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	Revision No.	1.1
	Drawing No.	KIC1422
Model No. : KPCM-45H22LC33-38DB-1422		

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Revision No.

1.1

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Drawing No.

KIC1422

## 1. Scope 范围

This specification applies electret condenser microphone.

此规格书适用于电容式麦克风.

## 2. General 概要

- 2.1 Out-Diameter : 4.5 mm  
2.1. 外径 : 4.5 mm  
2.2 Height : 2.2 mm  
2.2. 高度 : 2.2 mm  
2.3 Weight : ≤0.3 g  
2.3 重量 : ≤0.3 g  
2.4 Operating Temperature range: -40~+85°C without loss of function  
2.4 工作温度: -40~+85°C  
2.5 Store Temperature range:-40~+85°C without loss of function  
2.5 储存温度: -40~+85°C

## 3. Electrical and Acoustic Characteristics. 电声参数

Test condition : 15 ~ 35 °C, 35% ~ 85% RH, 860~1060 mbar

测试条件 : 15~35 °C, 35%~85%RH , 860 ~ 1060mbar

No	Items	Symbol	Unit	Specification	Condition
1	Directivity 指向性			Omni-directional 全指向性	
2	Sensitivity 灵敏度	S	dB	-38dB±3	0dB=1V/pa,1KHz
3	StandardOperationVoltage 标准操作电压	Vs	V.D.C	2	
4	Output impedance 输出阻抗	Zout	KΩ	2.2	f=1KHz,1pa
5	Max operating voltage 最大操作电压		V.D.C	10	
6	Sensitivity reduction 减压灵敏度	ΔS-Vs	dB	-3	f=1KHz,1pa Vs=2v-1.5V.D.C
7	Frequency 频率	f	Hz	20-20,000	
8	Max. Current Consumption 最大耗电流	IDss	mA	0.6	Vs=2V,RL=2.2KΩ
9	Signal to noise ration 讯号对比杂音	S/N	dBA	60	f=1KHz,1pa A weighted
10	Material 材质			AL 铝	
11	Terminal 端子				See appearance drawing请 参照外观尺寸图
12	Environmental Protection Regulations 环保法规			RoHS	

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.(国际电子协会) 建议, 以"Pa"为灵敏度标示单位比"ubar"灵敏度标示单位增加20dB

例如;-60dB(0dB=1V/ubar)=-40dB(1V/Pa)

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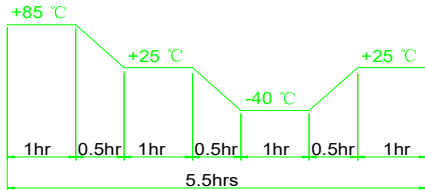
Drawing No.

KIC1422

## 4.1 Mechanical Characteristics 机械特性

No.	Item	Test Condition	Evaluation standard
1	Solderability 锡附着性 ( Connector excepted) 端子类不适合 此项	Striped wires of lead wires are immersed in rosin for 5 seconds and then immersed in solder both of +270±5°C for 3±0.5 seconds. 裸线部分侵入松香溶液5秒后,再侵入+270±5°C 熔融焊锡槽3±0.5	90% minstripped wires shall be wet with solder. (Except the edge of terminal). 裸线部分附着焊锡90%以上.(末端断面不算)
2	Lead Wire Pull Stength 线材拉力	The pull force shall be applied to double lead wire:Horizontal 4.9N (0.5kg) for 30 seconds. 双 线材水平方向施以4.9N (0.5kg)的力量30秒	No damage and cutting off. 线材不松动, 不脱落
3	Vibration 振动试验	Sounder shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55Hz band of vibration frequency to each of 3 perpendicular directions for 2 hour. 振幅为1.5mm,频率为10-50Hz,三个不同轴方向各振动2小时,试验后进行测量.	After any tests,the sensitivity to be within ±3dB 测试其灵敏度须与原测试值的差异不超过±3dB
4	Drop test 跌落试验	To be no interference in operation after dropped to concrete floor each one time from 1meter height at three directions in state of packing 以正规包装的三个方向从1米高处自由落到混凝土地面时,产品应不受影响	

## 4.2 Environmental test 环境试验

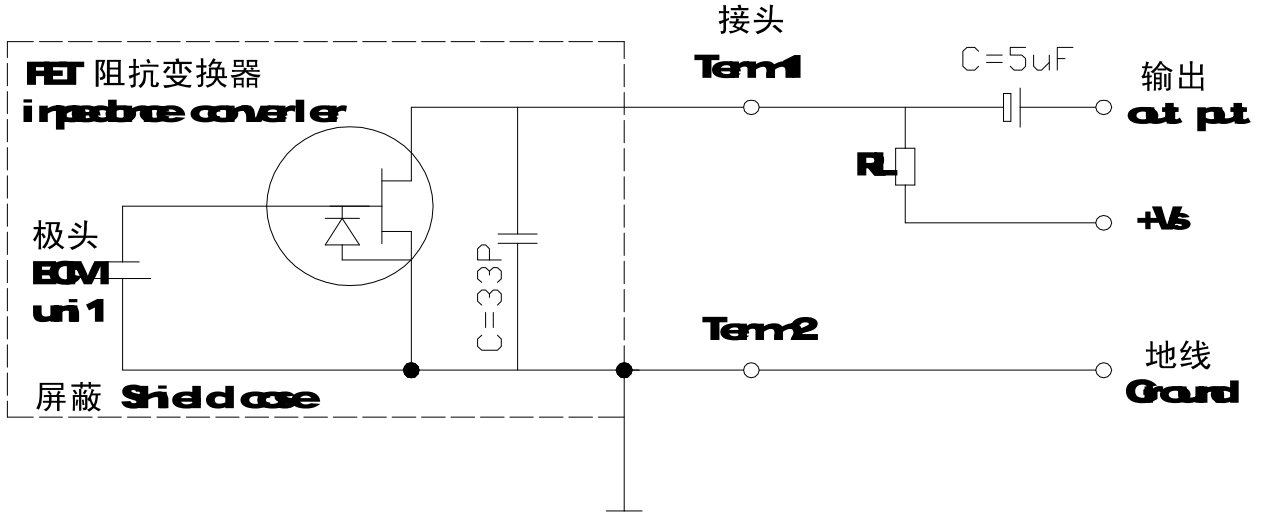
No.	Item	Test Condition	Evaluation standard
1	High temperature test 高温测试	After being placed in a chamber at +85 °C for 72 hours. 置于+85 °C 环境中72小时.	After any tests,the sensitivity to be within ±3dB of initial sensitivity after 6H of conditioning at +25°C 经测试后麦克风,须静置于+25°C(室温)环境中6小时后,测试其灵敏度须与原测试值的差异不超过±3dB
2	Low temperature test 低温试验	After being placed in a chamber at -40°C for 72 hours. 置于-40 °C 环境中72小时.	
3	Humidity Test 相对湿度试验	After being placed in a chamber at +40°C and 90±5% relative humidity for 240 hours. 置于+40°C,相对湿度90±5%环境中240小时.	
4	Temperature cycle test 温度循环测试	The part shall be subjected to 10 cycles.One cycle shall be consist of : 单体承受温度循环测试10次,其循环内容如图示 	

5. Measurement Block Diagram & Response curve

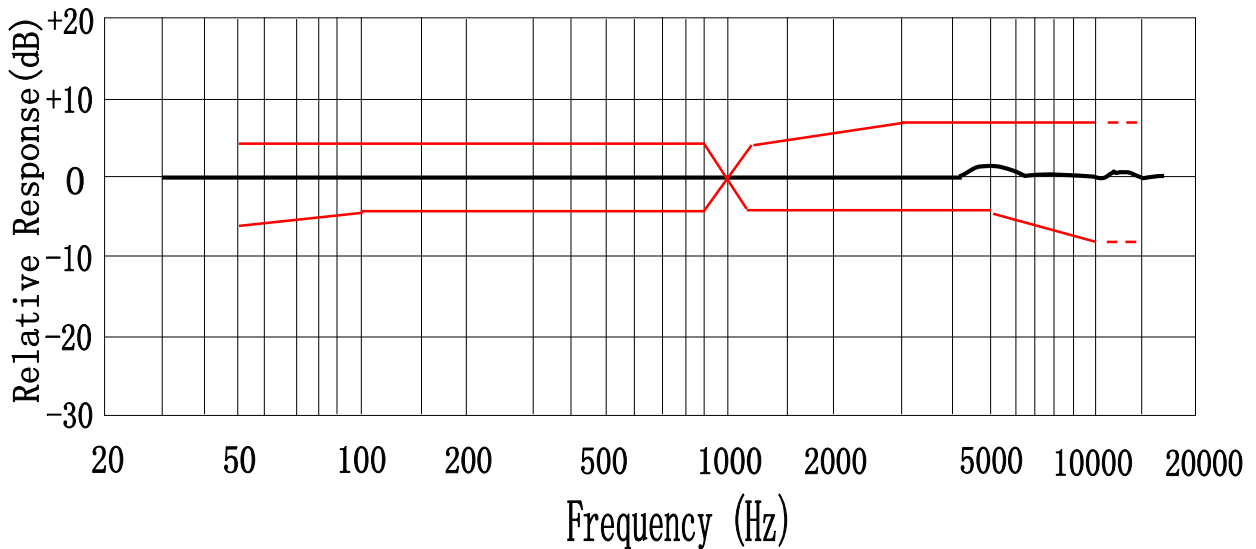
测试图和曲线图

5.1 Measurement Block Diagram 测试图

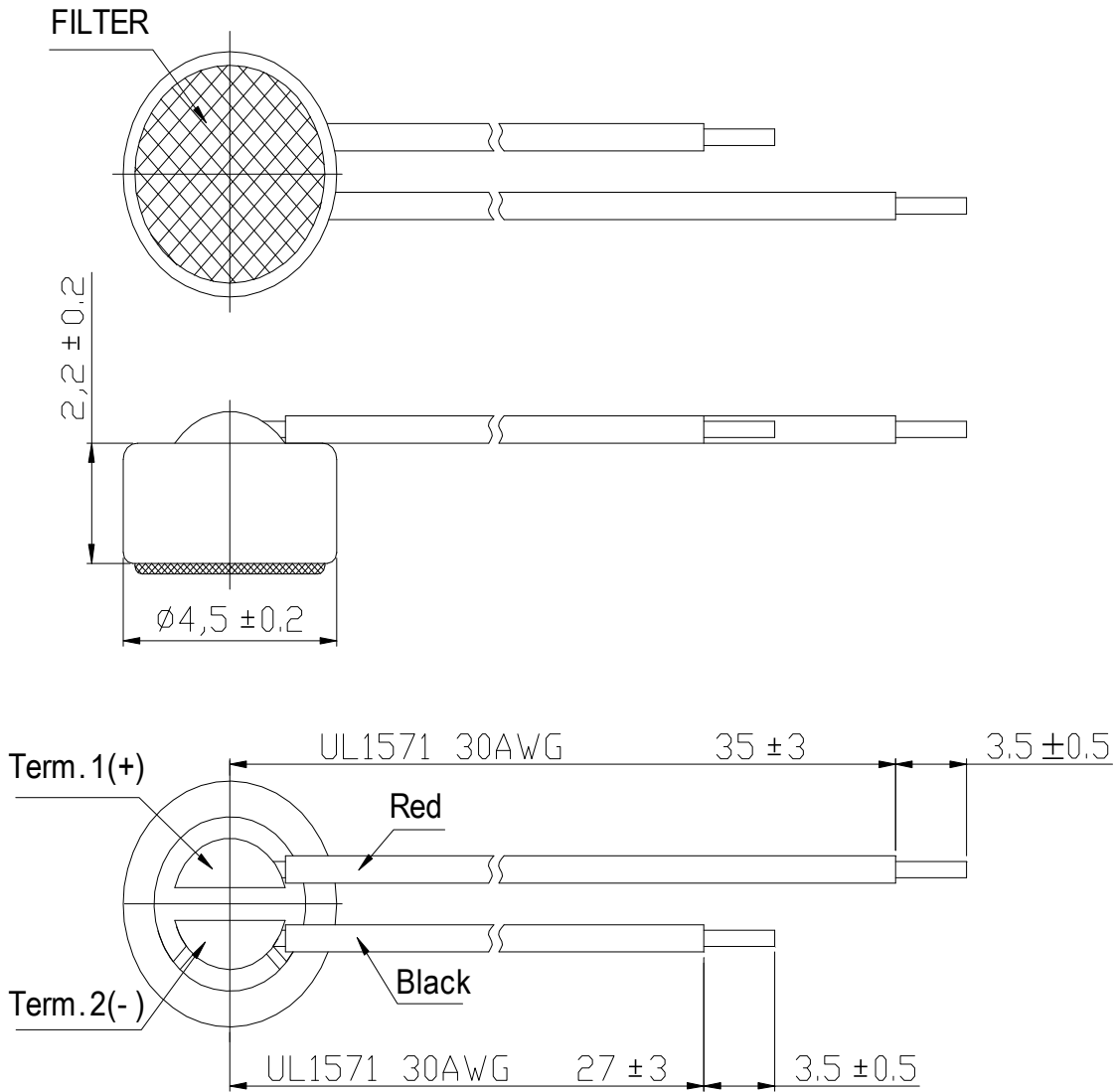
Schematic Diagram  $V_s = 2V$  ;  $R_1 = 2.2K\Omega$  ;



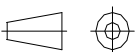
5.2 Response curve 曲线图



6. Dimensions 尺寸图



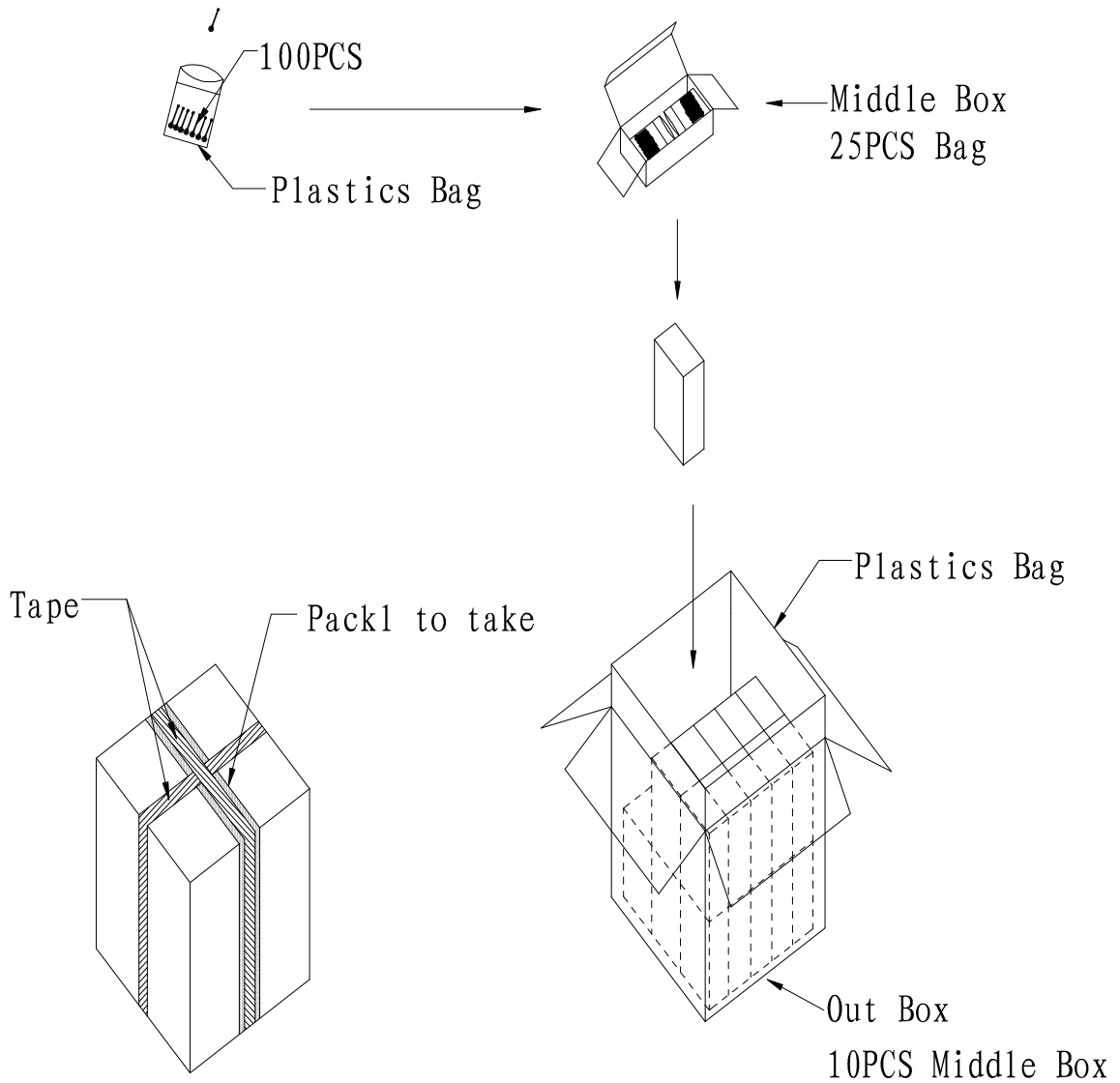
FIRST ANGLE PROJECTION



UNIT : mm

Tolerance :  $\pm 0.2$

7. Packing 包装



Plastics Bag	100x70	100PCSx1=100PCS
Middle Box	215x105x60	100PCSx25=2500PCS
Out Box	230x230x320	2500PCSx10=25000PCS

