規 格 承 認 書

PECIFICATION FOR APPROVAL

客　戶
CUSTOMER　：

項　目
ITEM　：　铁壳内磁喇叭

型　號
TYPE　：　GSPK5713TN-8R2W 内磁

描述
DESCRIPTION　：　φ57*H13mm 内磁 8R 2W　S.P.L：85dB± 3dB

客戶料號
CUSTOMER NO.：

規 格 書 號
SPECIFICATION NO.：

版　本
EDITION NO.　：　V1.0

日　期
DATE　：　20

客戶承認

CUSTOMER CONFIRM AND SIGN

檢查 TESTED BY	審核 CHECKED BY	承認 APPROVED BY

東莞市贏海電子有限公司

DONGUAN INGHAI ELECTRONICS CO.,LTD

製作 ISSUED BY	審查 CHECKED BY	確認 APPROVED BY
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A. SCOPE 範疇

This specification applies speaker, GSPK5713TN-8R2W 內磁

此規格書適用於喇叭, GSPK5713TN-8R2W 內磁

1. 測試條件 TEST CONDITION

Unless otherwise specified,the standard range of atmospheric conditions for making measurements and tests are as follows (無特定要求時如下述測試條件) : 15℃~ 35℃, 25% ~85%RH, 860mbar ~mbar.
If there is no doubt about the results,measurement shall be made with in the following limits （當判定有疑義的場合如下述測試條件）:20℃±3℃,60% ~ 70%RH,860mbar ~1060mbar.

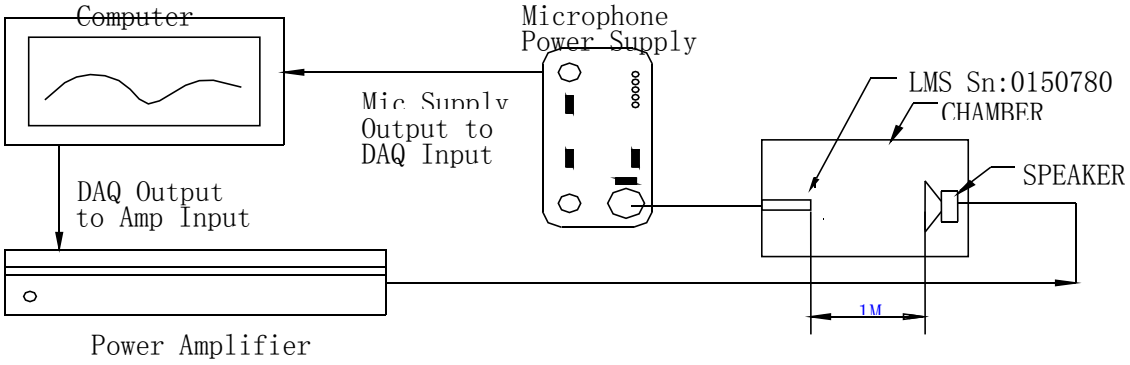
2. 一般規範 GENERAL SPECIFICATIONS

NO.	ITEM	SPECIFICATIONS
2.1	類型 Type	FULL RANGE
2.1	口徑 Dimensions	2” inch
2.3	重量 Weight	17.6g±2g/PC

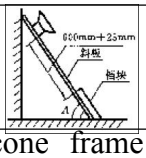
3. 電氣特性 ELECTRICAL AND SPECIFICATION

NO.	ITEM	SPECIFICATIONS	
3.1	额定阻抗 Rated Impedance	8Ω±15% At 1000Hz 1.0V	
3.2	直流阻抗 Dc resistance	8Ω±5 %	
3.1	谐振频率 Resonance frequency	450Hz±20% WITHOUT BAFFLE	
3.2	有效频率范围 Frequency range	F0-5KHZ Average SPL-10 dB	
3.3	灵敏度 Output S.P.L. (0dB=20 ubar)	85dB ±3dB	AT 0.1W/ 0.1M Average at(800, 1000, 1200, 2000Hz)
3.4	额定功率 Rated input power	2.0W	
3.5	最大功率 MAX. Input Power	2.5 W	
3.6	失真 Distortion	5%max. At 1kHz 2w/1m	
3.7	異常音 Buzz Rattles	Must be Normal at Sine wave 2.0V at 370-5KHz	
3.8	極性 Polarity	When a positive D.C voltage is applied to the terminal marked (+) or red, the diaphragm should move to the front	

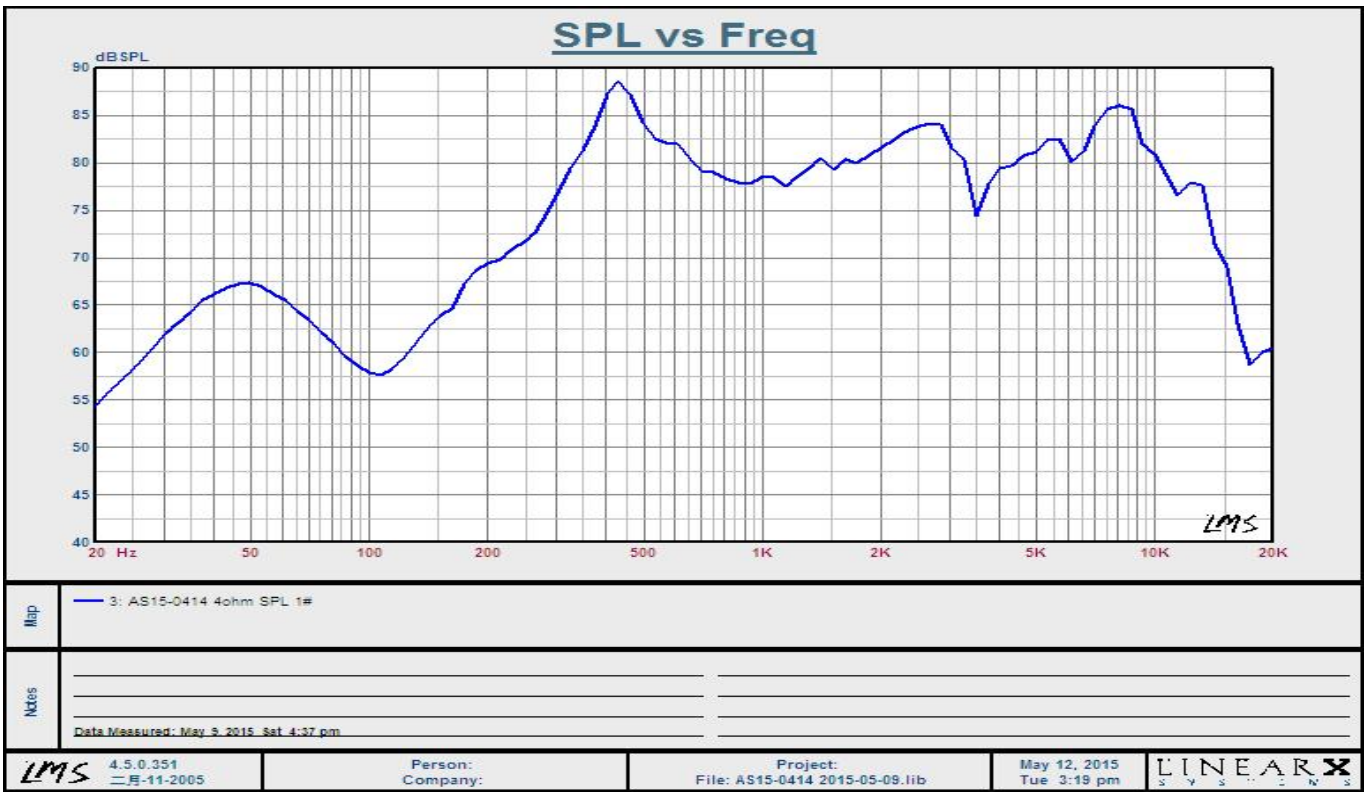
4. 揚聲器模式測量示意圖 SPEAKER MODE MEASUREMENT DIAGRAM

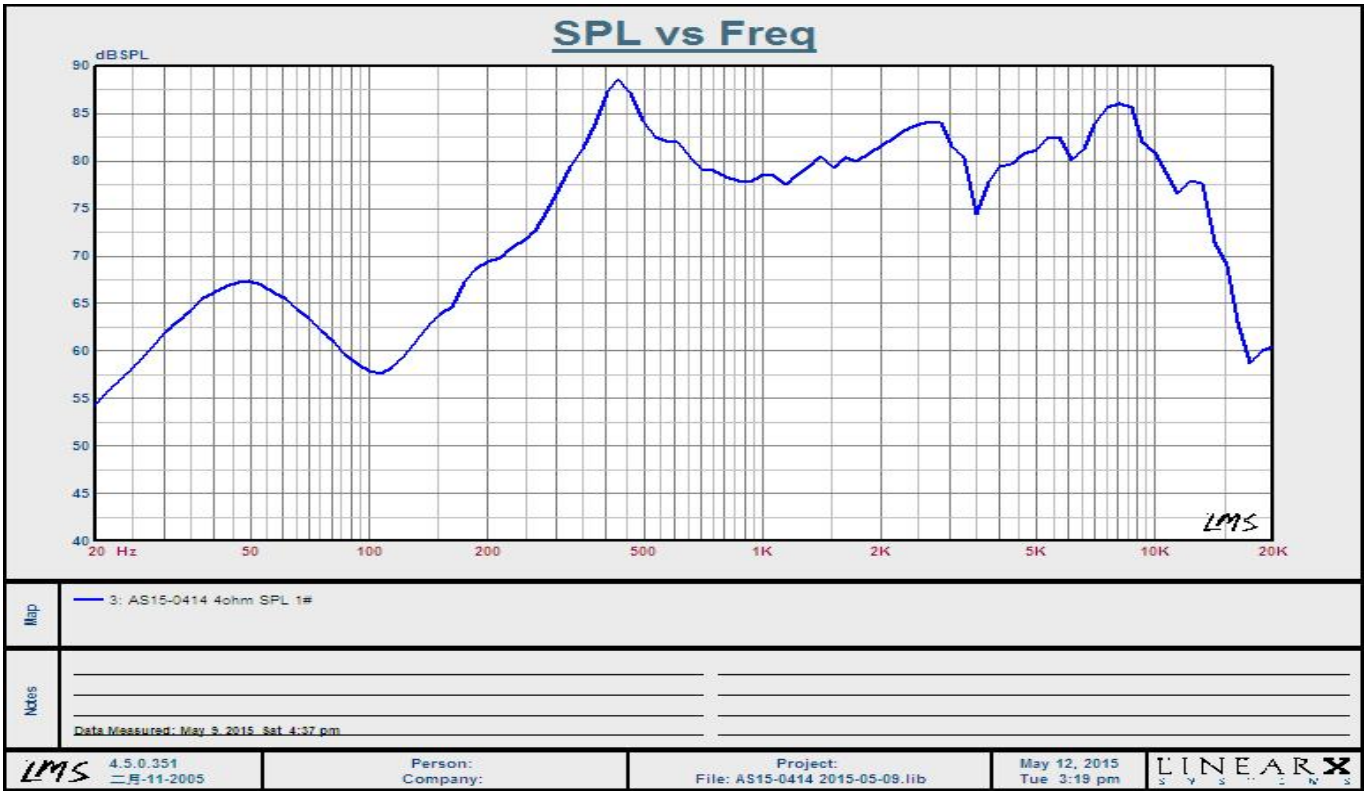


5. 環境試驗特性 ENVIRONMENTAL CHARACTERISTICS

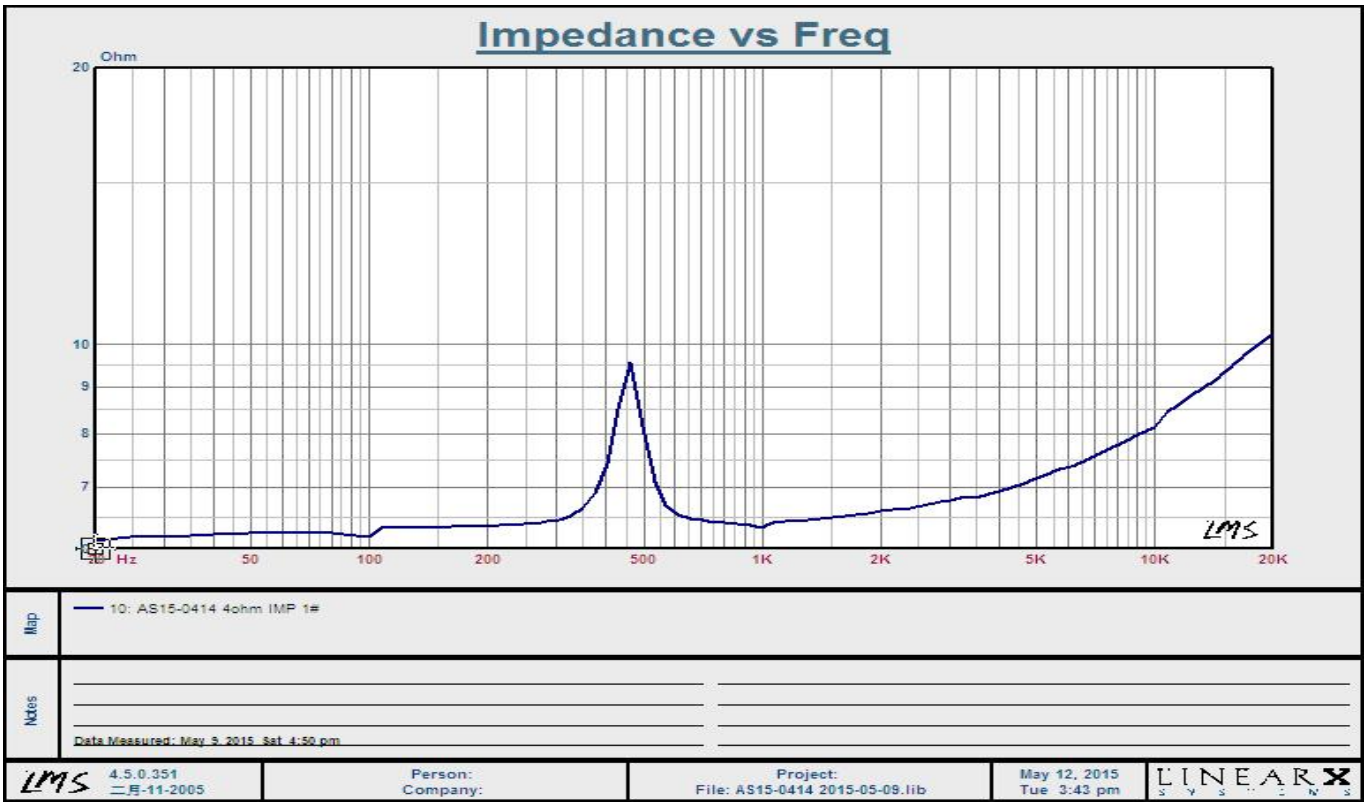
NO.	ITEM	CONDITIONS
5.1	工作温度 Operating temperature range	-20℃ ~+50℃
5.2	贮存温度 Storage temperature range	-25℃ ~+65℃
5.3	外观检测 Appearance	Should not exist any obstacle to be harmful to normal operation : damages \ cracks \ rusts and distortions etc.
5.4	试验后检测 Results of after test	Sensitivity difference shall be within (3dB) and should satisfy the test described under item 3.7 after each following test.
5.5	拉力试验 Terminal strength	Capable of withstanding **(2N)** load for **(10 sec.)** without resulting in any damage or rejection .
5.6	高温试验 High temperature durability	After having been in a test chamber for **16 hours** at the condition of **+55℃** ±2℃ and then let **6 hours** in a room .
5.7	低温试验 Low temperature durability	After having been in a test chamber for **16 hours** at the condition of **-20℃** ±3℃ and then let **6 hours** in a room .
5.8	湿度试验 Humidity durability	After having been in a test chamber for **48 hours** at the condition of **+40℃**±2℃ **90%~95%** RH and then let **6 hours** in a room .
5.9	温度循环试验 Temperature cycle durability	Low temperature **-10** ℃ ±2℃ (1 hour) / high temperature **+55**±2℃ (1 hour) : 1 cycle , total 5 cycles and then let 6 hours in a room .
5.10	振动试验（捆包状态） Vibration durability（PACK）	Frequency Range:10Hz ~ 55Hz~10Hz Amplitude : 0.35mm Duration : 2h per axis=10 cycles ; 3 axis
5.11	跌落冲击试验 Drop impact test	Speaker 
5.12	绝缘抵抗 Insulation resistance	Voice coil and magnetic circuit terminal and cone frame between the metal parts of the insulation resistance of not less than 1 1MΩ音圈引出端与盆架和磁路的金属部分之间的绝缘电阻不小**1MΩ**
5.13	连续负荷 Load test	Rated Power, Pink Noise at 460HZ-9KHz applied for 96 Hours. After Test, Meet Item **3.7**

6. 頻率響應曲線 FREQUENCY RESPONSE CURVE

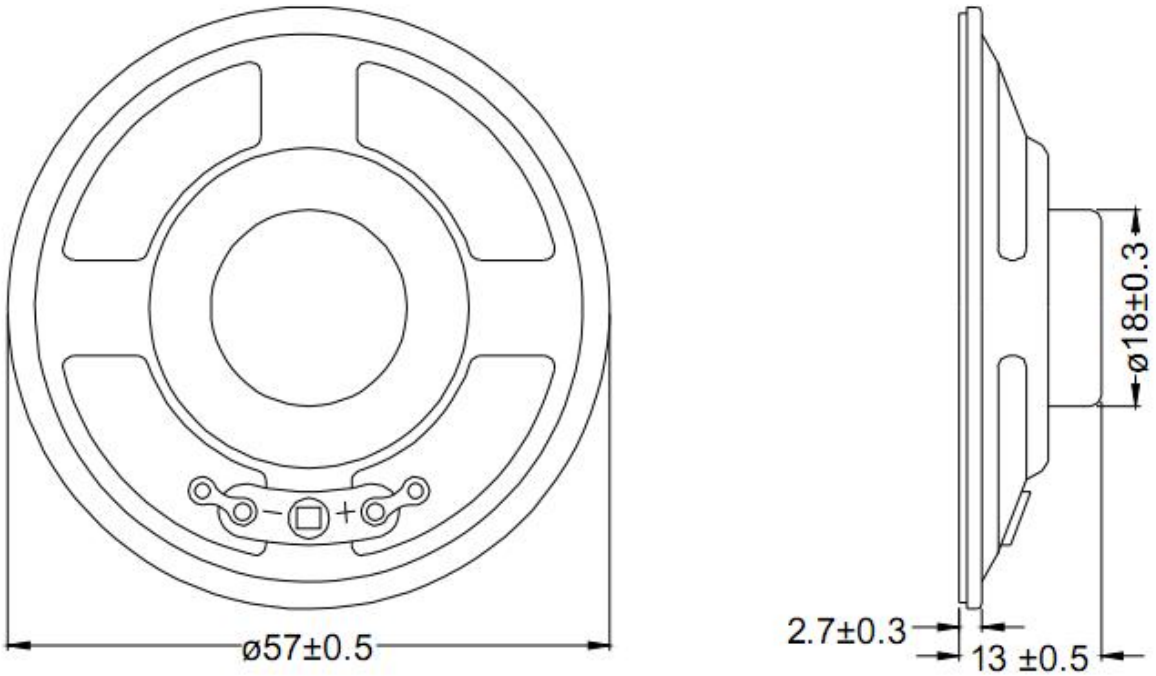


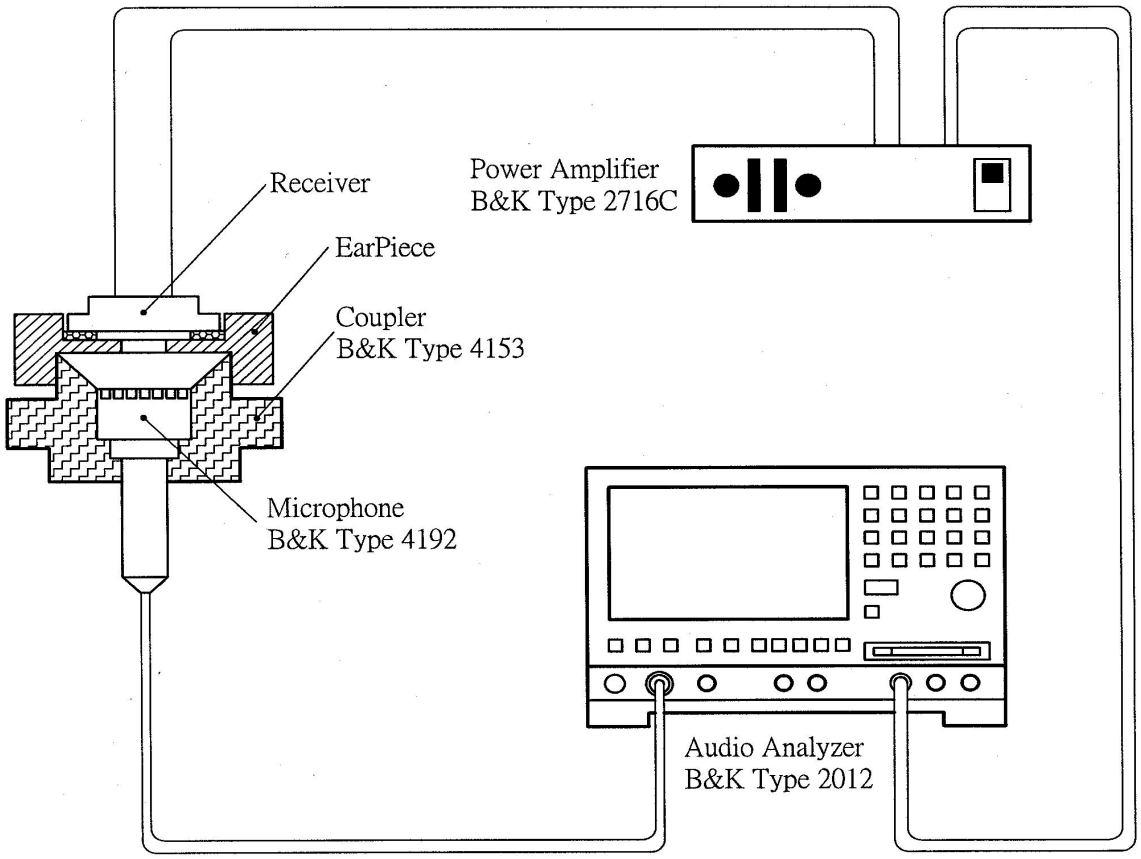


7. 阻抗曲線& T/S 參數曲線 IMPEDANCE CURVE & T/S PARAMETER CURVE



D. APPEARANCE DRAWING 外觀尺寸圖



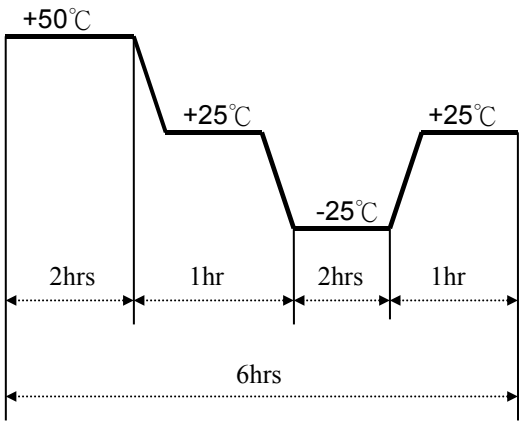


F. MECHANICAL CHARACTERISTICS 機械特性

No.	Item	Test conditions	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	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 890mV sine wave between 50Hz ~ 20KHz 測試後無任何障礙防礙正常操作.且在輸入 890mV 正弦波從 50Hz 到 20KHz 之間無異常音.
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 75cm 將受話器置於盒中，自 75 公分高度落在 40mm 木板上共 10 次.	

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 +50℃ for 796hours 置於+50℃環境 96 小時	Being placed for 6 hours at +25℃, receiver shall be measured. No obstacle to be harmful to normal operation; damages, cracks, rusts, etc. Should not be audible at 890mV, sine wave between50Hz ~20KHz.
2	Low temp. Test 低溫測試	After being placed in a chamber at -25℃ for 96 hours. 置於-25℃環境中 96 小時	
3	Humidity test 相對濕度測試	After being placed in a chamber at +40 ℃ and 95±5%RH relative humidity for 96 hours. 置於+40℃, 相對濕度 95±5%環境中 96 小時.	

4	Thermal cycle test 溫度循環測試	The part shall be subjected to 6 cycles. One cycle shall be consist of : 單體承受溫度循環測 6 次, 其循環內容如圖示:  	S.P.L. deviation of unit should be within ±3dB 經測試後, 靜置於+25℃（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 890mV 正弦波從 50Hz 到 20KHz 之間無異常音. 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
320±10℃ / 3±1 Sec

I. RELIABILITY TEST 信賴性試驗

No.	Item	Test conditions	Evaluation standard
1	Load test 連續負荷	565mV white noise is applied for 24 hours, at room temp. 在室溫下,輸入功率 565mV, 白雜音連續操作 24 小時.	Being placed for 1 hours at +25℃, receiver shall be measured. No obstacle to be harmful to normal operation; damages, cracks, rusts, etc. Should not be audible at 890mV sine wave between 50Hz ~20KHz. S.P.L. deviation of unit should be within ±3dB 經測試後, 靜置於+25℃（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 890mV 正弦波從 50 到 20KHz 之間無異常音. 輸出音壓變化量在±3dB 內.

TEST CONDITION.

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