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		Revision No.	1.0
Model No. :	KPI-G4330	Drawing No.	OEM2642R

## 1. Scope

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

本规格书适用于压电式蜂鸣器，通常它用在系统中做报警或提示用，如果将该产品用于其它领域，请与我们联系。

## 2. General

2.1 Out-Diameter : Ø43mm

外径: Ø43mm

2.2 Height : 14mm

高度: 14mm

2.3 Weight : 11 g

重量: 11克

2.4 Operating Temperature range:

-20~+60°C without loss of function

工作温度: -20~+60°C

2.5 Store Temperature range:

-30~+70°C without loss of function

储藏温度: -30~+70°C

## 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	Rated Voltage 额定电压	12VDC
2	Operating Voltage 工作电压	3~20VDC
3	Rated Current 额定电流	10mA at 12VDC
4	Resonant Frequency 谐振频率	2.9±0.5KHz
5	Sound Pressure Level 额定声压	100dB at 12VDC/30cm
6	Tone Nature 音调	Continuous
7	Case Material/Color 壳体材质/颜色	ABS/Black

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## 4. Reliability Test

After test(1~7item), the transducer S.P.L. difference shall be within  $\pm 10\text{dB}$ , and the appearance not exist any change to be harmful to normal operation(e.g.cracks,rusts, damages and especially distortion).

在1-7项试验后，声响器的声压变化值在 $\pm 10\text{dB}$ 之内，外观无变化（例如：开裂、生锈、损伤、变形等现象）。

	Item	Specification
1	高温放置 Leave test in high temperature	放置于温度 $+70 \pm 2^\circ\text{C}$ 的烘箱内240小时，然后取出，在常温下放置4小时后，测试蜂鸣器。试验后符合表1要求。 After being placed in a chamber with $+70 \pm 2^\circ\text{C}$ for 240 hours and then being placed in natural condition for 4 hours, Buzzer shall be measured.Specification The measured value shall meet Table 1.
2	低温放置 Leave test in low temperature	放置于温度 $-30 \pm 2^\circ\text{C}$ 的制冷箱内240小时，然后取出，在常温下放置4小时后，测试蜂鸣器。试验后符合表1要求。 After being placed in a chamber with $-30 \pm 2^\circ\text{C}$ for 240 hours and then being placed in natural condition for 4 hours, Buzzer shall be measured.Specification The measured value shall meet Table 1.
3	湿中放置 Leave test in humidity	放置于90%~95% R.H.,温度 $+40 \pm 2^\circ\text{C}$ 的环境试验箱内240小时，然后取出，在常温下放置4小时后，测试蜂鸣器。试验后符合表1要求。 After being placed in a chamber with 90%~95% R.H. at $+40 \pm 2^\circ\text{C}$ for 240 hours and then being placed in natural condition for 4 hours, Buzzer shall be measured.The measured value shall meet Table 1.
4	温度循环 Cycle test for temperature	先放置于温度 $-30 \pm 2^\circ\text{C}$ 的试验箱内30分钟后放置于室温( $+20^\circ\text{C}$ )15分钟后，放置于 $+70 \pm 2^\circ\text{C}$ 的烘箱内30分钟，再放置于室温( $+20^\circ\text{C}$ )15分钟.经过以上循环5次,在常温下放置4小时后，测试蜂鸣器。试验后符合表1要求。 After being placed in a chamber at $-30 \pm 2^\circ\text{C}$ for 30 minutes, Buzzer shall be placed at room temperature( $+20^\circ\text{C}$ ).After 15 minutes at this temperature ,Buzzer shall be placed in a chamber at $+70 \pm 2^\circ\text{C}$ . After 30 minutes at this temperature, Buzzer shall be returned to room temperature ( $+20^\circ\text{C}$ ) for 15 minutes. After 5 above cycles, Buzzer shall be measured after being placed in natural condition for 4 hours.The measured value shall meet Table 1.

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#### 4. Reliability Test

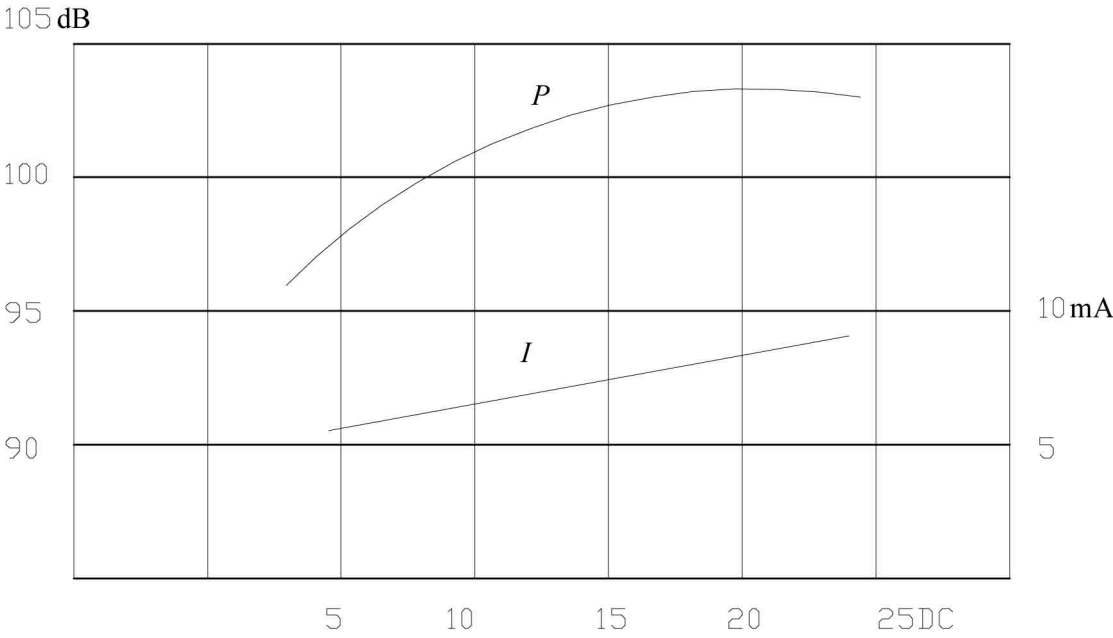
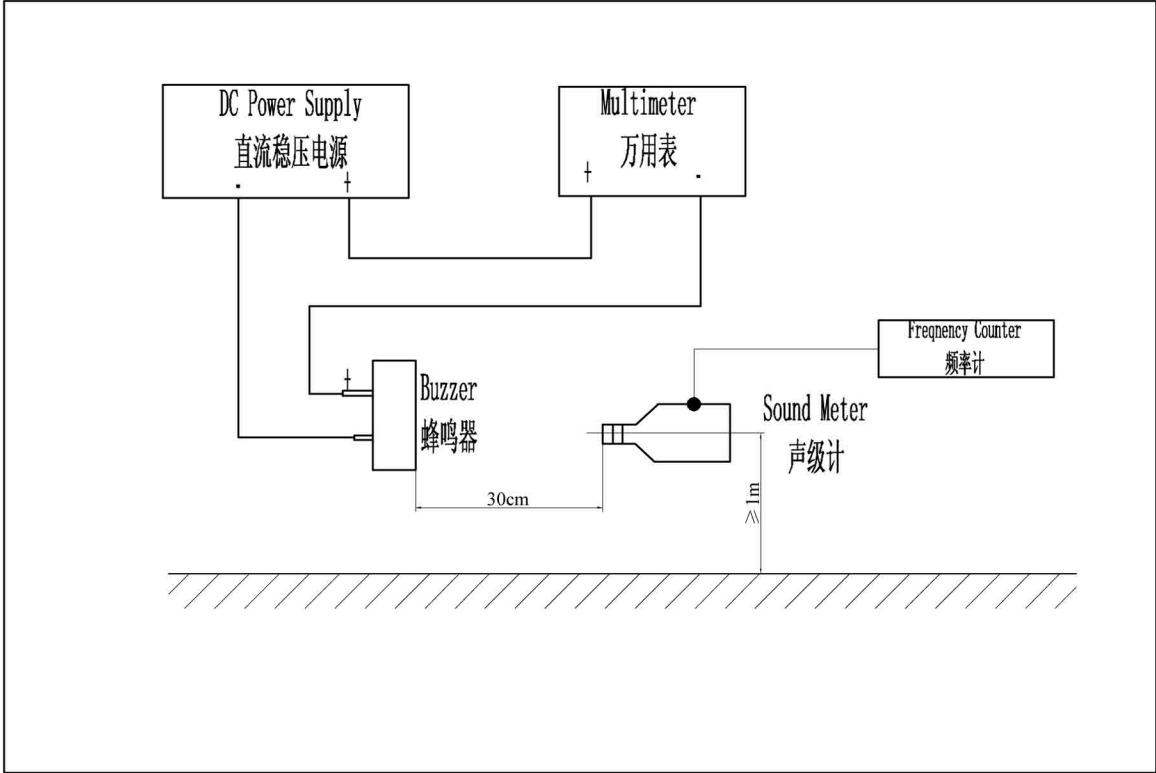
	Item	Specification
5	耐冲击性 Shock test	100G正弦波, XYZ三个方向各3次冲击实验 后,测试蜂鸣器.试验后符合表 1要求. 100G sine wave 3 times to each direction(X.Y.Z).The measured value shall meet Table 1.
6	耐焊接性 Heat-proof for solder	将蜂鸣器的插针插入(插至距蜂鸣器壳体1.5mm处为止)+300±5℃的焊锡槽3±0.5秒或+260±5℃的焊锡槽10±1秒,然后在常温中放置4小时后,测试蜂鸣器.试验后符合表 1要求. Lead terminal are immersed up to 1.5mm from Buzzer body in Buzzer bath of +300 ±5℃ for 3 ±0.5 seconds or ±260 ±5℃ for 10 ±1 seconds, and then Buzzer shall be measured after being placed in natural condition for 4hours.The measured value shall meet Table 1.
7	耐振动性 Vibration test	振动频率10~55Hz,1.5mm全振幅,XYZ 三个方向各4小时试验后,测试蜂鸣器.试验后符合表 1要求. Buzzer shall be measured after being applied vibration of amplitude of 1.5mm with 10 to55Hz band of vibration frequency to each of 3 perpendicular directions for 4hours.The measured value shall meet Table 1.
8	可焊性 Solderability	先将蜂鸣器的插针浸入松香液 5秒钟,然后 浸入+260±5℃熔融的锡槽中3±0.5秒.试验后插针表面90%以上 被焊锡润湿.(插针的段面). Lead terminals are immersed in rosin for 5 seconds and then immersed in Buzzer bath of +260 ±5℃ for 3 ±0.5 seconds.Specification:90%min.lead terminals shall be wet with Buzzer (Except the edge of terminal).
9	插针强度 Terminal Strength Pulling	分别在每个插针的轴向施加 9.8牛顿的静荷 重10秒.试验后插针没有断开和 可见的损伤。 The force 10 seconds of 9.8N is applied to each terminal in axial direction.Specification No visible damage and cutting off.

表 1  
Table 1

	项目 Item	判定基准 Determinant norm
1	声压 SPL	在初值的±10dB以内 ±10dB based on initial value
2	频率 Frequency	在初值的±0.5KHz以内 ±0.5KHz based on initial value after expose 4hours at normal temperature

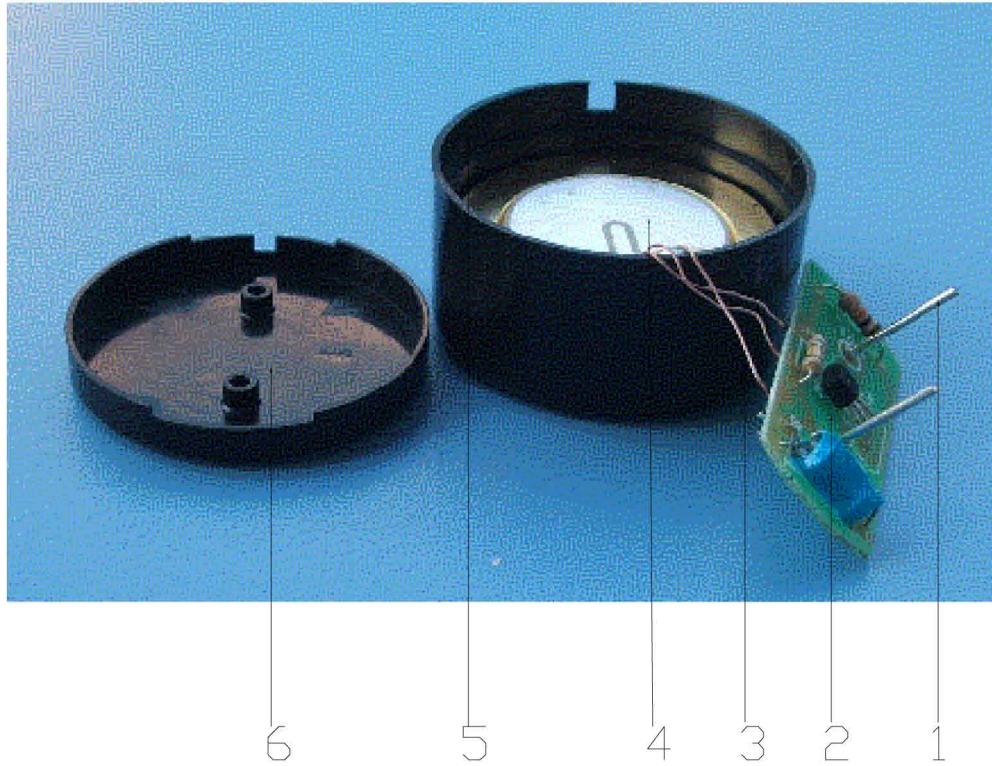
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### 5. Measurement Block Diagram & Response curve



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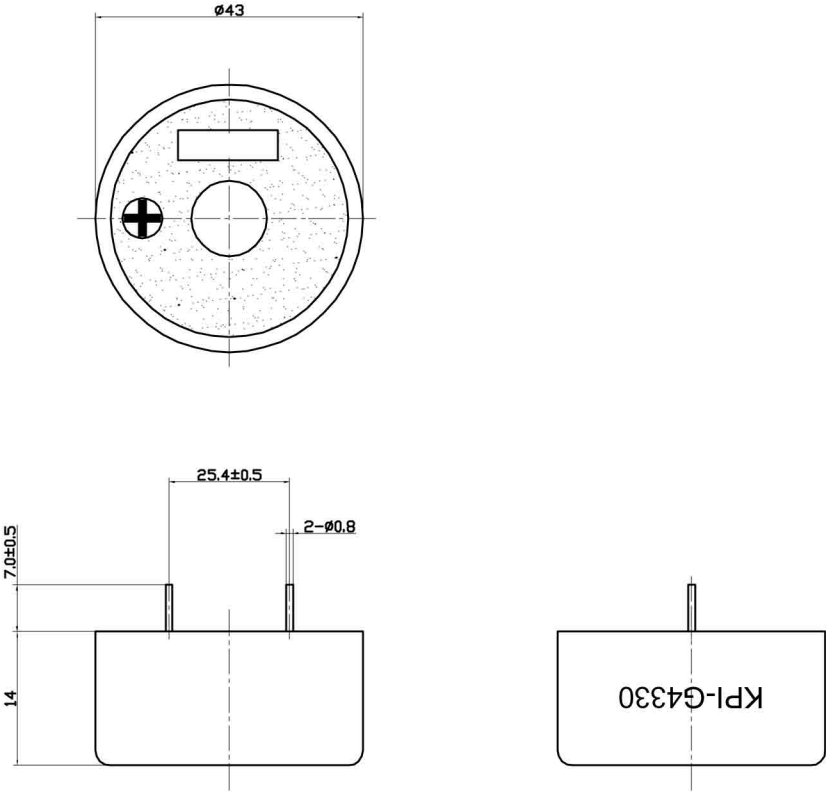
## 6. Structure



6	Cover 后盖	1	PC	
5	Case 壳体	1	PC	
4	Element 蜂鸣片	1	H65 Piezo Ceramic	
3	Wire 引线	3		
2	PCB/Component 印制板 / 元器件	1		
1	Pin 插针	2	H62	
No.	Part Name 型号	Q'TY 数量	Material 材质	Remarks 备注

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### 7. Dimensions



FIRST ANGLE PROJECTION

UNIT : mm  
Tolerance :  $\pm 0.5$