

# SPECIFICATION

Customer :

Applied To :

Product Name : Piezo Transducer

Model Name : KPR-G3010H

Drawing No. : KP3.840.342R

Compliance with ROHS

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 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声响器，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 Out-Diameter : Ø30 mm

外径: Ø30 mm

2.2 Height : 5.7mm

高度: 5.7 mm

2.3 Weight : 4 g

重量: 4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

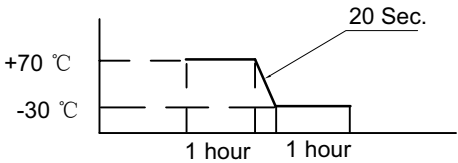
	Items 项目	Specification 规格
1	Rated Voltage 额定电压	12Vp-p Square Wave
2	Max.Allowable Voltage 最大输入电压	30Vp-p Square Wave
3	Max.Rated Current 额定电流	8mA at 3.6KHz/12Vp-p Square Wave
4	Resonant Frequency 谐振频率	3.6± 0.5KHz
5	Min.Sound Pressure Level 额定声压	80dB at 3.6KHz/12Vp-p Square Wave/30cm
6	Capacitance at 100Hz 电容( at 100Hz)	24000pF ± 30%
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：无开裂、生锈、损伤、变形等现象）。

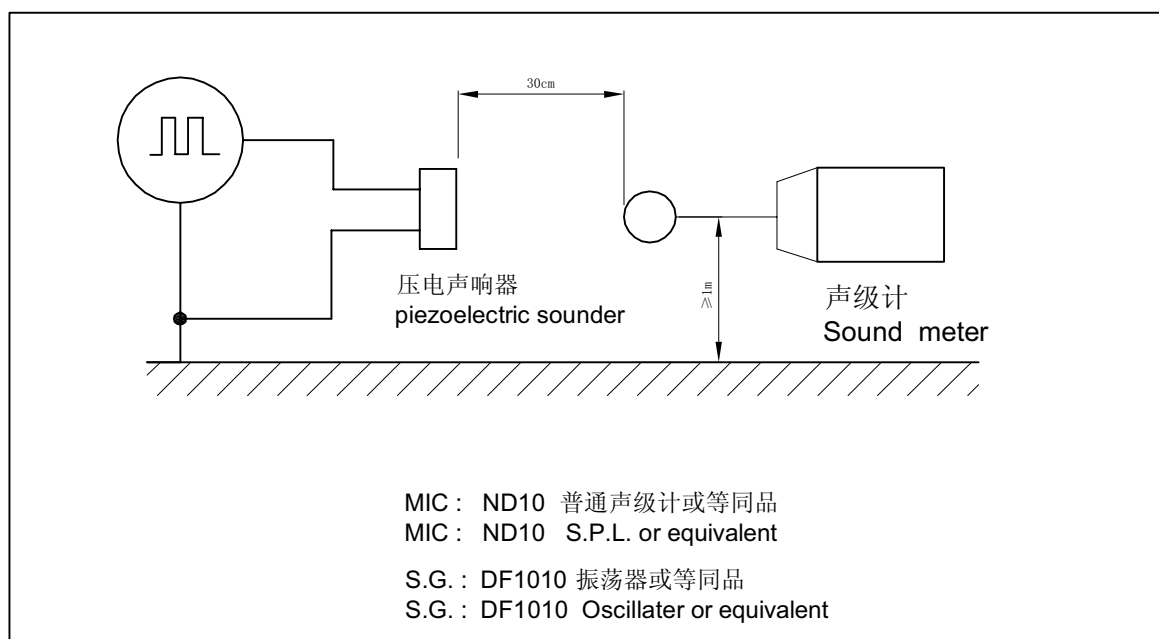
	Item	Specification
1	High Temperature Test 高温试验	<p>After being worked in a chamber with <math>+70\pm 2\text{ }^\circ\text{C}</math> for 2h and then being placed in a chamber with <math>+70\pm 2\text{ }^\circ\text{C}</math> for 16h, finally being placed in natural condition for 2h, sounder shall be measured.</p> <p>将产品置于 <math>+70\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>
2	Low Temperature Test 低温试验	<p>First being worked in a chamber with <math>-30\pm 2\text{ }^\circ\text{C}</math> for 2h and then being placed in a chamber with <math>-30\pm 2\text{ }^\circ\text{C}</math> for 16h, finally being placed in natural condition for 2h, sounder shall be measured.</p> <p>将产品置于 <math>-30\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>+70\pm 2\text{ }^\circ\text{C}</math> for 1 hour, then sounder shall be placed in a chamber at <math>-30\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>+70\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>-30\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

	Item	Specification
5	Vibration Resistance 振动试验	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 hour. 振幅为1.5mm, 频率为10-30Hz, 三个不同轴方向各振动2小时, 试验后进行测量.
6	Drop Test 跌落试验	Sounder packed in the carton are dropped in six direction from the height of 80cm to the concrete floor. 跌落高度80cm, 6个不同方向整箱跌落到水泥地, 试验后进行测量.

#### 5. Measurement Block Diagram & Response curve



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11/04/2006 13:56

CRY6125F 蜂鸣器测试仪 V86

无框 滤波器无

型号:KPR-G3010H

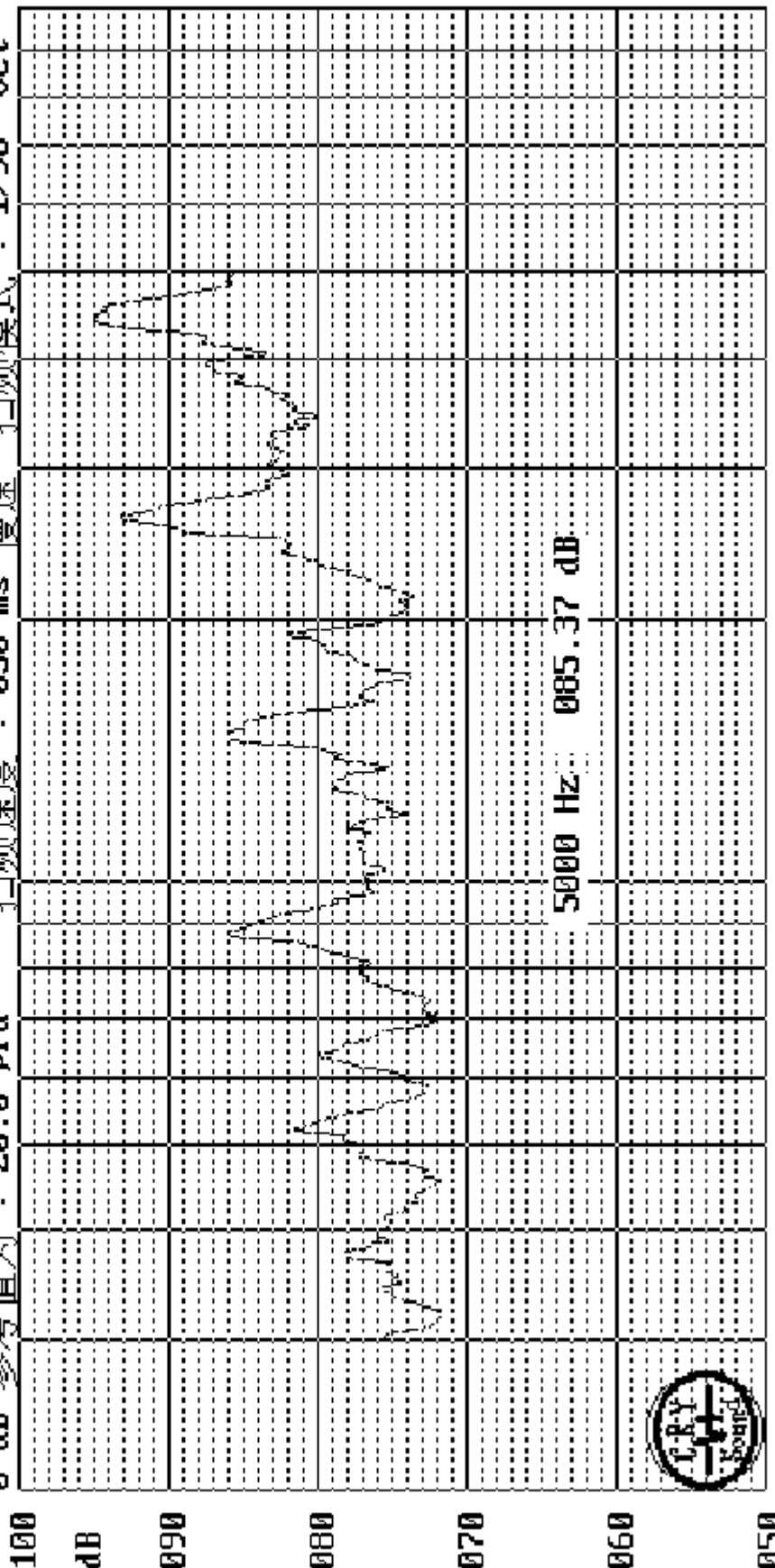
Fc= 3608 Hz 081.57 dB

电压:6000 mV

Fo= 4477 Hz 095.19 dB

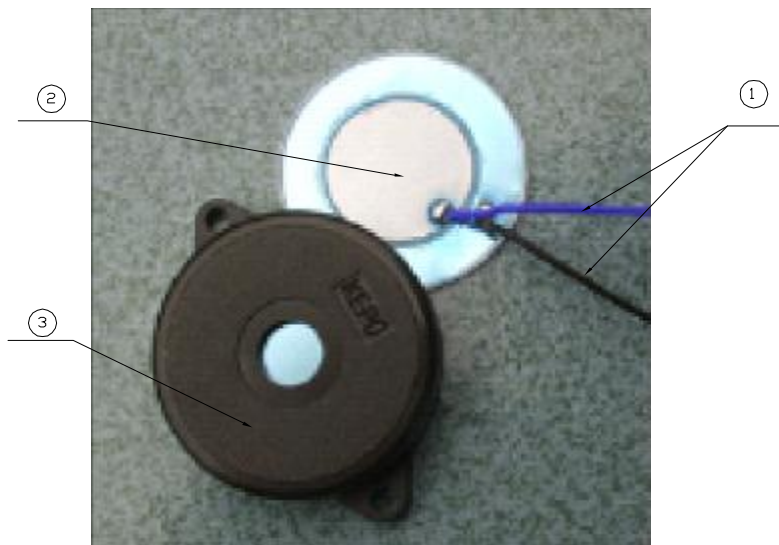
方波

0 dB 参考值为: 20.0  $\mu$ Pa 扫描速度: 030 ms 慢速 扫描模式: 1/96 Oct



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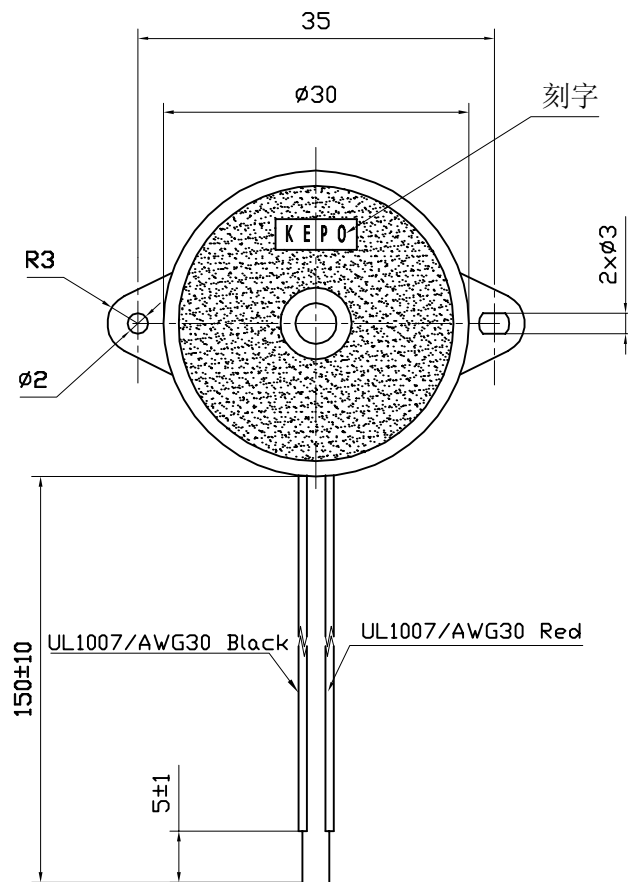
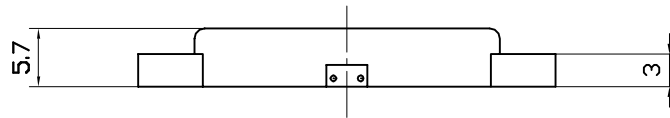
## 6. Structure



5				
4	Cover 后盖	1	ABS	
3	Case 壳体	1	ABS	
2	Piezp-Element 蜂鸣片	1	H65	
			Piezo Ceramic	
1	Wire 引线	2		
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 :  $\pm 0.5$

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## 8. Packing



Picture1(350PCS)



Picture2(3500PCS)

QTY: 3500Pcs

SIZE:460 x295 x220

