

Specification for Mechanical Buzzer		Page	3/10
Model No. : KPMB-G2303L-K4652		Revision No.	1.0
		Drawing No.	OEM4652R

## 1. Scope

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

本规格书适用于机械式蜂鸣器，通常它用在系统中做报警或提示的蜂鸣器用，如果将该产品用于其它领域，请与我们联系。

## 2. General

2.1 Out-Diameter : 23×17mm

外径: 23×17 mm

2.2 Height : 15mm

高度: 15 mm

2.3 Weight : 10 g.

重量: 10克

2.4 Case Material /Color : ABS/Black

壳体材质/颜色: ABS/黑

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

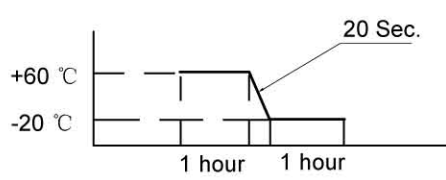
	Items 项目	Specification 规格
1	Operating Temperature Range 工作温度范围	-20 ~ +60°C
2	Storage Temperature Range 储存温度范围	-30 ~ +70°C
3	Rated Voltage 额定电压	3VDC
4	Operating Voltage 工作电压	2~5VDC
5	Max. Rated Current 额定电流	25mA/3VDC
6	Resonant Frequency 谐振频率	400±100Hz
7	Min. Sound Pressure Level 额定声压	75dB/3VDC/20cm
8	Tone Nature 音调	Continuous (直音)

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## 4. Reliability Test

After test(1~6item), the Buzzer S.P.L . difference shall be within  $\pm 10\text{dB}$ ,Frequency difference shall be within  $\pm 0.5\text{KHz}$ . and the appearance not exist any change to be harmful to normal operation(e.g. cracks,rusts,damages and especially distortion).

在1-6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 $\pm 0.5\text{KHz}$ 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>  <p>The diagram illustrates a thermal shock cycle. It shows a temperature profile with two horizontal segments: one at <math>+60\text{ }^{\circ}\text{C}</math> and another at <math>-20\text{ }^{\circ}\text{C}</math>. Each horizontal segment is labeled '1 hour'. A diagonal line connects the end of the <math>+60\text{ }^{\circ}\text{C}</math> segment to the start of the <math>-20\text{ }^{\circ}\text{C}</math> segment, with a label '20 Sec.' indicating the dwell time at the transition point.</p>

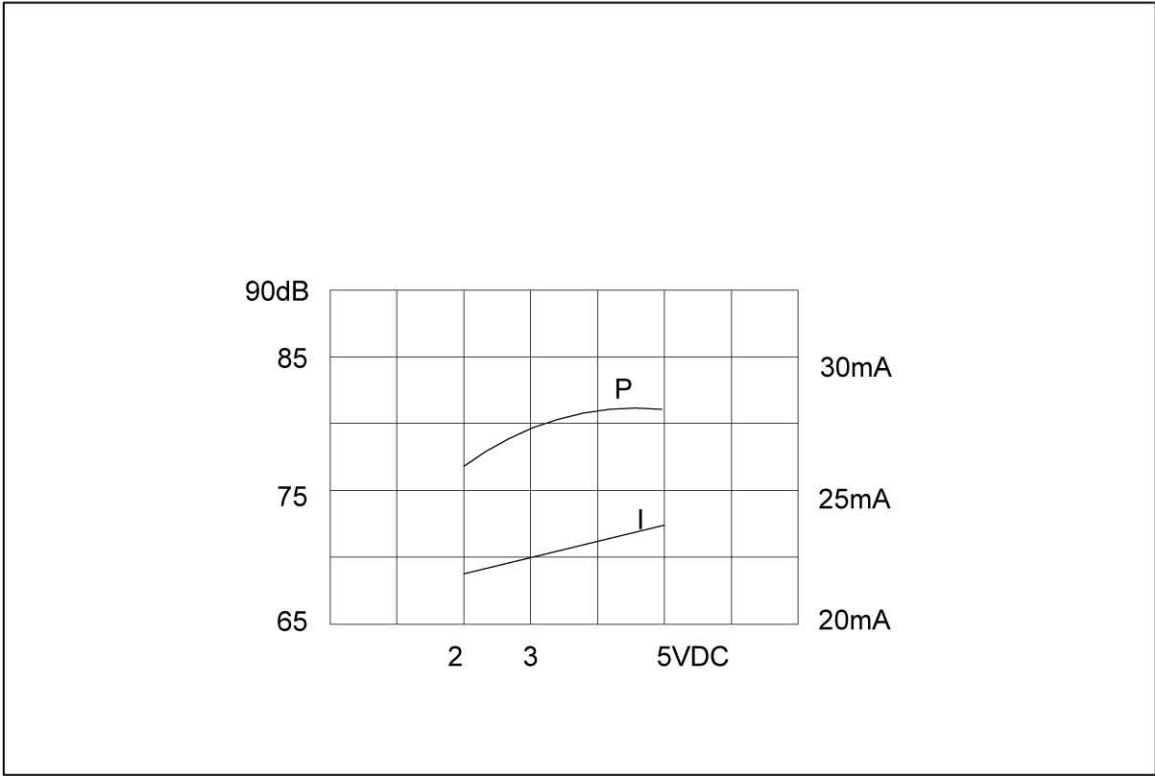
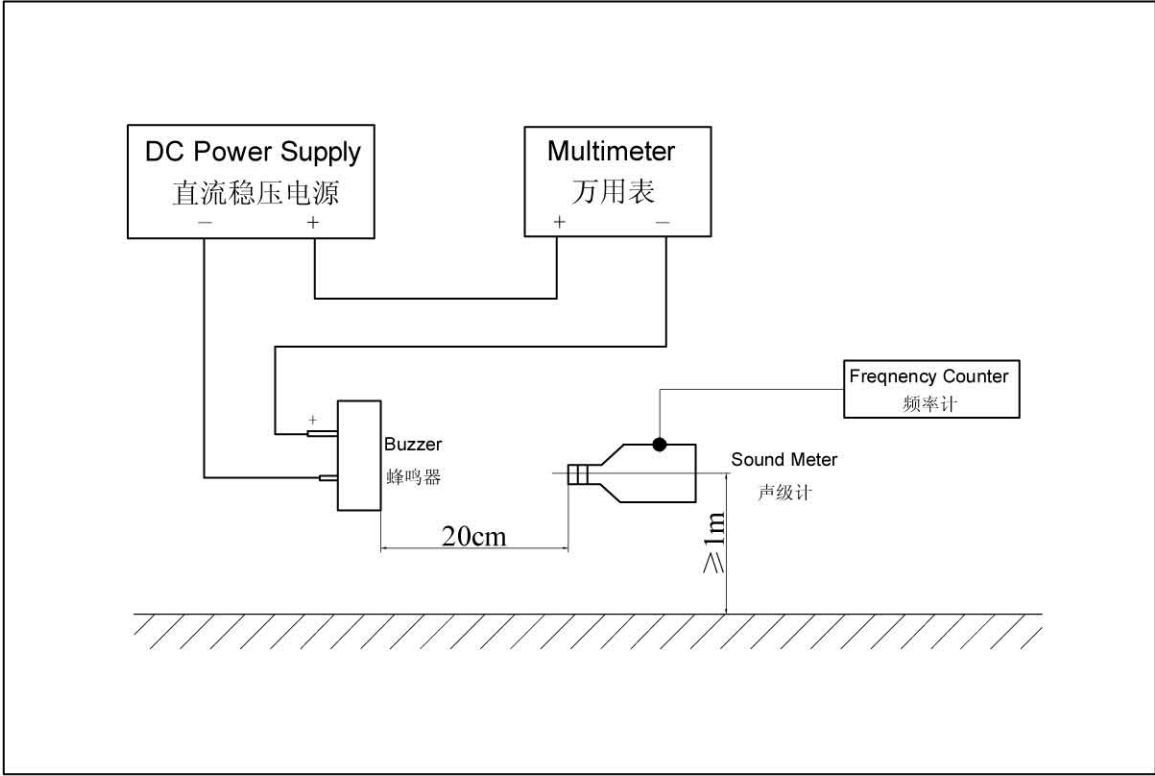
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## 4. Reliability Test

	实验项目 Item	实验条件 Test Condition	实验后规格 Specification
5	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	耐振动性 Vibration Resistant	<p>振动频率 10~30 Hz, 1.5mm 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 1.5mm with 10 to 30Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours.</p>	

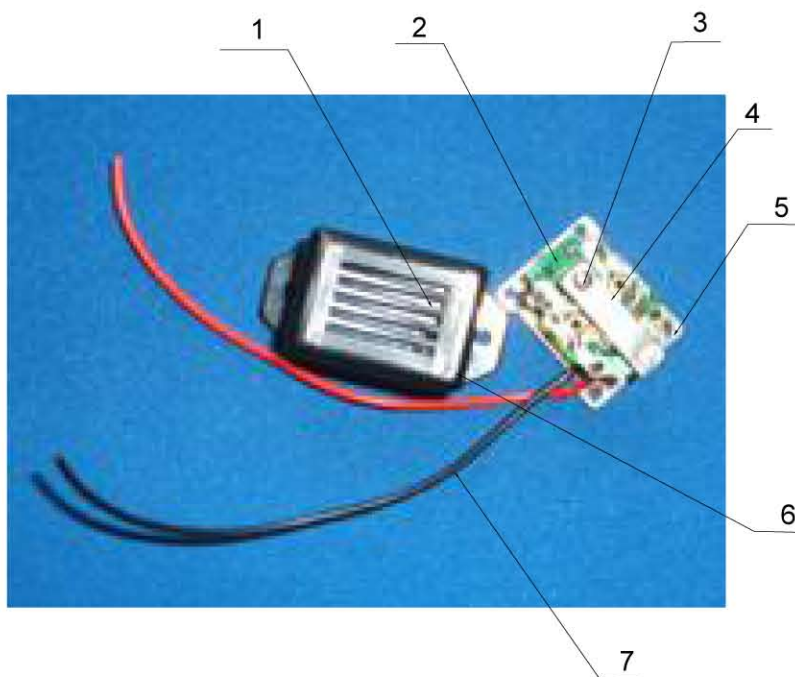
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5. Measurement Block Diagram & Response curve



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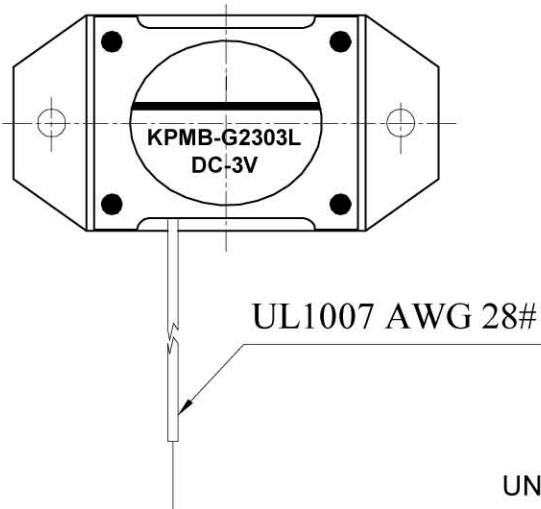
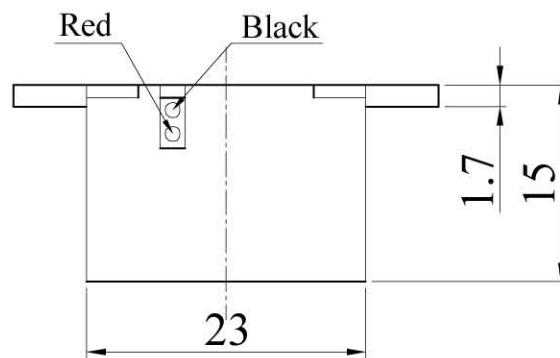
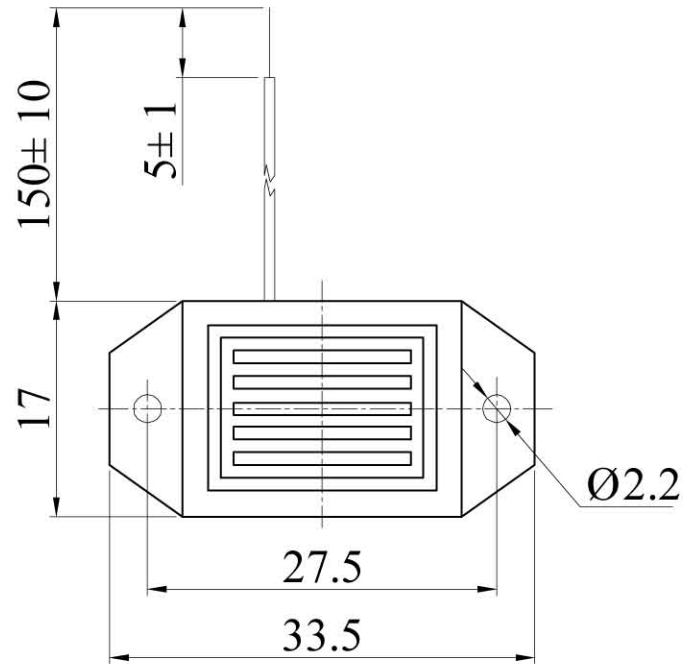
## 6. Structure



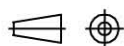
7	Case 引线	2	/	
6	Case 壳体	1	ABS	
5	T Core T 铁	1	Fe	
4	Coil 线圈	1	QA	
3	Magnetic ring 磁块	1	/	
2	PCB 印制板	1	/	
1	Diaphragm 膜片	1	/	
No.	Part Name 型号	Q'TY	Material 材质	SGS 编号

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# 7. Dimensions



FIRST ANGLE PROJECTION



UNIT : mm  
Tolerance :  $\pm 0.5$