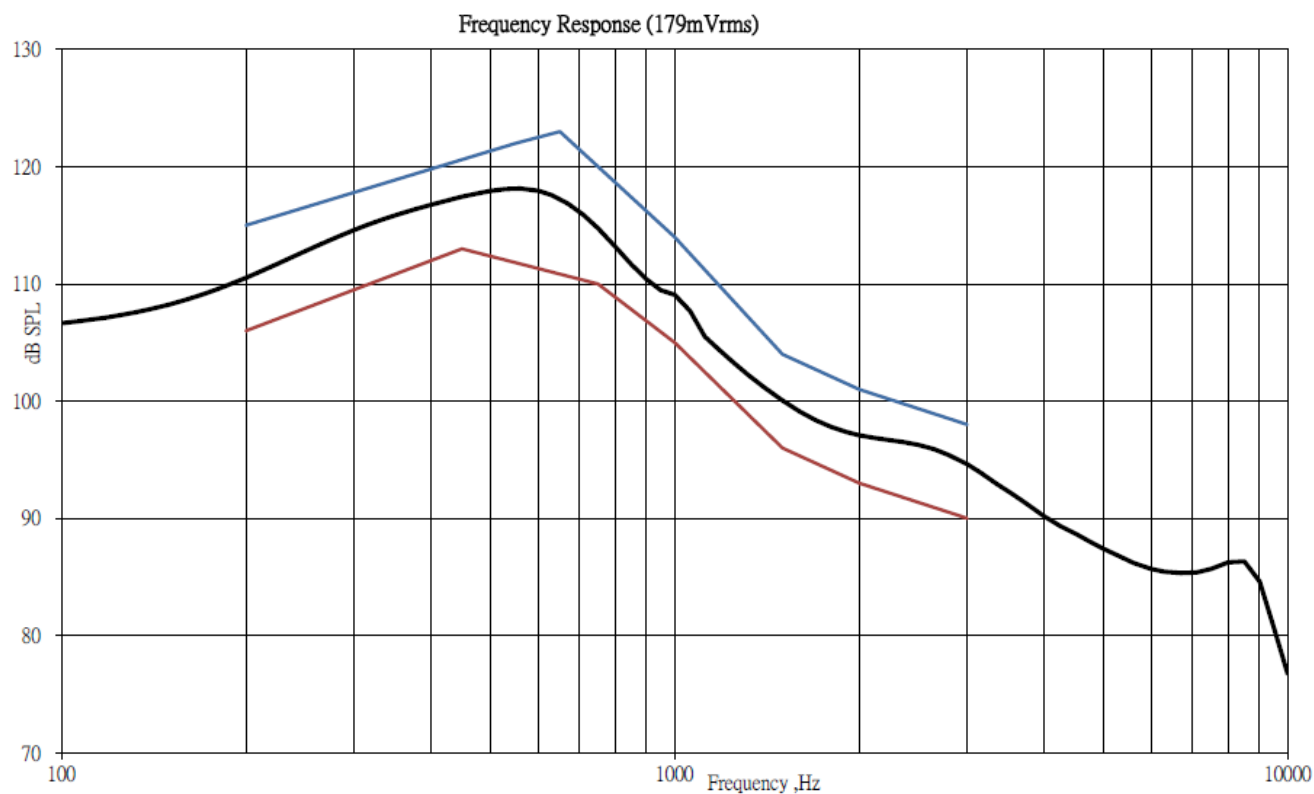


Table 1: Tolerance Limits Date for FR

Frequenc y(Hz)	Upper Limits(dB)	Frequenc y (Hz)	LowerLimi ts(dB)
200	115	200	106
550	122	450	113
650	123	750	110
1000	114	1000	105
1500	104	1500	96
2000	101	2000	93
3000	98	3000	90

D.THD 失真圖

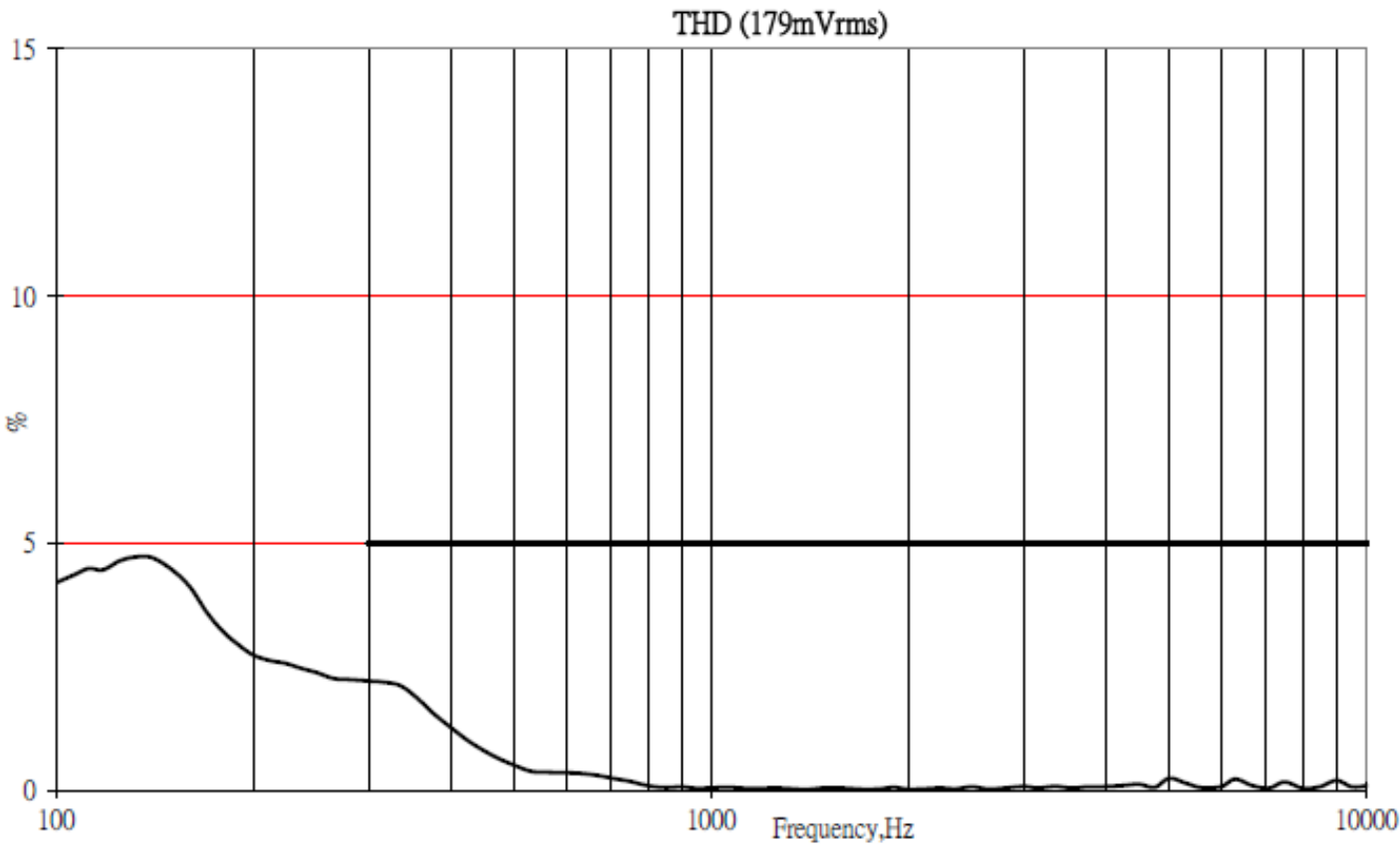
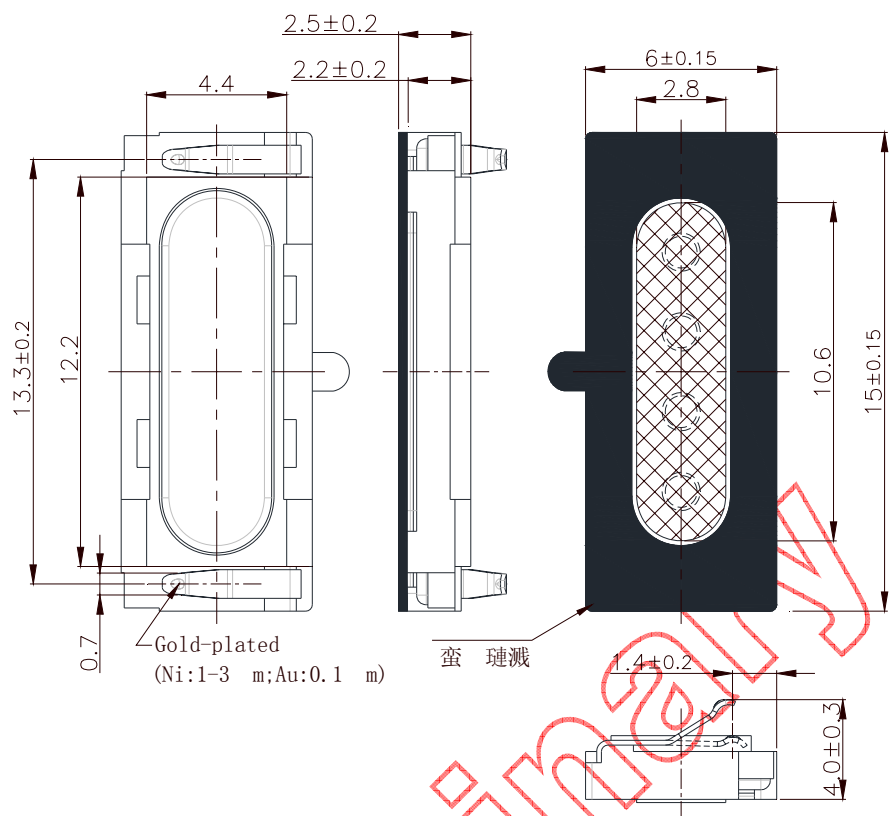


Table 2: Limits Date for THD

Frequency (Hz)	Limits (%)
300	5
5000	5

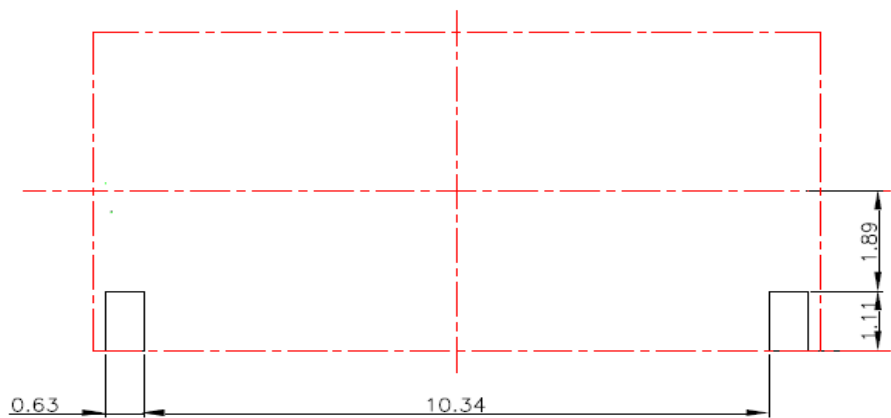
E. APPEARANCE DRAWING 外觀尺寸圖



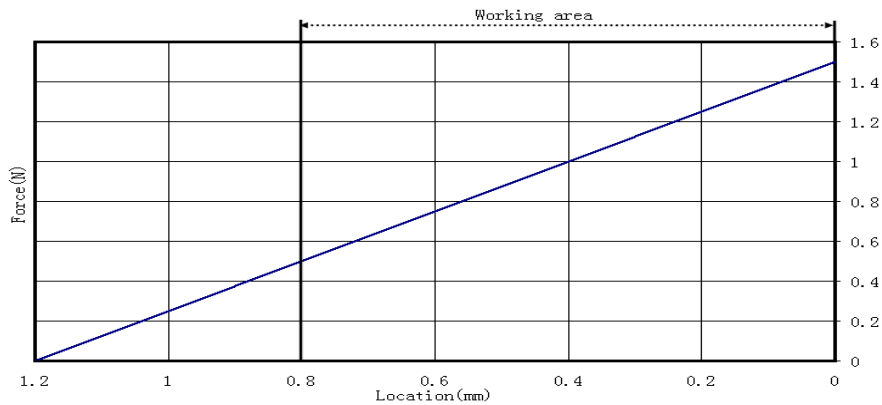
Tol: ± 0.3

Unit: mm

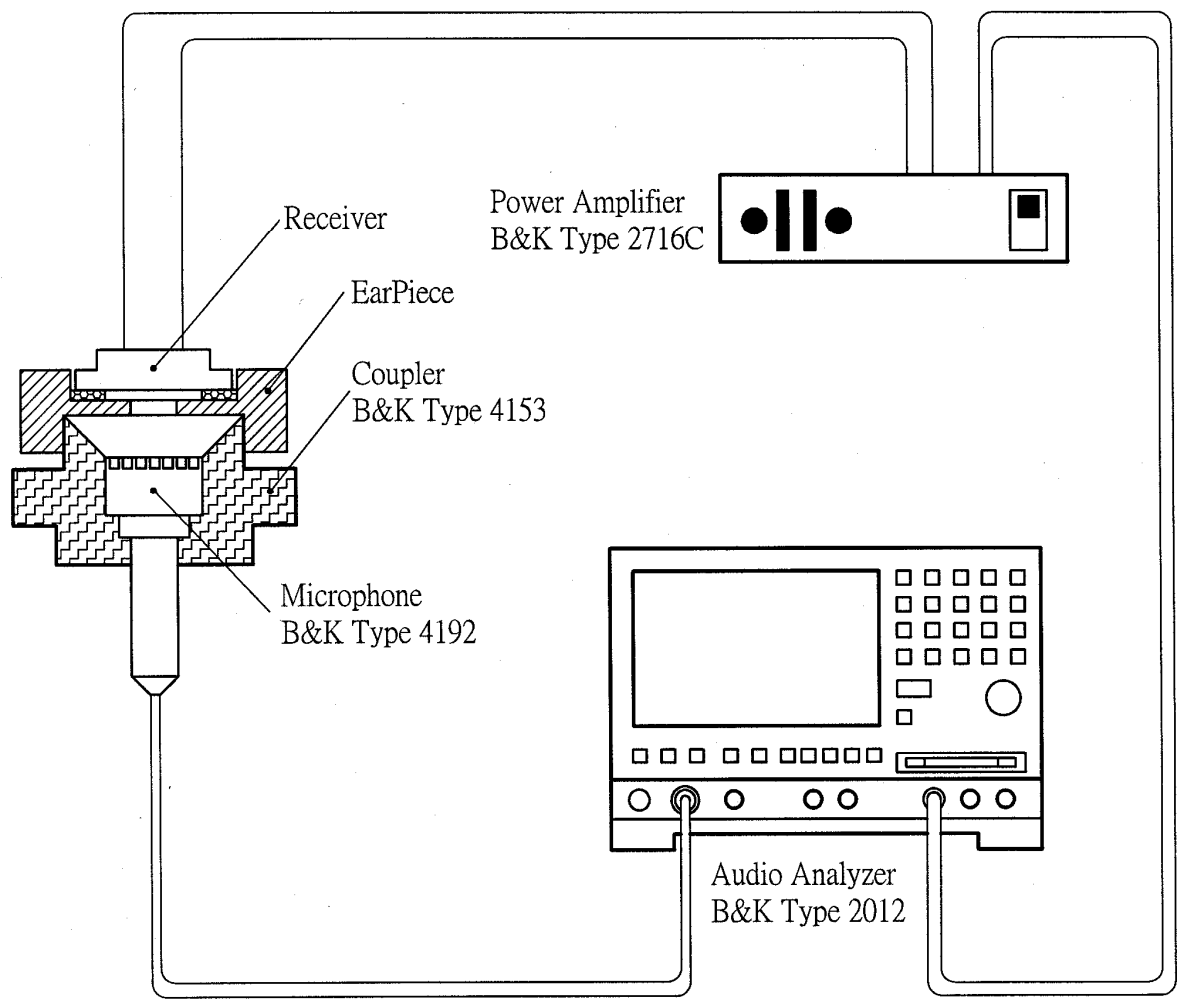
F. RECOMMENDED PWB PAD LAYOUT 建議組裝規範



FORCE PROGRESSION OF ONE SPRING CONTACT



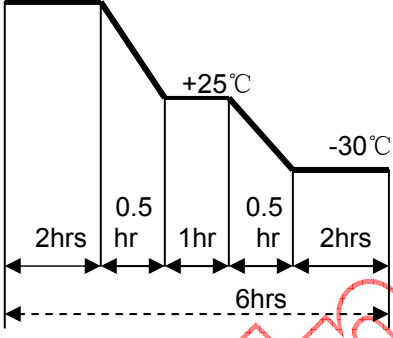
G. MEASUREMENT CIRCUIT 測量線路



H. MECHANICAL CHARACTERISTICS 機械特性

No.	Item	Test conditions	Evaluation standard
1	Solderability 焊錫附着性 (Connector excepted) 端子類不適用此項	Stripped wires of lead wires are immersed in rosin for 5 seconds and then immersed in solder bath of $+270\pm5^{\circ}\text{C}$ for 3 ± 0.5 seconds. 裸線部份浸入松香溶液 5 秒後,再浸入 $+270\pm5^{\circ}\text{C}$ 溶融焊錫槽 3 ± 0.5 秒.	90% min. stripped wires shall be wet with solder.(Except the edge of terminal) 浸入裸線部份附着焊錫 90% 以上.(末端斷面不算).
2	Vibration test 振動測試	Receiver 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 0.8V sine wave between 300Hz ~ 3.4KHz
3	Drop test 落下測試	Drop the receiver contained in normal box onto the board 40mm thick 10 times from the height of 100cm 將受話器置於盒中,自 100 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.且在輸入 0.8V 正弦波從 300Hz 到 3.4KHz 之間無異常音.

I. ENVIRONMENT TEST 環境測試

No.	Item	Test conditions	Evaluation standard
1	High temp. Test 高溫測試	After being placed in a chamber at +70°C for 96 hours 置於+70°C環境 96 小時	Being placed for 6 hours at +25°C, receiver shall be measured. No obstacle to be harmful to normal operation; damages, cracks, rusts, etc. Should not be audible at 0.8V, sine wave between 300 ~3.4KHz. 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。且在輸入 0.8V 正弦波從 300 到 3.4KHz 之間無異常音。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 96 hours. 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 96 hours. 置於+40°C，相對濕度 90~95%環境中 96 小時	
4	Thermal cycle test 溫度循環測試	The part shall be subjected 5 cycles. One cycle shall be 12 hours and consist of; +70°C 	

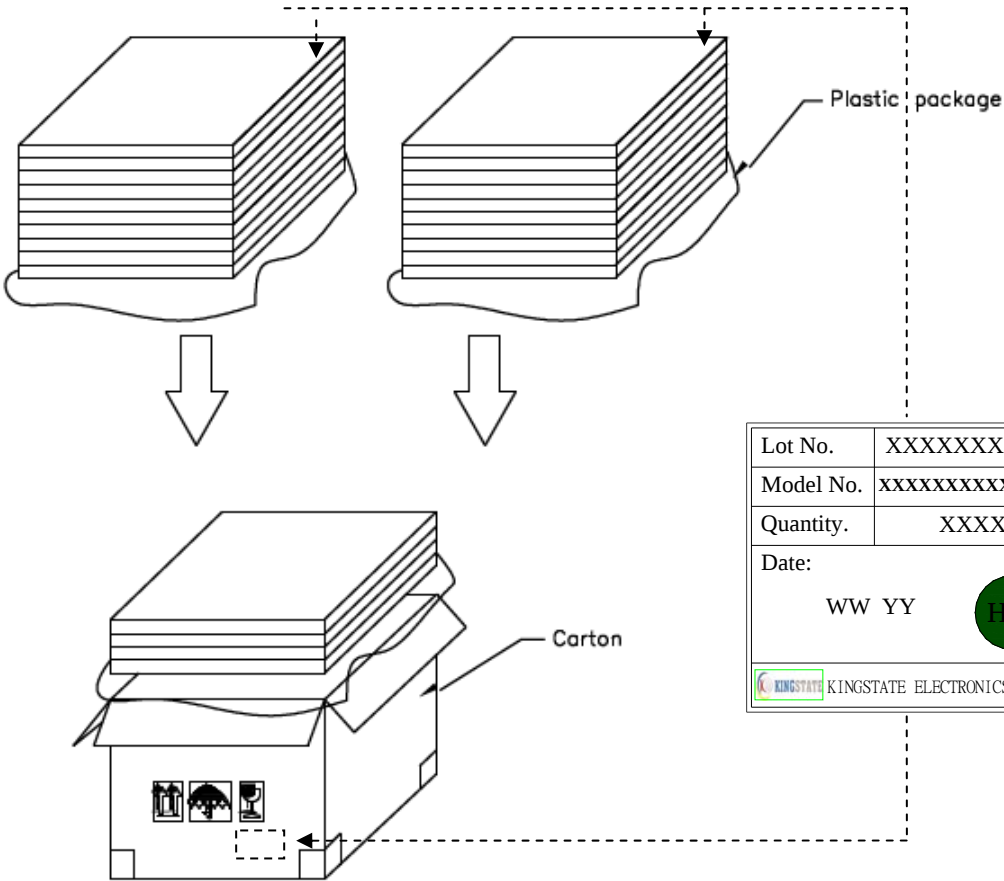
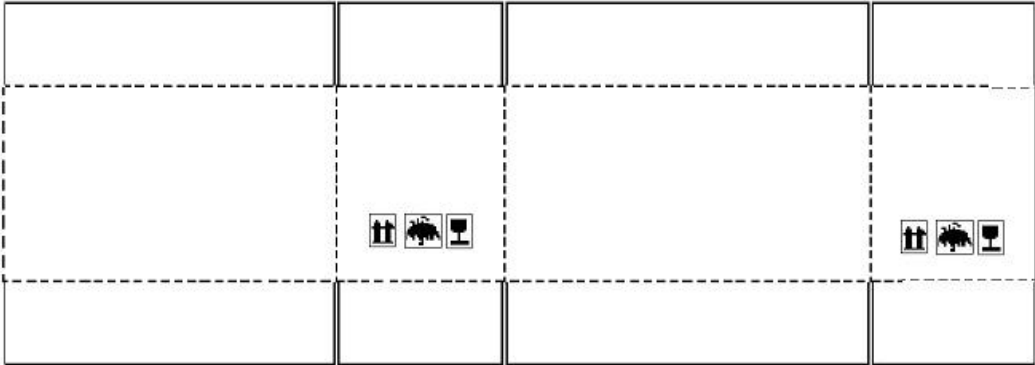
J. RELIABILITY TEST 信賴性測試

No.	Item	Test conditions	Evaluation standard
1	Load test 連續負荷	Rated Power White noise is applied for 96 hours 連續 96 小時輸入額定功率的白色噪音	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 0.8V sine wave between 300 ~3.4KHz. 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 0.8V 正弦波從 300 到 3.4KHz 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
Judgment 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

K.PACKING STANDARD 包裝規格



Tray	360*230*10	10*10=120pcs
Unit	360*230*115	100pcs*10=1000pcs
Carton box	375*240*260	1000pcs*2=2000pcs