

SPECIFICATION


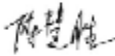
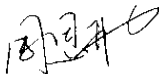
受 控

Customer : QUARTZ- 1
Applied To :
Product Name : MIC
Model Name : KPCM- G97H45P- 50dB- 1066
Drawing No. : KIC1066

Signature of Appronal

--

Signature of KEPO

Approved by	Checkde by	Issued by	Date
			



宁波凯普电子有限公司
Ningbo Kepo Electronics Co.,Ltd.

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 www.chinaacoustic.com

Specification for Microphone	Page	2/8
	Revision No.	1.0
Model No. : KPCM- G97H45P- 50dB- 1066	Drawing No.	KIC1066

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- G97H45P- 50dB- 1066		Drawing No.	KIC1066

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 : 9.7 mm
2.1. 外径 : 9.7 mm
2.2 Height : 4.5 mm
2.2. 高度 : 4.5 mm
2.3 Weight : ≤1 g
2.3 重量 : ≤1 g
2.4 Operating Temperature range: '- 20 ~ +70 °C without loss of function
2.4 工作温度: - 20 ~ +70 °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 ~ 1060 mbar

No	Items	Symbol	Unit	Specification	Condition
1	Directivity 指向性			Omni- directional 全指向性	
2	Sensitivity 灵敏度	S	dB	- 50dB±3	0dB=1V/ubar, 1KHz
3	Standard Operation Voltage 标准操作电压	Vs	V. D. C	4.5	
4	Output impedance 输出阻抗	Zout	KΩ	2.2	f=1KHz, 1ubar
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, 1ubar Vs=4.5- 1.5V. D. C
7	Frequency 频率	f	Hz	50- 16,000	
8	Max. Current Consumption 最大耗电流	IDss	mA	0.5	Vs=4.5V, RL=2.2KΩ
9	Max input Sound Pressure Level 最大入力音压	SPL	dB	120	
10	Signal to noise ration 讯号对比杂音	S/N	dBA	58	f=1KHz, 1ubar A weighted
11	Material 材质			AL 铝	
12	Terminal 端子				See appearance drawing 请参 照外观尺寸图
13	Environmental Protection Regulations 环保法规			RoHS	

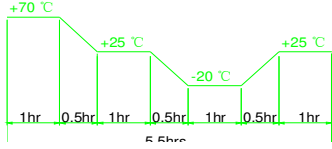
We use "Pascal (Pa)" indication of sensitivity as per the recommendation of I.E.C (International Electro technical Commission). The Sensitivity of "Pa" will increase 20dB comparing with "ubar" indication.
Example : - 60dB(0dB=1v/ubar)=- 40dB(1v/Pa)
依I.E.C.(国际电子协会) 建议, 以"Pa"为灵敏度标示单位比"ubar"灵敏度标示单位增加20dB
例如:- 60dB(0dB=1V/ubar)=- 40dB(1V/Pa)

Specification for Microphone		Page	4/8
		Revision No.	1.0
Model No. : KPCM- G97H45P- 50dB- 1066		Drawing No.	KIC1066

4.1 Mechanical Characteristics 机械特性

No.	Item	Test Condition	Evaluation standard
1	Solderability 焊锡附着性 (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℃ for 3±0.5 seconds. 裸线部分浸入松香溶液5秒后, 再浸入+270±5℃ 熔融焊锡槽3±0.5	90% minstripped wires shall be wet with solder . (Except the edge of terminal). 浸入裸线部分附着焊锡90%以上。(末端断面不算)
2	Lead Wire Pull Strength 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	The microphone unit without packaged must be subjected to each 3 drops a three axis from the height of 1 meter to 20mm thick wooden board. 未包装麦克风单体从1公尺高处, X.Y.X 3个方向, 各3回, 落于20mm厚木板上。	

4.2 Environmental test 环境试验

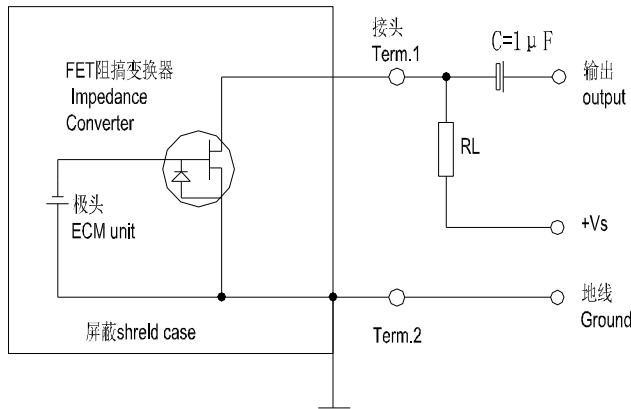
No.	Item	Test Condition	Evaluation standard
1	High temperature test 高温测试	After being placed in a chamber at +70 °C for 72 hours. 置于+70 °C 环境中72小时。	After any tests, the sensitivity to be within ±3dB of initial sensitivity after 6 hours of conditioning at +25 °C 经测试后麦克风, 须静置于+25 °C (室温) 环境中6小时后, 测试其灵敏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 - 20 °C for 72 hours. 置于- 20 °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

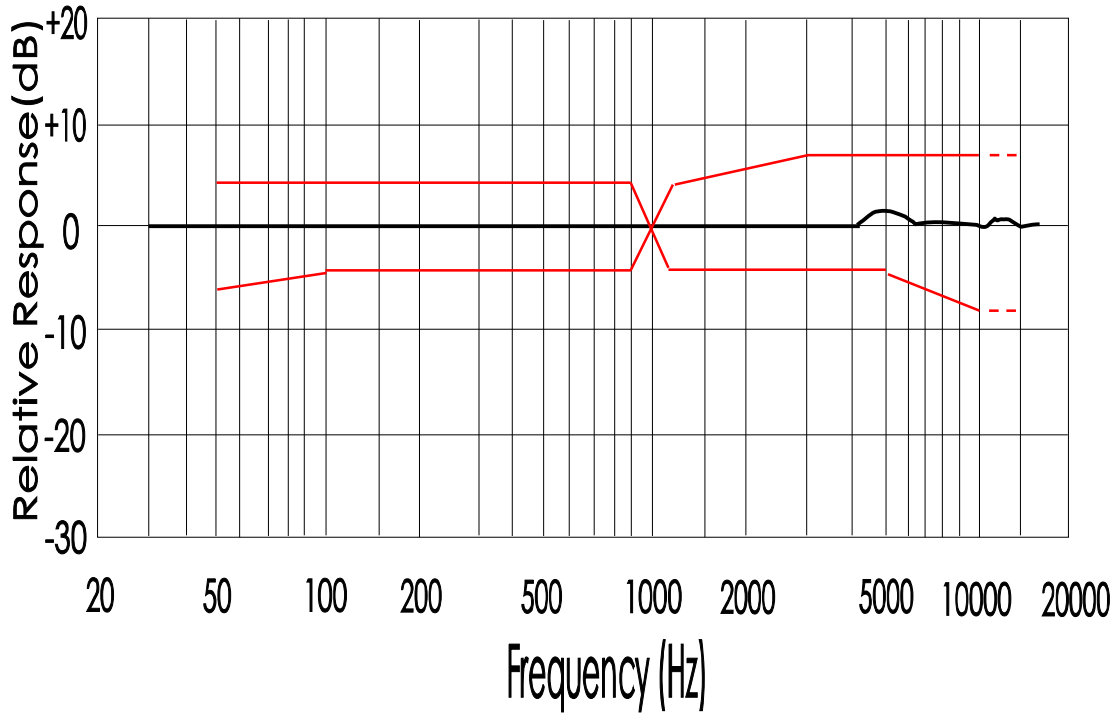
测试图和曲线图

5.1 Measurement Block Diagram 测试图

Schematic Diagram $V_s = 4.5V$; $R_1 = 2.2K\Omega$

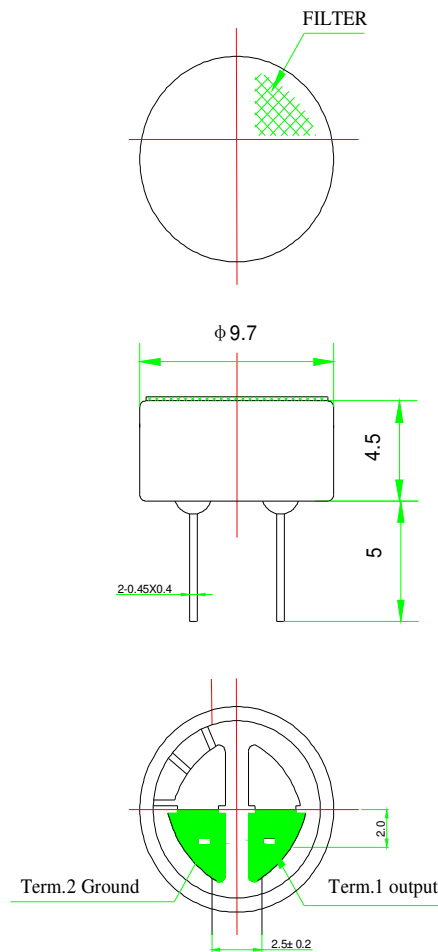


5.2 Response curve 曲线图



Specification for Microphone	Page	6/8
	Revision No.	1.0
Model No. : KPCM- G97H45P- 50dB- 1066	Drawing No.	KIC1066

6. Dimensions 尺寸图



FIRST ANGLE PROJECTION

UNIT : mm
Tolerance : ± 0.2

Specification for Microphone

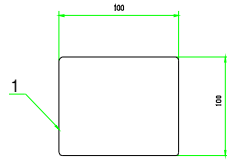
Page 7/8

Revision No. 1.0

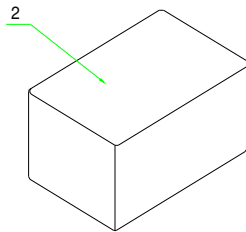
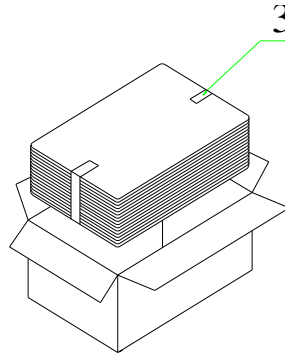
Model No. : KPCM- G97H45P- 50dB- 1066

Drawing No. KIC1066

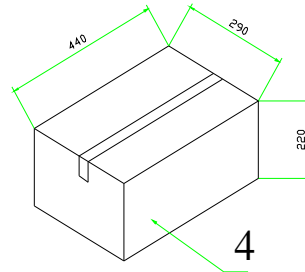
7. Packing 包装



小包装
Inner Box
100X100X4
100Pcs



中包装
Middle Box
205×105×48
2000PCS



外包装
Outer Box
230X230X260
20000PCS

Specification for Microphone	Page	8/8
	Revision No.	1.0
Model No. : KPCM- G97H45P- 50dB- 1066	Drawing No.	KIC1066

8. Revision 履历

Rev. No.	DATE	PAGE	DESCRIPTION	BOM
1.0	2009.12.01		Primary	