

A. SCOPE 範疇

This specification applies electret condenser microphone, **KECG2234WBL-30L**

B. SPECIFICATION 規格

No.	Item	Symbol	Unit	Specification	Condition
1	Directivity 方向性			Omnidirectional 全指向	
2	Sensitivity 靈敏度	S	dB	-34± 3	f=1KHZ, 1Pa 0dB=1V/Pa
3	Standard operating voltage 標準操作電壓	Vs	V D.C.	2	
4	Output impedance 輸出阻抗	Zout	KΩ	2.2	f=1KHZ, 1Pa
5	Max operating voltage 最大操作電壓		V D.C.	10	
6	Sensitivity reduction 減電壓靈敏度	△S-Vs	dB	-3	f=1KHZ, 1Pa Vs=2.0V D.C. to 1.5V D.C.
7	Frequency 頻率	f	Hz	100 ~ 20,000	
8	Max. current consumption 最大耗電流	Idss	mA	0.5	Vs=2.0V D.C. RL=2.2KΩ
9	Signal to noise ratio 訊號對雜音比	S/N	dBA	More than 70	f=1KHZ, 1Pa A weighted
10	Operation temp. 操作溫度		°C	-20 ~ +70	
11	Storage temp. 儲存溫度		°C	-20 ~ +70	
12	Dimension 尺寸		mm	Φ6.0x2.2	See appearance drawing 請參照外觀尺寸圖
13	Piece weight/Out Box weight 單重 / 箱重		gram	0.7/9400	
14	Material 材質			AL 鋁	
15	Terminal 端子			Wire type	See appearance drawing 請參照外觀尺寸圖 Hand soldering only
16	Environmental Protection Regulation 環保法規			RoHS2.0	
17	Dustproof and Waterproof level 防塵防水等級			IP67	IEC standard 589 edition 2.0 (1989) IEC 標準 529 第二版 (1989)

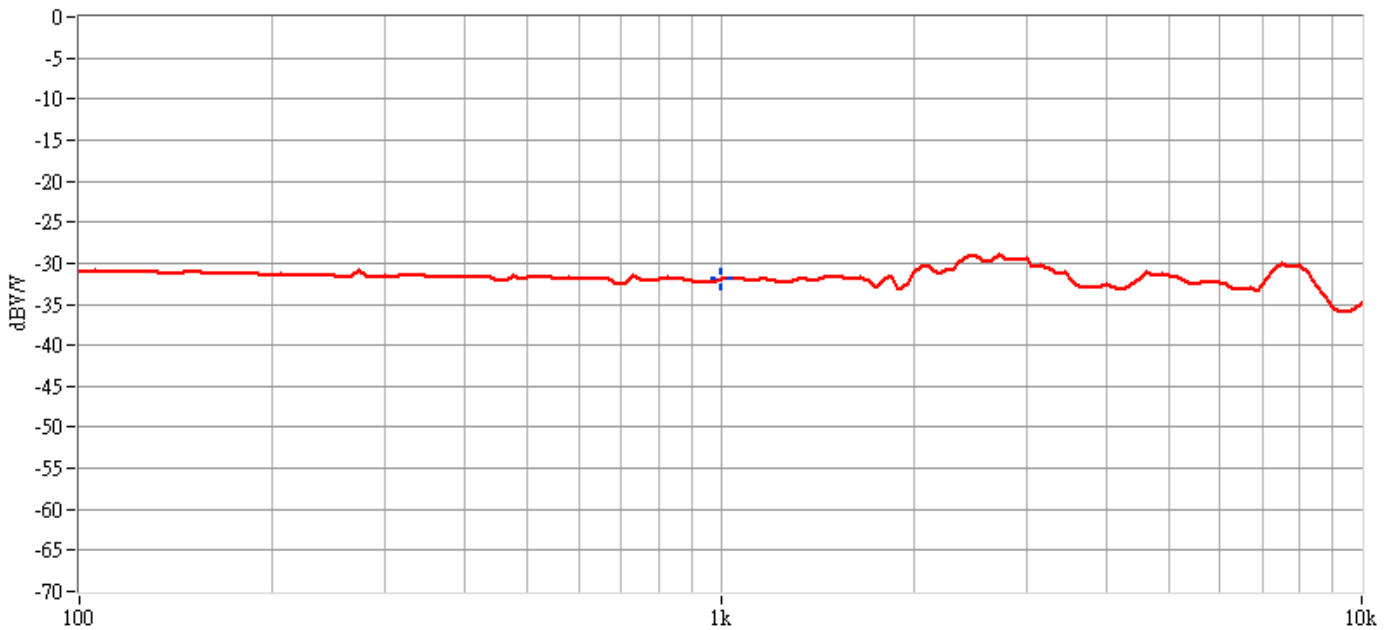
We use "Pascal (Pa)" indication of sensitivity as per the recommendation of I.E.C. (International Electro technical Commission). The Sensitivity of "Pa" will increase 20dB comparing with "ubar" indication.

Example: -60dB (0dB=1V/ubar) = -40dB (1V/Pa)

依I.E.C.(國際電子協會)建議,以"Pa"為靈敏度標示單位比"ubar"靈敏度標示單位增加20dB

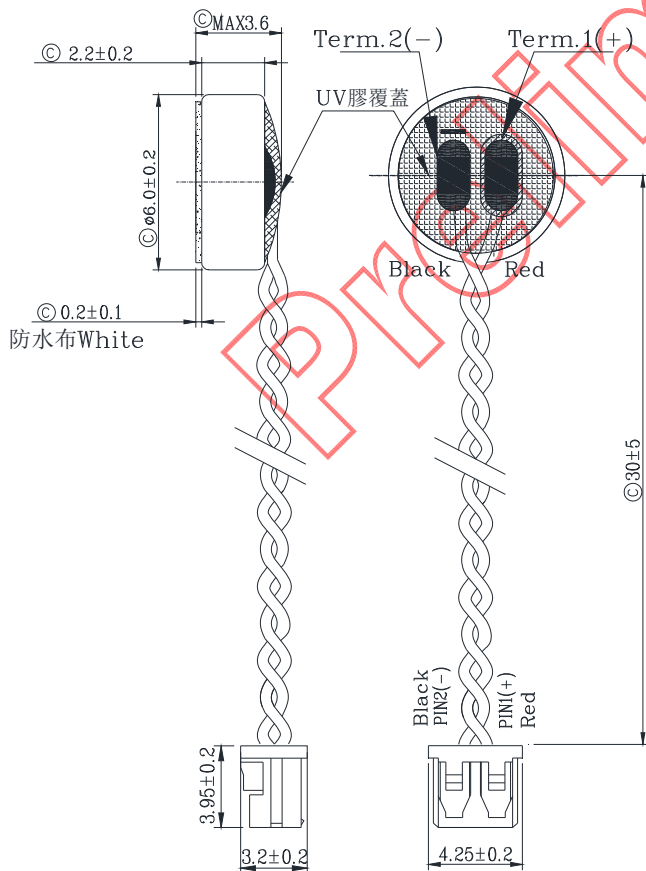
例如: -60dB (0dB=1V/ubar) = -40dB (1V/Pa)

C.TYPICAL FREQUENCY RESPONSE CURVE 頻率響應曲線



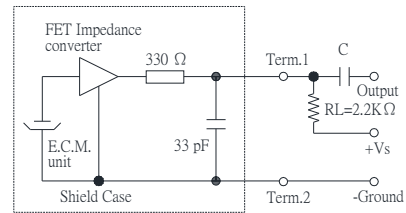
D. APPEARANCE DRAWING

外觀尺寸圖



E. MEASUREMENT CIRCUIT

測量線路



Schematic Diagram

	Cable Color	Pin Definition
1	Red	PIN1(+)
2	Black	PIN2(-)

- 1.Connector: JVT1146HN0-02N Pitch 1.25mm
- 2.Wire: UL3302 30AWG OD: 0.7 ± 0.05 mm 絞線

Unit:mm

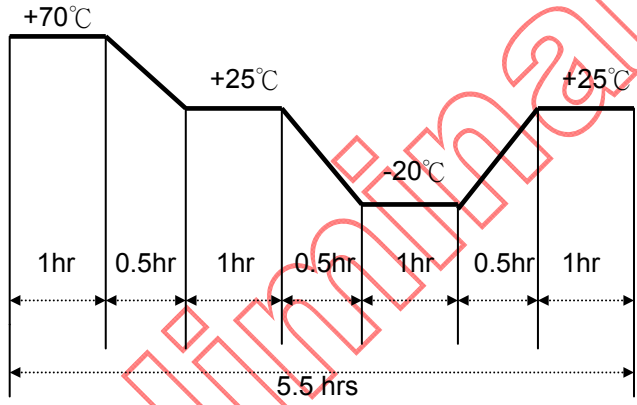
Tol: ± 0.20

RL=2.2K Ω

F. MECHANICAL CHARACTERISTICS 機械特性

No.	Item	Test condition	Evaluation standard
1	Soldering Heat Resistance 焊錫耐熱性	Soldering iron of $+270\pm 5^{\circ}\text{C}$ should be placed on the terminal for 2 ± 0.5 seconds. 端子部份置於 $+270\pm 5^{\circ}\text{C}$ 烙鐵上 2 ± 0.5 秒.	No interference in operation 操作無任何不良
2	PCB Wire Pull Strength PCB 線材拉力	The pull force shall be applied to double lead wire : Horizontal 4.9N(0.5kg) for 30 seconds. 雙線材水平方向施以 4.9N(0.5kg)的力量,30 秒.	No damage and cutting off. 不鬆動,不脫落.
3	Vibration Test 振動測試	The part 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.	After any tests, the sensitivity to be within $\pm 3\text{dB}$ 測試其靈敏度須與原測試值的差異不超過 $\pm 3\text{dB}$.
4	Drop Test 落下測試	The part unit without packaged must be subjected to each 3 drops at three axes from the height of 1 meter to 20 mm thick wooden board. 未包裝麥克風單體從 1 公尺高處, X.Y.Z.3 個方向,各 3 回,落於 20mm 厚木板上.	

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 72 hours. 置於+70°C環境中 72 小時	
2	Low temp. test 低溫測試	After being placed in a chamber at -20°C for 72 hours. 置於-20°C環境中 72 小時	
3	Humidity test 相對濕度測試	After being placed in a chamber at +40°C and 90±5% relative humidity for 240 hours. 置於+40°C, 相對濕度 90±5%環境中 240 小時	
4	Dustproof and Waterproof test (IP67) 防塵防水測試	Place in water depth of 1 meter, take out after 30 minutes 置于水深 1 米, 30 分鐘後撈出,	
5	Temp. cycle test 溫度循環測試	<p>The part shall be subjected to 10 cycles. One cycle shall be consist of : 單體承受溫度循環測試 10 次, 其循環內容如圖示:</p> 	

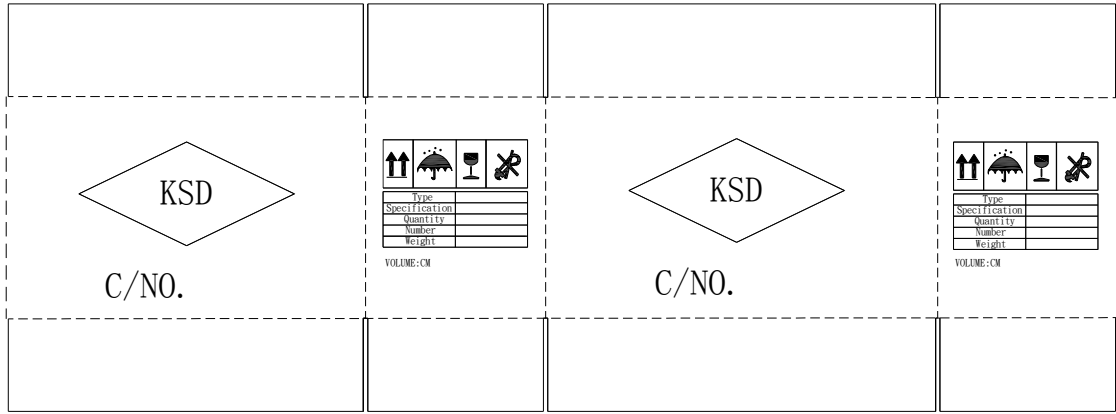
After any tests, the sensitivity to be within ±3dB of initial sensitivity after 6 hours of conditioning at +25°C.

經測試後麥克風, 須靜置於 +25°C (室溫) 環境中 6 小時後. 測試其靈敏度須與原測試值的差異不超過±3dB.

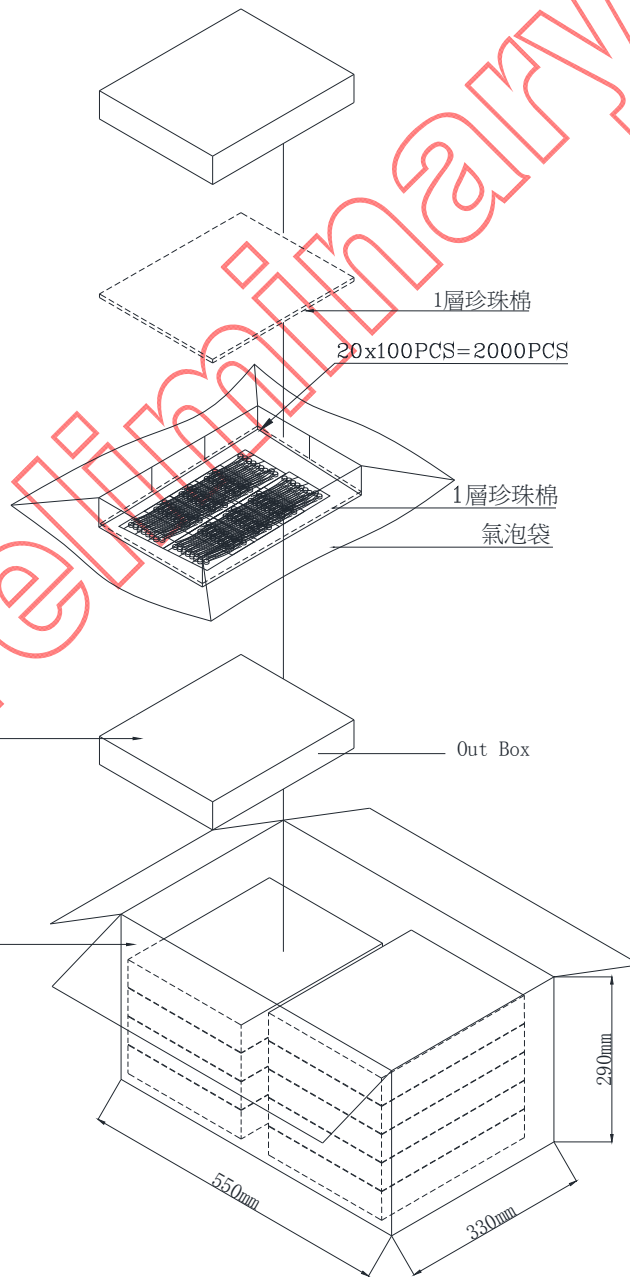
TEST CONDITION.



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

H. PACKING STANDARD 包裝規格



Draft/Primary



Lot No.	XXXXXXXXXX
Part No.	XXXXXXXXXX
Quantity	XXXX PCS
Date:	DD MM YY
	
	

* The label sticked on inner boxes and the outer of carton.

OutBox	310mmx248mmx49mm	20x100PCS=2000PCS
Carton Box	550mmx330mmx290mm	10x2000PCS=20000PCS