


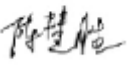
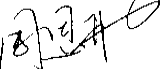
# SPECIFICATION

受 控

Customer : QUARTZ-1  
Applied To :  
Product Name : MIC  
Model Name : KPCM-B60H27AUC43-67dB-1557  
Drawing No. : KIC1557

Signature of Appronal

Signature of KEPO

Approved by	Checkde by	Issued by	Date
			2011.11.30

宁波凯普电子有限公司  
Ningbo Kepo Electronics Co.,Ltd.  
 ISO9001 Certificate  
宁波东钱湖镇东钱湖工业区宝源路 25 号  
TEL:+86-574-88370330 FAX:+86-574-88370329  
No.25 Baoyuan road Dongqian Lake, Industry Area, Dongqian town,Ningbo City,  
China(Post Code:315121)  
[Sales@chinaacoustic.com](mailto:Sales@chinaacoustic.com) [www.chinaacoustic.com](http://www.chinaacoustic.com)

<b>Specification for Microphone</b>	Page	2/8
	Revision No.	1.0
Model No. : KPCM-B60H27AUC43-67dB-1557	Drawing No.	KIC1557

## **CONTENTS**

- 1. Scope
- 1.范围
- 2. General
- 2.概要
- 3. Electrical and Acoustic Characteristics.
- 3.电声参数
- 4. Mechanical characteristics and environmental test
- 4.机械特性和环境试验
- 5. Measurement Block Diagram & Response curve
- 5.测试图和曲线图
- 6. Dimensions
- 6.尺寸图
- 7. Packing
- 7.包装
- 8. Revision
- 8.履历表

# Specification for Microphone

Page

3/8

Revision No.

1.0

Model No. : KPCM-B60H27AUC43-67dB-1557

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KIC1557

## 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 : 6 mm

2.1.外径 : 6 mm

2.2 Height : 2.7 mm

2.2.高度 : 2.7 mm

2.3 Weight : ≤0.3 g

2.3重量 : ≤0.3 g

2.4 Operating Temperature range: '-40 ~+80°C without loss of function

2.4工作温度: -40 ~+80°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, 45% ~ 85% RH, 860~1060 mbar

测试条件 : 15~35 °C, 45%~85%RH , 860 ~ 1060mbar

No	Items	Symbol	Unit	Specification	Condition
1	Directivity 指向性			Unidirectional 单指向	
2	Sensitivity 灵敏度	S	dB	-67dB±3	0dB=1V/ubar,1KHz
3	StandardOperationVoltage 标准操作电压	Vs	V.D.C	1.5V	
4	Output impedance 输出阻抗	Zout	KΩ	680Ω	f=1KHz,1ubar
5	Max operating voltage 最大操作电压		V.D.C	6	
6	Sensitivity reduction 减压灵敏度	ΔS-Vs	dB	-3	f=1KHz,1ubar Vs=4.5-1V.D.C
7	Frequency 频率	f	Hz	100-16,000	
8	Max. Current Consumption最大 大耗电	IDss	mA	0.5	Vs=1.5V,RL=680Ω
9	Signal to noise ration 讯号对比杂音	S/N	dBA	60	f=1KHz,1ubar 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)

# Specification for Microphone

Page

4/8

Revision No.

1.0

Model No. : KPCM-B60H27AUC43-67dB-1557

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KIC1557

## 4.1 Mechanical Characteristics 机械特性

No.	ItHM	Test Condition	Evaluation standard
1	Vibration 振动试验	To be no interference in operation after vibrations. 10Hz to 50Hz for 1 minrte full amplitude 1.52mm , for 2 hours at three axes 1分钟频率变化从10Hz到50Hz,振幅在1.52mm,在三 个方向测试振动2小时,产品应不受影响	After any tests,the sensitivity to be within $\pm 3$ dB 测试其灵敏度须与原测试值的 差异不超过 $\pm 3$ dB
2	DROP TEST 跌落测试	To be no interference in operation after dropped to concrete floor each one time from 1meterheight 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.	ItHM	Test Condition	Evaluation standard
1	High temperature test 高温测试	After being placed in a chamber at +85 °C for 240 hours. 置于+85 °C 环境中240小时.	After any tests,the sensitivity to be within $\pm 3$ dB of initial sensitivity after6H of conditioning at +25°C 经测试后麦克风,须静置于 +25°C(室温)环境中2小时后, 测试其灵敏度须与原测试值的 差异不超过 $\pm 3$ dB
2	Low temperature test 低温试验	After being placed in a chamber at -40°C for 240 hours. 置于-40 °C 环境中240小时.	
3	Humidity Test 对湿度试验	After being placed in a chamber at +40°C and 93± 5% relative humidity for 240 hours. 置于+40°C,相对湿度93±5%环境中240小时.	
4	Impact test 冲击试验	The width of 11ms, acceleration 150M / S <sup>2</sup> half sine pulse, 10 times in the three directions tested, sensitivity to be within $\pm 3$ dB from initial sensitivity 在宽度为11ms,加速度为150M/S <sup>2</sup> 的脉冲半正弦 波,在三个方向测试10次,灵敏度偏离范围在 $\pm$ 3dB	

StandardTestCondition: a)Temperature:+15°C~+35°C b)Humidity:45%-75% c)Pressure:86 kPa -106kPa

标准测试条件: a)环境温度:+15°C~+35°C b)相对湿度:45%-75% c)大气压力:86 kPa -106kPa

Judgement Test Condition: a) Temperature:(20±2)°C b) Humidity:60%-70% c) Pressure:86 kPa -106kPa

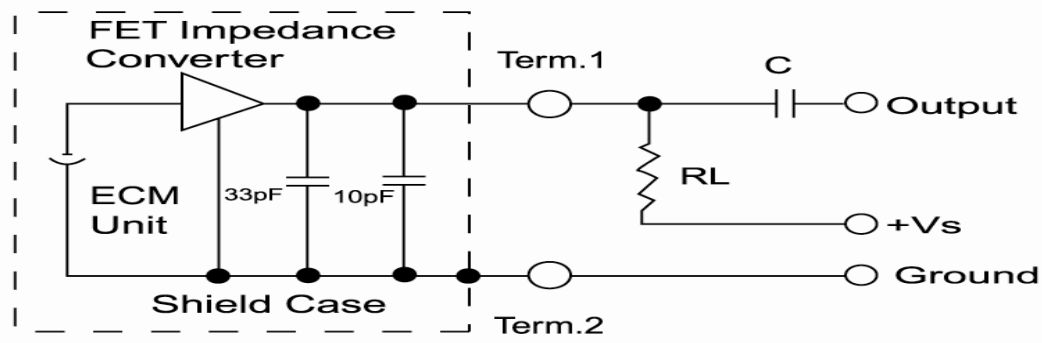
判定测试条件: a) 环境温度: (20±2)°C b)相对湿度: 60%-70% c)大气压力: 86 kPa -106kPa

### 5. Measurement Block Diagram & Response curve

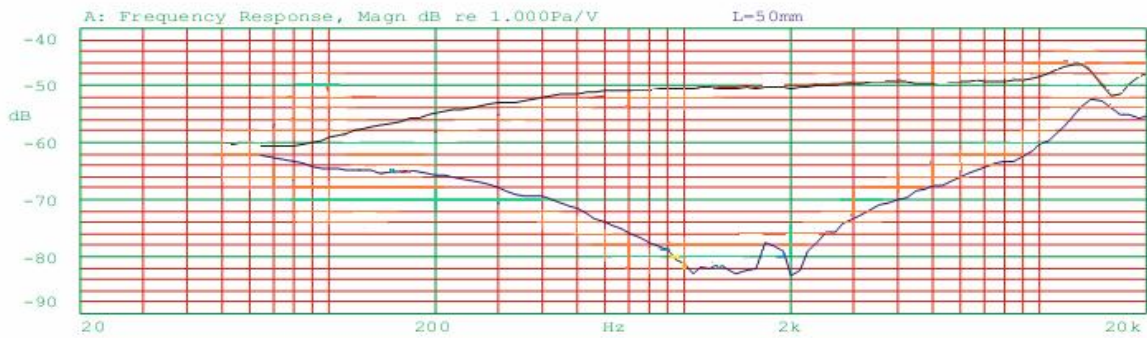
#### 测试图和曲线图

##### 5.1 Measurement Block Diagram 测试图

Schematic Diagram  $V_s = 1.5V$  ;  $R_1 = 680\Omega$



##### 5.2 Response curve 曲线图



# Specification for Microphone

Page

6/8

Revision No.

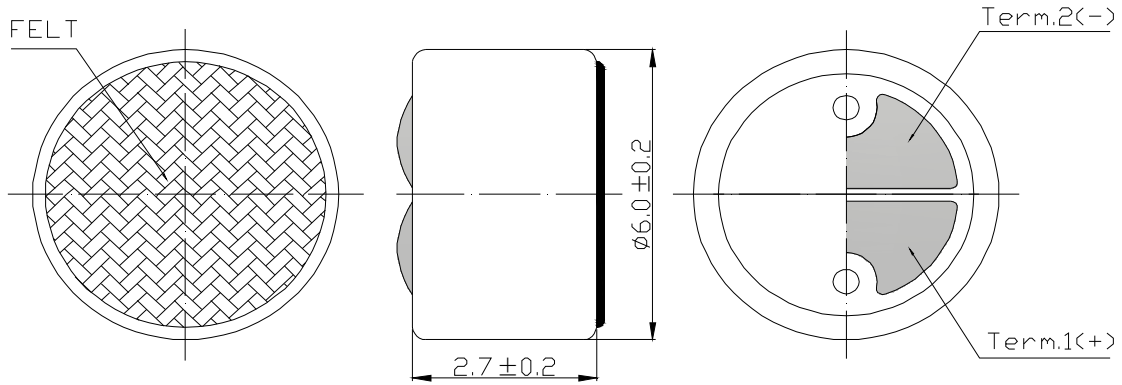
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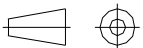
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## 6. Dimensions 尺寸图



FIRST ANGLE PROJECTION



UNIT :mm

Tolerance :±0.2

### 7. Packing 包装

