

# SPECIFICATION

Customer : COMPONET

受 控

Applied To :

Product Name : Mechanical Buzzer

Model Name : KPMB-G2312L-K9740

Drawing No. : OEM9740R

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 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 : 8 g.  
 重量: 8克
- 2.4 Case Material /Color : ABS/Black  
 壳体材质/颜色: ABS/黑

## 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

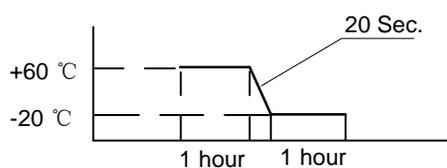
	Items 项目	Specification 规格
1	Operating Temperature Range 工作温度范围	-20 ~ +60°C
2	Storage Temperature Range 储存温度范围	-30 ~ +70°C
3	Rated Voltage 额定电压	12VDC
4	Operating Voltage 工作电压	9~15VDC
5	Max.Rated Current 额定电流	30mA/12VDC
6	Resonant Frequency 谐振频率	400±100Hz
7	Min.Sound Pressure Level 额定声压	80dB/12VDC/20cm
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）。

1	High Temperature Test 高温试验	<p>After being placed in a chamber with <math>+70\pm 2^\circ\text{C}</math> for 240 hours and then being placed in natural condition for 2 hours, sounder shall be measured.</p> <p>放置于温度<math>+70\pm 2^\circ\text{C}</math>的烘箱内240小时，然后取出，在常温下放置2小时后，测试声响器。</p>
2	Low Temperature Test 低温试验	<p>After being placed in a chamber with <math>-30\pm 2^\circ\text{C}</math> for 240 hours and then being placed in natural condition for 2 hours, sounder shall be measured.</p> <p>放置于温度<math>-30\pm 2^\circ\text{C}</math>的制冷箱内240小时，然后取出，在常温下放置2小时后，测试声响器</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^\circ\text{C}</math> for 240 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^\circ\text{C}</math>试验箱中240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^\circ\text{C}</math> for 1 hour, then sounder shall be placed in a chamber at <math>-20\pm 2^\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^\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^\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2小时，进行测量</p> 

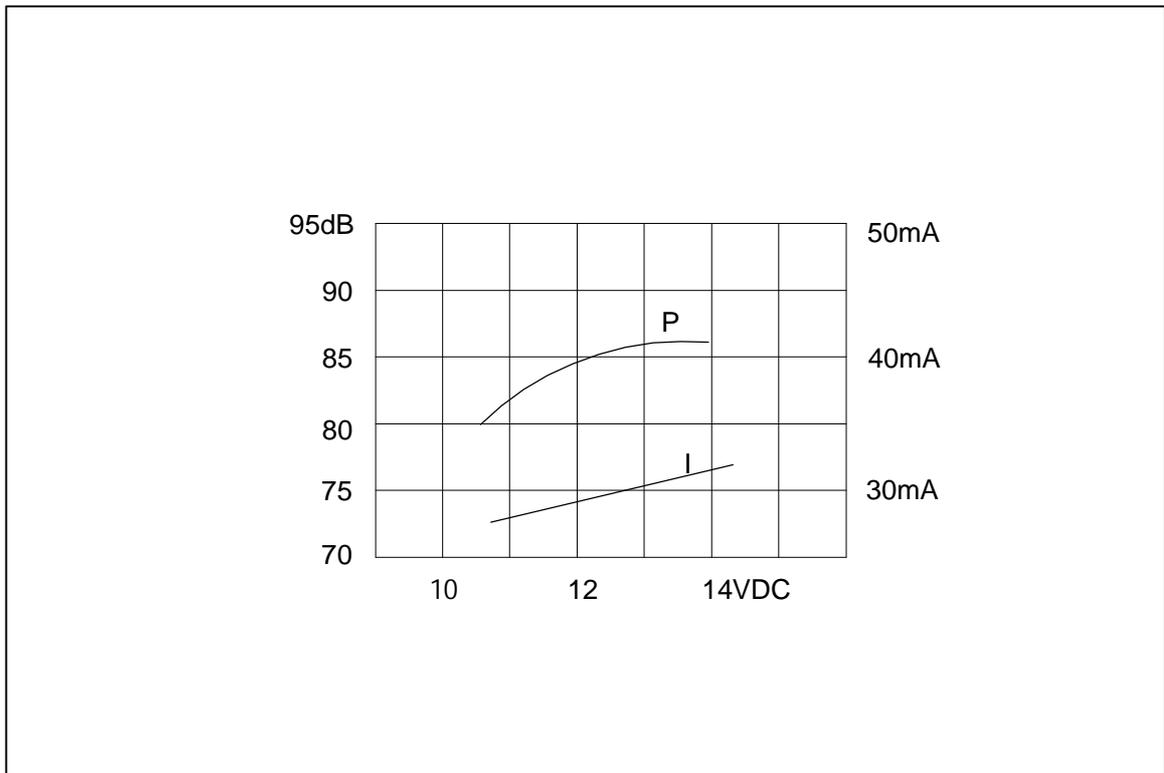
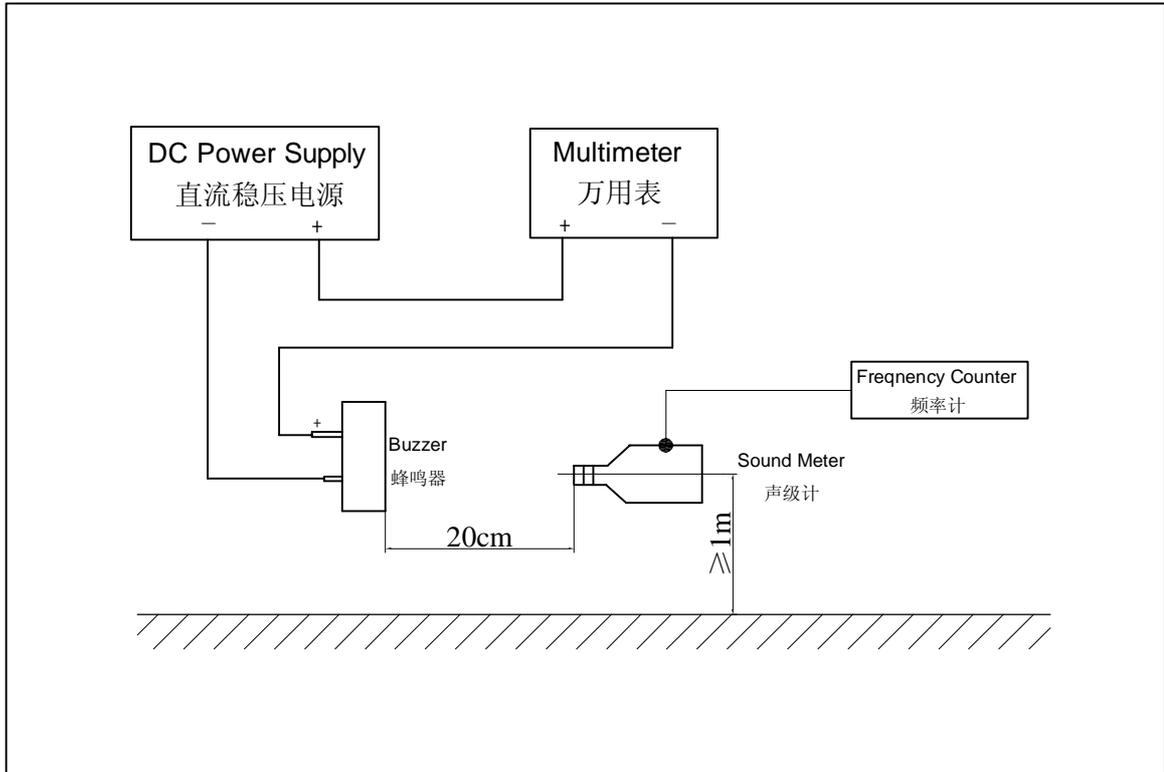
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#### 4. Reliability Test

	实验项目 Item	实验条件 Test Condition	实验后规格 Specification
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>	符合表1的要求  The measured value shall meet Table 1.
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>	
7	连续运行 continuum run	<p>12VDC/240小时</p> <p>12VDC/240hours</p>	

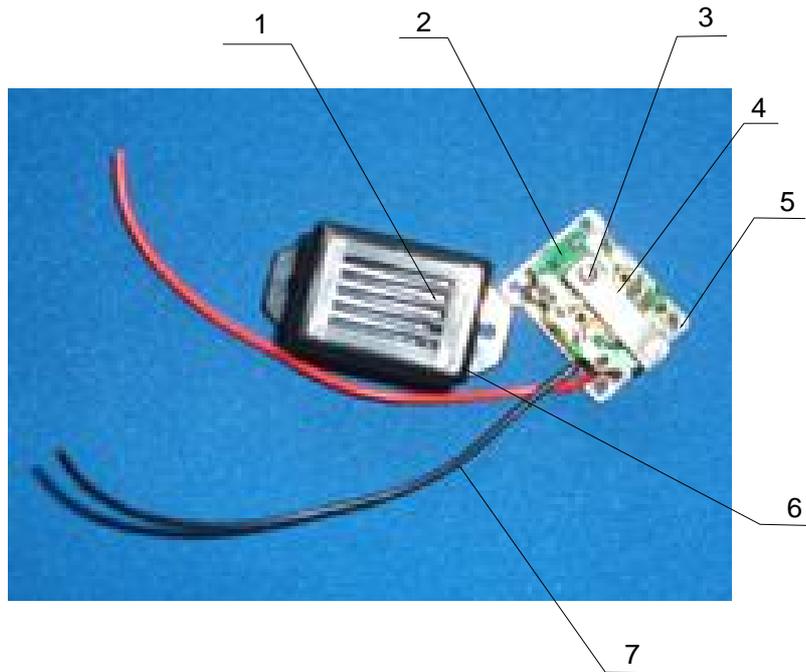
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## 5. Measurement Block Diagram & Response curve



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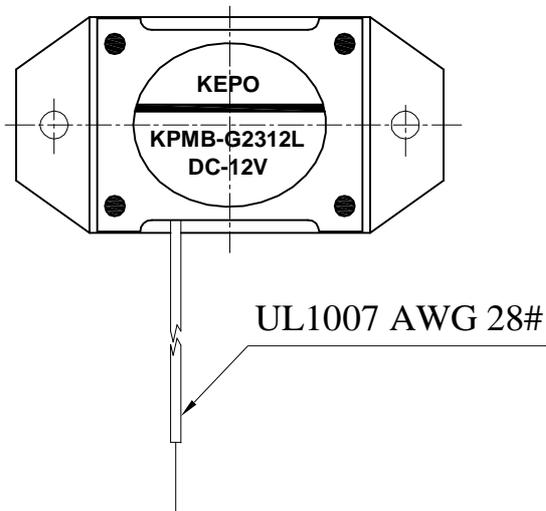
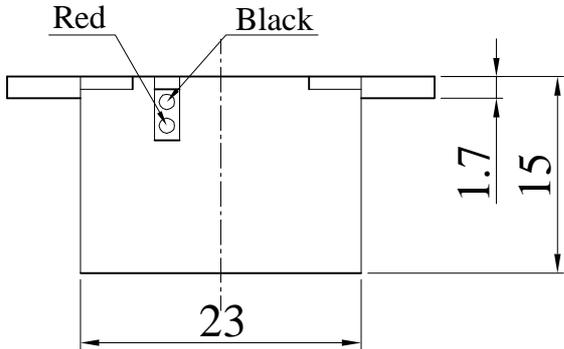
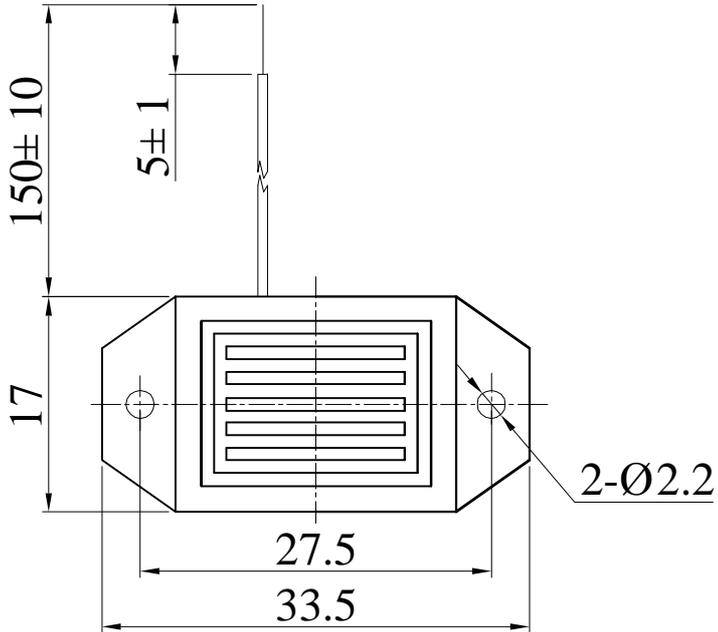
## 6. Structure



7	Wire 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 : ±0.5

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## 9. 包装标准 Packaging Standard

产品的外包装是纸箱, 它应该清楚的标明型号, 数量, 出厂检验批号.  
在运输及储存的过程中, 产品必须不会受到机械损伤.

Each minimum package unit of products shall be in a carton box and it shall be clearly marked with Part Number, quantity and outgoing inspection number.

There shall be no mechanical damage on products during transportation and/or in storage.

## 10. 警告 Cautions

如果产品使用于下列高可靠性的装置时, 请与我们联系, 以免对人的生命, 财产和身体造成损害.

Please contact us before using our products for the undermentioned applications requiring especially high reliability in order to prevent defects which might directly cause damage to other party's life, body or property (listed below).

- (1) Aircraft equipment 飞行设备
- (2) Aerospace equipment 航天设备
- (3) Undersea equipment 潜水设备
- (4) Medical equipment 医疗设备
- (5) Transportation equipment (automobiles, trains, ships) 交通设施
- (6) Traffic signal equipment 交通信号设备
- (7) Disaster prevention/crime prevention equipment 防灾害/防犯罪设备
- (8) Data-processing equipment 数据处理设备
- (9) Applications of similar complexity or reliability requirements comparable to the applications listed in the above 以及与上述相类似或可靠性要求更高的设备

## 11. 注意事项 Cautions for Use

11.1 如果产品所承受的机械应力超过规定的值, 元件可能被破坏.

The component may be damaged if mechanical stress over this specification is applied.

11.2 在使用烙铁的情况下, 应注意烙铁头的温度应该保持在 +350 °C 以下, 并且焊接时间控制在3秒内.

In case of using solder iron for soldering, the top of soldering iron's temperature should be kept less than +350 °C. Moreover the soldering time should be also kept with in 3seconds.

