SPECIFICATION FOR APPROVAL

承　　認　　書

Customer :

Description. : Micro Receiver Unit

MingLi Part No. : SD28-EH

Customer's Model No. :

Specification No. : 2023-05-20

Number Of The Edition : 1.0

CUSTOMER'S APPROVED SIGNATURE		

Changzhou E-Sound Electronics Co., Ltd.

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Approved by	Checked by	Issued by
周剑锋	鲍爱华	王桃

A. SCOPE 範疇

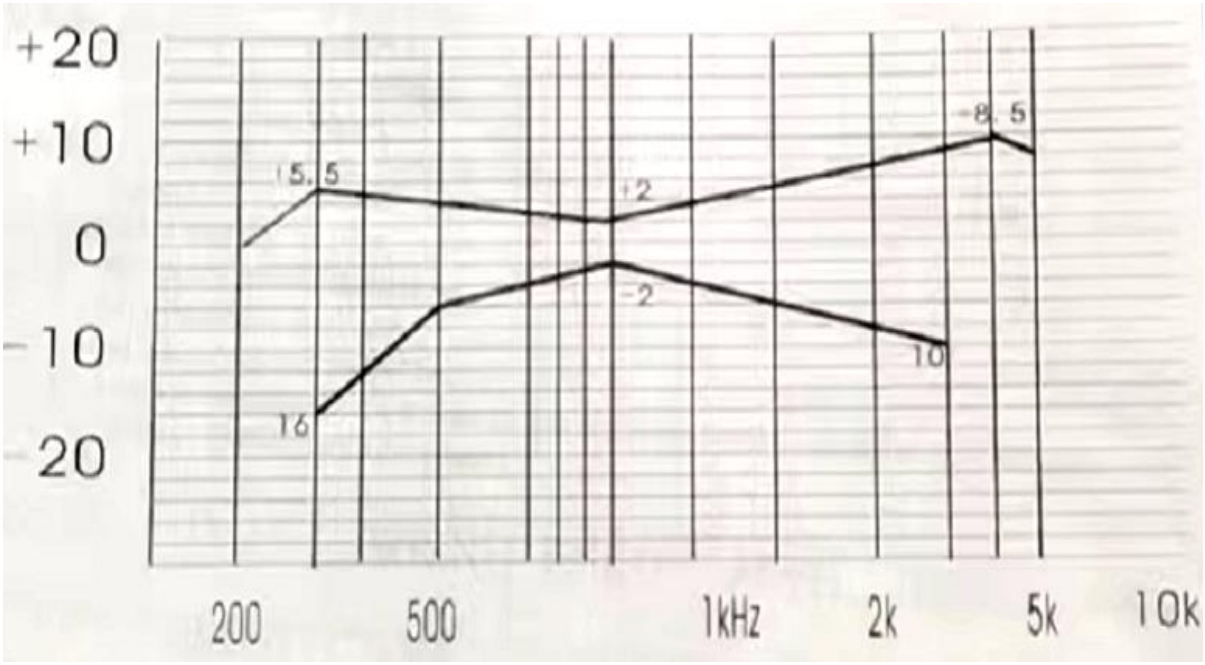
This specification applies receiver, **SD-28EH**

此規格書適用於受話器, **SD-28EH**

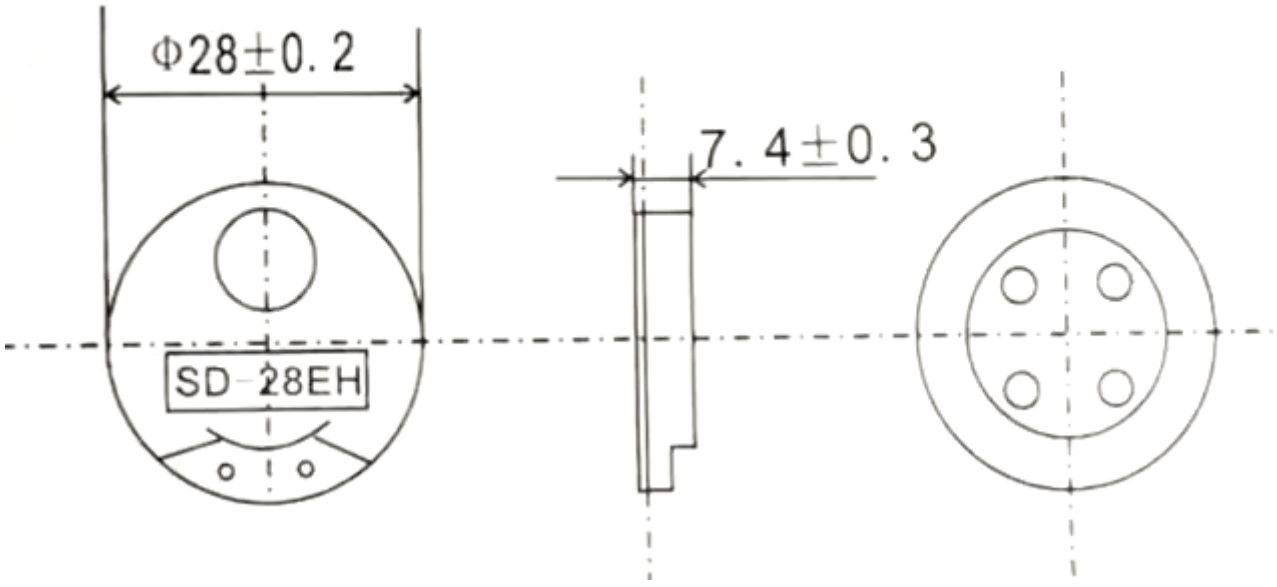
B. SPECIFICATION 規格

No.	Item	Symbol	Unit	Specification	Condition
1	Dimension 尺寸		mm	28±0.2 mm x7.2±0.2 mm(t)	Refer to attached drawing in details
2	Nominal input Power 正常输入功率		mW	10	
3	Max. Input Power 最大輸入功率		mW	30	White noise for 1 minute
3	Impedance 阻抗	Ω	ohm	150± 20%	At 1kHz
4	S.P.L. 音壓位準		dB	100± 3	At 1KHz 100mV with IEC318 coupler
5	Frequency Rang 有效頻寬		Hz	200∽4.0K	
6	Distortion 失真			5% max	at 1K Hz 10mW
7	Axial 轴向		dB	≥-19	at 1K Hz 100mV
8	Radial 径向		dB	≥-22	at 1K Hz 100mV
9	Voice Coil 音圈直徑			7.3	
10	Operating temp. 操作溫度		℃	-30∽+65	
11	Buzze & Rattle 異常音				
12	Weight 重量		g	4.2	

C. TYPICAL FREQUENCY RESPONSE MARK　頻率響應框图

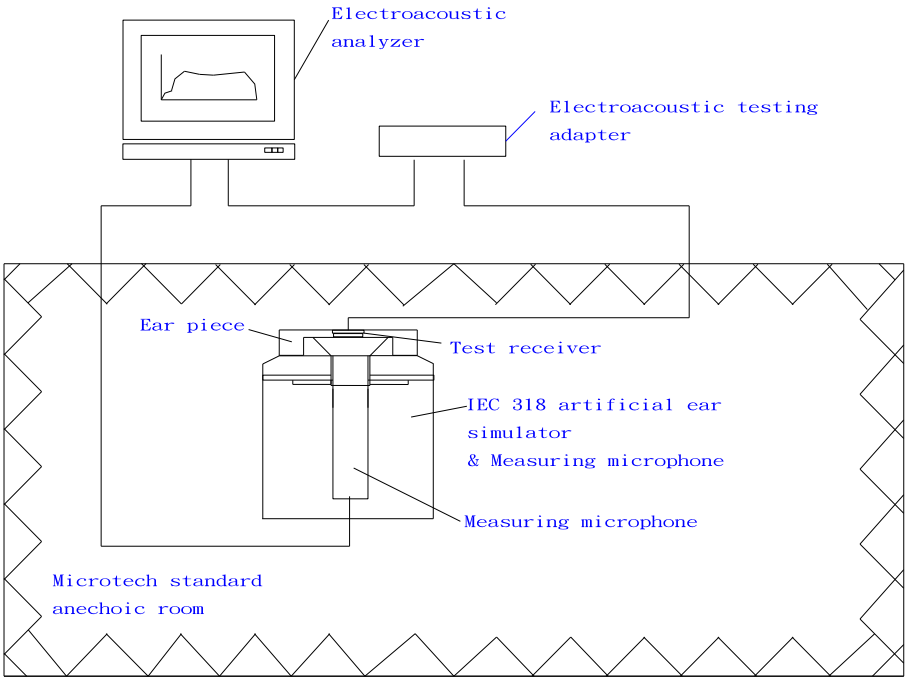


D. APPEARANCE DRAWING　外觀尺寸圖

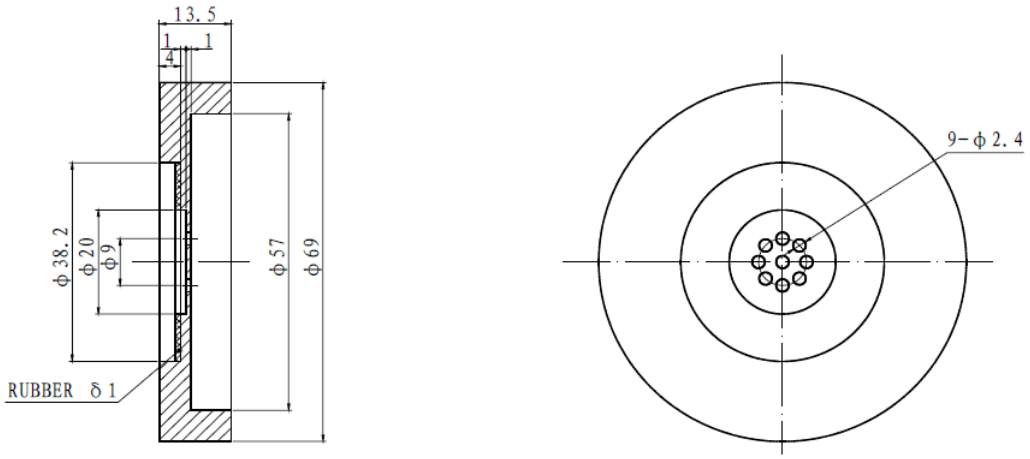


Unless otherwise specified, tolerance: ±0.2　(unit: mm)

E. MEASUREMENT METHOD　測量路線



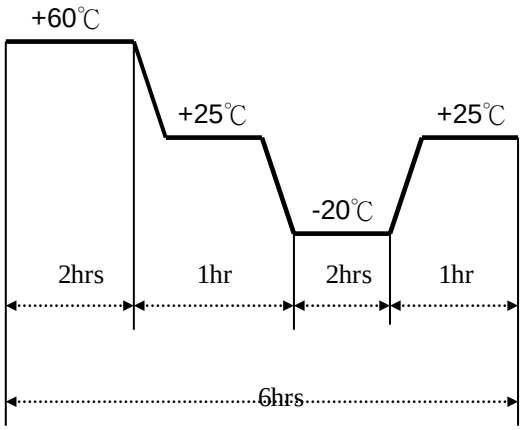
F. EAR PIECE 測試治具



G. MECHANICAL CHARACTERISTICS 機械特性

No.	Item	Test conditions	Evaluation standard
1	Terminal strength 端子強度	Applied 1.0kg load to the terminal for 15 sec. 對端子施以 1.0kg 拉力 15 秒	Without Resulting in any damage or rejection. 沒有造成任何損害或排斥.
2	Vibration test 振動測試	Speaker shall be measured after being applied vibration of amplitude of 1.52mm with 20 to 55hz band of vibration frequency to each of 3 perpendicular directions for 2 hours. 振動週波數 20～55HZ、全振幅 1.0mm 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 100mV sine wave between 200 ~ 4.0KHz 測試後無任何障礙防礙正常操作.且在輸入 100mV 电压测试灵敏度前后变化不超过正负 3dB
3	Drop test 落下測試	Drop the receiver contained in normal box onto the board 40mm thick 10 times from the height of120cm 將揚聲器置於盒中, 自 120 公分高度落在 40mm 木板上共 10 次.	

H. 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 +60℃ for 96 hours 置於+60℃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 100mV, sine wave between 200 ~ 4.0KHz. 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 100mV 电压测试灵敏度前后变化不超过正负 3dB
2	Low temp. Test 低溫測試	After being placed in a chamber at -20℃ for 96 hours. 置於-20℃環境中 96 小時	
3	Humidity test 相對濕度測試	After being placed in a chamber at +40℃and 90±5% RH relative humidity for 96 hours. 置於+40℃, 相對濕度 90±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: 	

I. RELIABILITY TEST 信賴性測試

No.	Item	Test conditions	Evaluation standard
1	Load test 連續負荷	0.1V, white noise is applied for 96 hours 輸入功率 0.1V, 連續操作 96 小時	No obstacle to be harmful to normal operation; damages, cracks, rusts, etc. Should not be audible at 100mV sine wave between 200 ~ 4.0KHz. S.P.L. deviation of unit should be within ±3dB 測試後無任何障礙防礙正常操作. 且在輸入 100mV 电压测试灵敏度前后变化不超过正负 3dB

TEST CONDITION.

Standard Test Condition :	a) Temperature : +5 ~ +35℃	b) Humidity : 45-85%	c) Pressure : 860-1020mbar
一般測試條件 :	a) 溫度 : +5 ~ +35℃	b) 濕度 : 45-85%	c) 氣壓 : 860-1020mbar
Judgement Test Condition :	a) Temperature : +25 ± 2℃	b) Humidity : 60-70%	c) Pressure : 860-1020mbar
爭議時測試條件:	a) 溫度 : +25 ± 2℃	b) 濕度 : 60-70%	c) 氣壓 : 860-1020mbar

J · HAC TEST 助听测试图

