

# SPECIFICATION

Customer : QUARTZ-1

Applied To :

Product Name : Magnetic Buzzer

Model Name : KPMB-G3008-4233

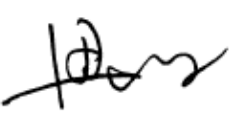


Drawing No. : OEM4233R

Compliance with ROHS(本品符合ROHS指令)

Signature of Approval

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Signature of KEPO

Approved by	Checked by	Issued by	Date
			

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## 1. Scope

This product specification is applied to the Micro Speaker in alarm systems. Please contact us when using this product for any other applications than described in the above.

本规格书适用于微型喇叭，通常它用在系统中做报警或提示的声响器用，如果将该产品用于其它领域，请与我们联系。

## 2. General

2.1 Form : Ø30mm

外形 : Ø30mm

2.2 Height : 12.5mm

高度 : 12.5mm

2.3 Weight : 12g

重量 : 12克

2.4 Operating Temperature range:

-20~+60°C without loss of function

工作温度: -20~+60°C

Store Temperature range:

-30~+70°C without loss of function

储藏温度: -30~+70°C

2.5 According to the No.7 of RoHS Exemptions, lead-based solder alloys containing 85% by weight or more lead (Sn10Pb90)

根据"欧盟RoHS指令豁免条款"第7条规定,使用了铅含量超过85%的锡铅合金焊料 (Sn10Pb90)

## 3. Electrical and Acoustic Characteristics.

Test condition : 15 ~ 35 °C, 25% ~ 85% RH, 860~1060 mbar

测试条件: 15~35 °C, 25%~85%RH, 860~1060mbar

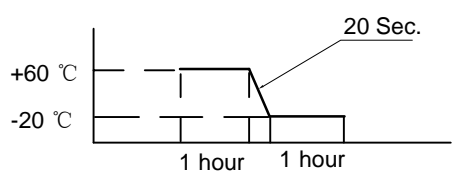
	Items 项目	Specification 规格
1	Impedance 额定阻抗	8 Ω ± 15%
2	Rated Norse Power 额定功率	0.15W
3	Max.Input Power 最大输入功率	0.3W
4	Resonant Frequency 谐振频率	700~5000Hz
5	Rated Frequency Range 频率范围	1200± 200Hz
7	Min.Sound Pressure Level 额定声压	≥75dB at 1.2KHz 1.1Vrms Sine Wave/10cm
8	Case Material/Color 壳体材质/颜色	ABS/Black

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## 4. Reliability Test

After test(1~8item), the Buzzer S.P.L . difference shall be within  $\pm 10\text{dB}$ , Frequency difference shall be within  $\pm 0.2\text{KHz}$ . and the appearance not exist any change to be harmful to normal operation(e.g. cracks,rusts,damages and especially distortion).

在1-8项试验后，蜂鸣器的声压变化值在 $\pm 10\text{dB}$ 之内，频率变化在 $\pm 0.2\text{KHz}$ 之内。外观无变化（例如：开裂、生锈、损伤、变形等现象）。

	Item	Specification
1	High Temperature Test 高温试验	<p>After being woked in a chamber with <math>+60\pm 2\text{ }^\circ\text{C}</math> for 2h and then being placed in natural condition for 2h, sounder shall be measured.</p> <p>将产品置于 <math>+60\pm 2\text{ }^\circ\text{C}</math> 试验箱中，先工作 2小时，然后在正常大气压条件下恢复2小时后，进行测量</p>
2	Low Temperature Test 低温试验	<p>First being worked in a chamber with <math>-20\pm 2\text{ }^\circ\text{C}</math> for 2h and then being placed in a chamber with <math>-20\pm 2\text{ }^\circ\text{C}</math> for 16h, finally being placed in natural condtion for 2h, sounder shall be measured.</p> <p>将产品置于 <math>-20\pm 2\text{ }^\circ\text{C}</math> 试验箱中，先工作 2小时，再放置16小时，然后在正常大气压条件下恢复2小时后，进行测量</p>
3	Humidity Test 潮湿试验	<p>After being placed in a chamber with 90 to 95%R.H. at <math>+40\pm 2\text{ }^\circ\text{C}</math> for 2 h and then being placed in natural condition for 2h , sounder shall be measured.</p> <p>将产品置于湿度为 90~95%R.H，温度为<math>40\pm 2\text{ }^\circ\text{C}</math>试验箱中 2小时，然后在正常大气压条件下恢复2小时后，进行测量</p>
4	Thermal Shock Test 热冲击试验	<p>After being worked in a chamber at <math>+60\pm 2\text{ }^\circ\text{C}</math> for 1 hour, then sounder shall be placed in a chamber at <math>-20\pm 2\text{ }^\circ\text{C}</math> for 1 hour(1 cycle is the below diagram).</p> <p>After 6 above cycles, sounder shall be measured after being placed in natural condition for 1 hour.</p> <p>将产品置于<math>60\pm 2\text{ }^\circ\text{C}</math>试验箱中，先工作1小时，然后将产品置于<math>-20\pm 2\text{ }^\circ\text{C}</math>试验箱中，再工作1小时，经过6个循环后，在正常大气压条件下恢复1小时，进行测量</p> 

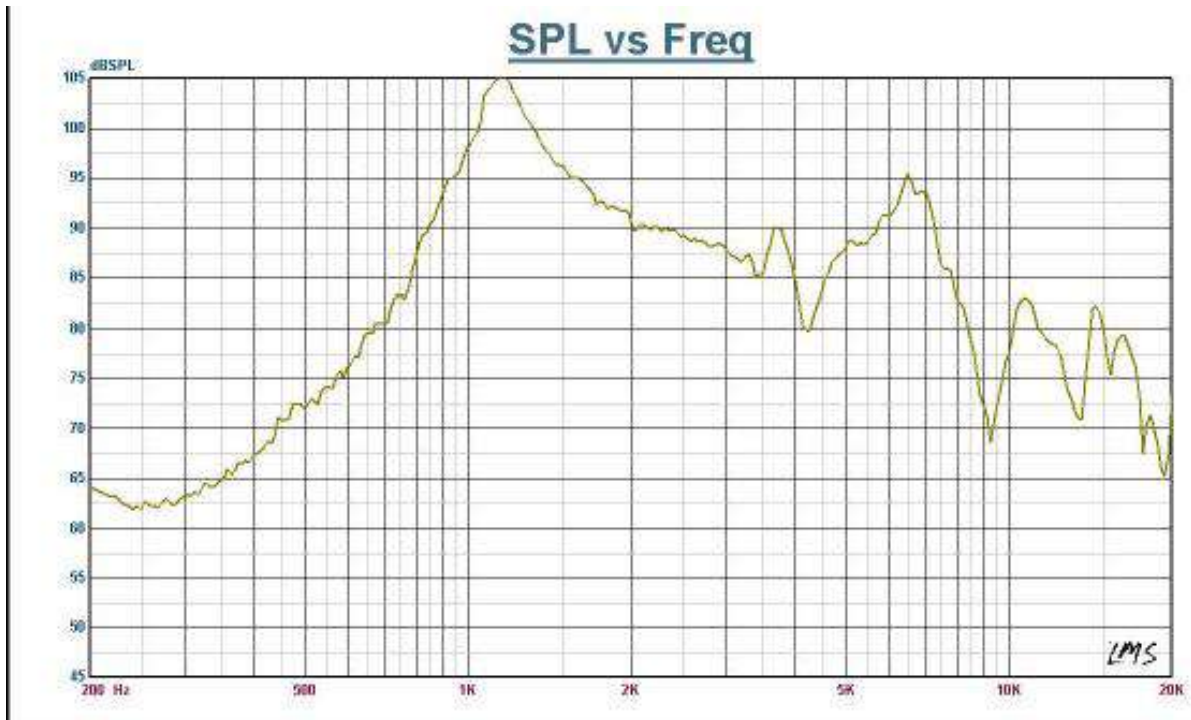
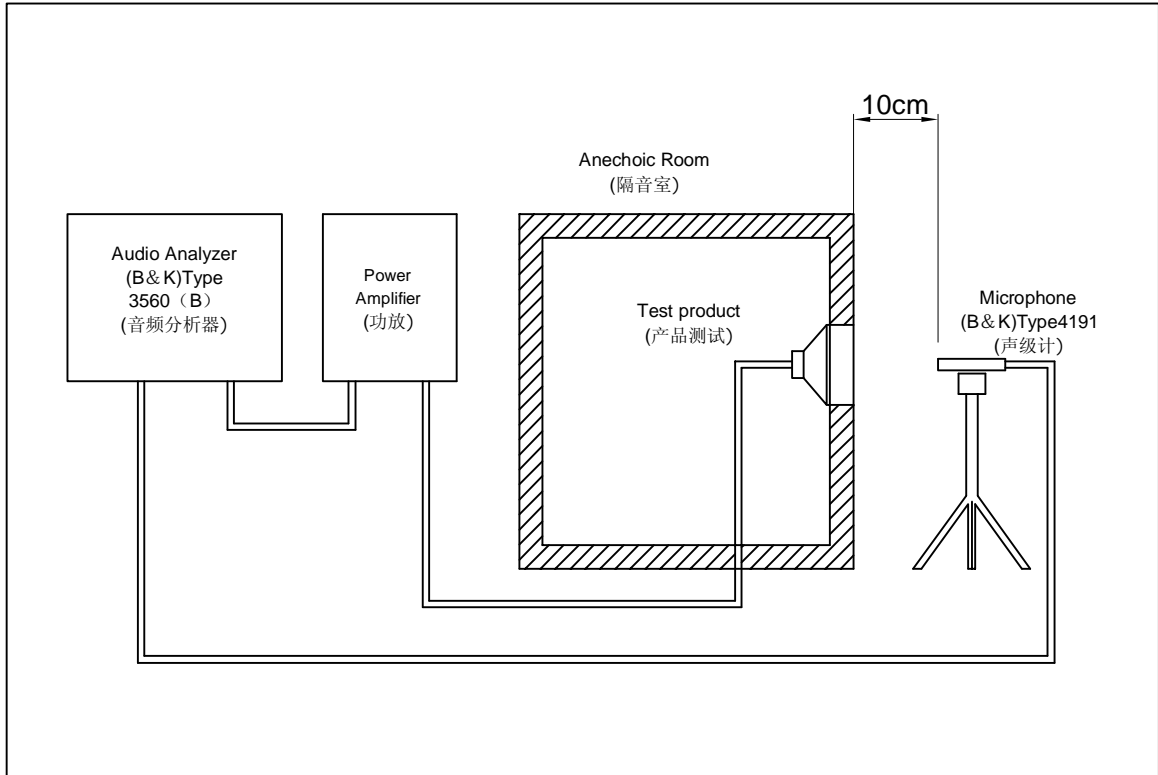
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## 4. Reliability Test

	实验项目 Item	实验条件 Test Condition	实验后规格 Specification
6.1	耐冲击性 Shock	<p>峰值加速度 <math>490\text{m/s}^2</math>, 半正弦波, XYZ三个方向各3次冲击实验后, 进行测试.</p> <p>Sounder shall be measured after being applied shock(<math>490\text{m/s}^2</math>) for each three mutually perpendicular directions to each of 3 times by half sine wave.</p>	<p>符合表1的要求</p> <p>The measured value shall meet Table 1.</p>
6.2	耐振动性 Vibration Resistant	<p>振动频率 <math>10\sim 30\text{Hz}</math>, <math>1.5\text{mm}</math> 全振幅, XYZ三个方向各2小时试验后, 进行测试.</p> <p>Sounder shall be measured after being applied vibration of amplitude of <math>1.5\text{mm}</math> with <math>10</math> to <math>30\text{Hz}</math> band of vibration frequency to each of 3 perpendicular directions for 2 hours.</p>	
6.3	耐焊接性 Soldering Heat Resistance	<p>将产品的插针插入(插至距产品壳体<math>1.5\text{mm}</math>处为止) <math>+300\pm 5^\circ\text{C}</math>的焊锡槽<math>3\pm 0.5</math>秒或<math>+260\pm 5^\circ\text{C}</math>的焊锡槽<math>10\pm 1</math>秒, 然后在常温中放置4小时后, 进行测试.</p> <p>Lead terminal are immersed up to <math>1.5\text{mm}</math> from sounder's body in solder bath of <math>+300\pm 5^\circ\text{C}</math> for <math>3\pm 0.5</math> seconds or <math>+260\pm 5^\circ\text{C}</math> for <math>10\pm 1</math> seconds, and then sounder shall be measured after being placed in natural condition for 4 hours.</p>	
6.4	可焊性 Solderability	<p>先将产品的插针浸入松香液5秒钟, 然后浸入<math>+260\pm 5^\circ\text{C}</math>熔融的锡槽中<math>3\pm 0.5</math>秒.</p> <p>Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of <math>+260\pm 5^\circ\text{C}</math> for <math>3\pm 0.5</math> seconds.</p>	
6.5	插针强度 Terminal Strength Pulling	<p>分别在每个插针的轴向施加9.8牛顿的静荷重10秒.</p> <p>The force 10 seconds of <math>9.8\text{N}</math> is applied to each terminal in axial direction.</p>	

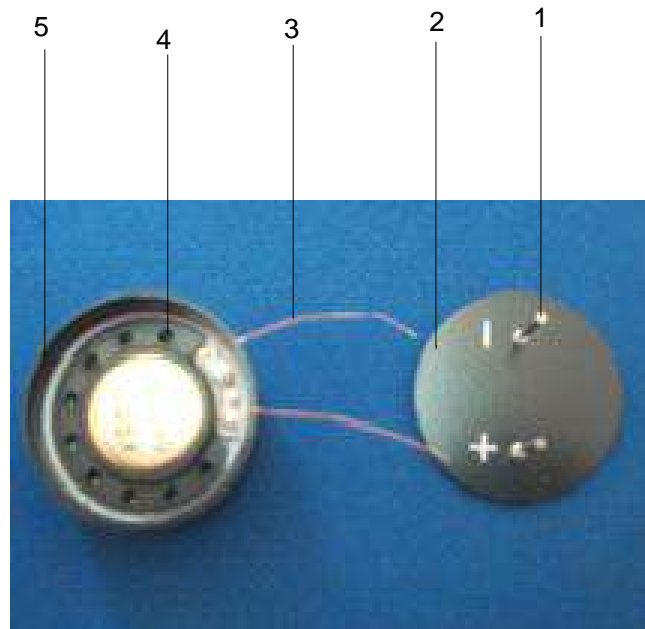
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## 5. Measurement Block Diagram & Response curve



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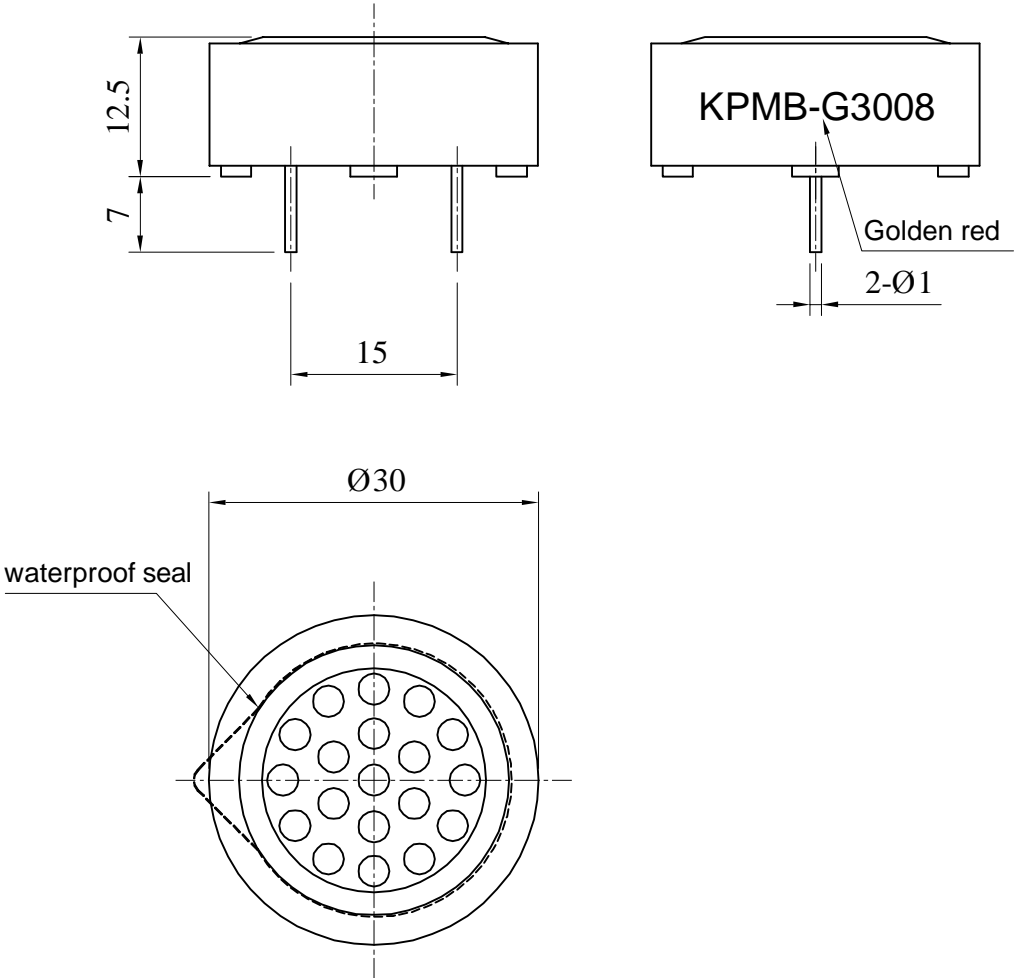
## 6. Structure



5	Housing 壳体	1	ABS	
4	Speaker 喇叭	1	/	
3	Coil 漆包线	1	QA-1	
2	PCB 印制板	1	/	
1	Pin 插针	2	H62	
No.	Part Name 型号	Q'TY	Material 材质	Remark 备注

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### 7. Dimensions



FIRST ANGLE PROJECTION

UNIT : mm  
Tolerance :  $\pm 0.5$



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## 8. Packing



QTY: 1820Pcs  
460x295x350mm

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### 9. Revision

Rev. No.	DATE	PAGE	DESCRIPTION	SIGN
1.1	2009.06.04	10	Primary	