

# SPECIFICATION

Customer : Lomex

受 控

Applied To :

Product Name : Magnetic Transducer

Model Name : KPM-G1205A20-K9140


Drawing No. : OEM9140R

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
	刘祥兵	胡浩波	2012-08-29

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## 1. Scope

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

本规格书适用于电磁式声响器，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 : Ø12 mm  
 外径: Ø12 mm
- 2.2 Height : 9.0 mm  
 高度: 9.0 mm
- 2.3 Weight : 1.7 g  
 重量: 1.7克
- 2.4 Operating Temperature range:  
 -20~+70°C without loss of function  
 工作温度: -20~+70°C
- Store Temperature range:  
 -30~+80°C without loss of function  
 储藏温度: -30~+80°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

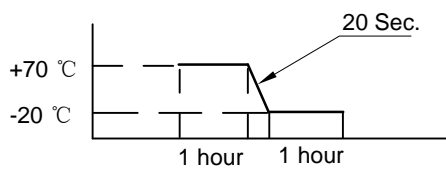
	Items 项目	Specification 规格
1	Rated Voltage 额定电压	5V
2	Operating Voltage 工作电压	4~8V
3	Max. Rated Current 额定电流	120mA/5V
4	Resonant Frequency 谐振频率	2000Hz
5	Min. Sound Pressure Level 额定声压	90dB/5V/2000Hz/10cm
6	Coil Resistance 直流阻抗	16± 4 Ω
7	Coil Impedance 交流阻抗	40 Ω
8	Case Material/Color 壳体材质/颜色	PBT/BLACK

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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	High Temperature Test 高温试验	<p>After being woked in a chamber with <math>+70\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>+70\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>+70\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>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>-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

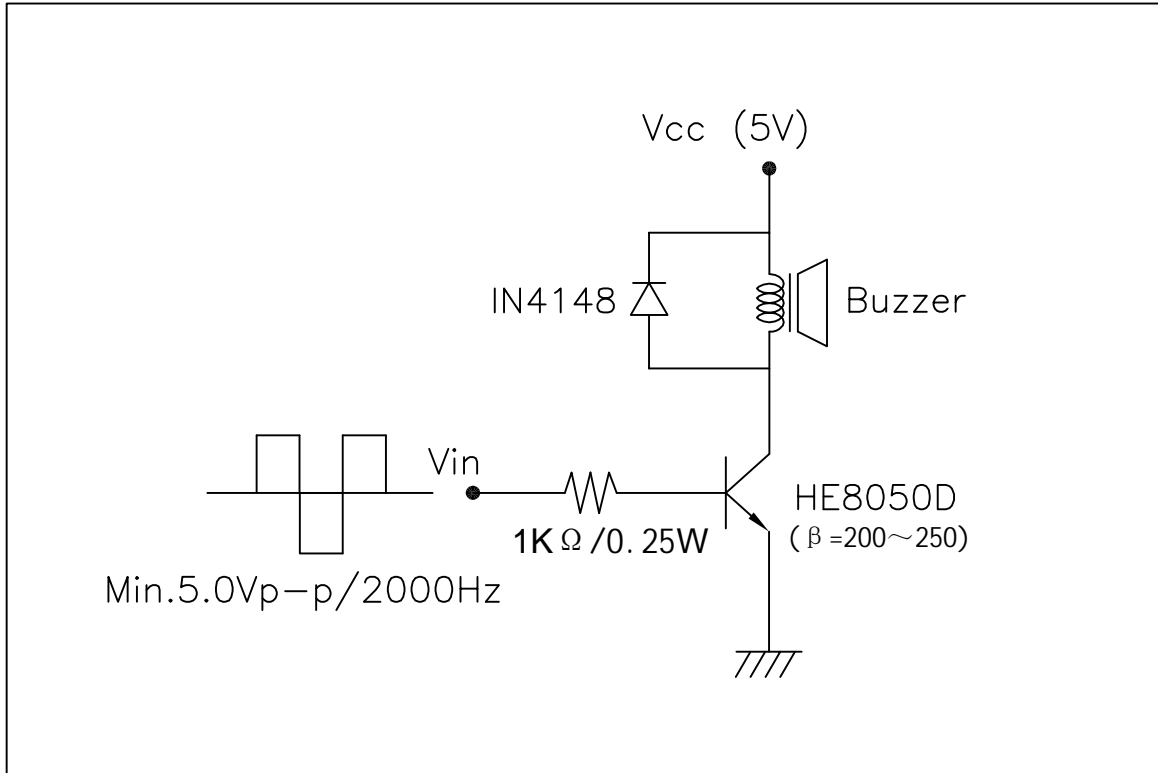
	Item	Specification
5	Vibration Resistance 振动试验	Sounder shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 30Hz band of vibration frequency to each of 3 perpendicular directions for 2 hour. 振幅为1.5mm, 频率为10~30Hz, 三个不同轴方向各振动2小时, 试验后进行测量.
6	Drop Test 跌落试验	Sounder packed in the 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.
7	Solderability 可焊性试验	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $+260 \pm 5^{\circ} \text{C}$ for $3 \pm 0.5$ seconds. 插针浸入松香5秒, 然后再浸入 $+260 \pm 5^{\circ} \text{C}$ 的锡炉中 $3 \pm 0.5$ 秒, 插针表面应覆盖一层光滑明亮的焊料.
8	Terminal Strength Pulling 插针强度试验	The force 10 seconds of 9.8N is applied go each terminal in axial direction. 插针应承受9.8N拉力, 拉力时间10秒, 插针无松动和脱落等现象.

表1  
Table 1

	项目 Item	判定基准 Determinant norm
1	声压级 Sound Pressure Level	在初始值的 $\pm 10\text{dB}$ 以内 $\pm 10\text{dB}$ based on initial value

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## 5. Measurement Block Diagram & Response curve



03/20/2009 12:56

CRY6125F 蜂鸣器测试仪 V91

无框 滤波器无

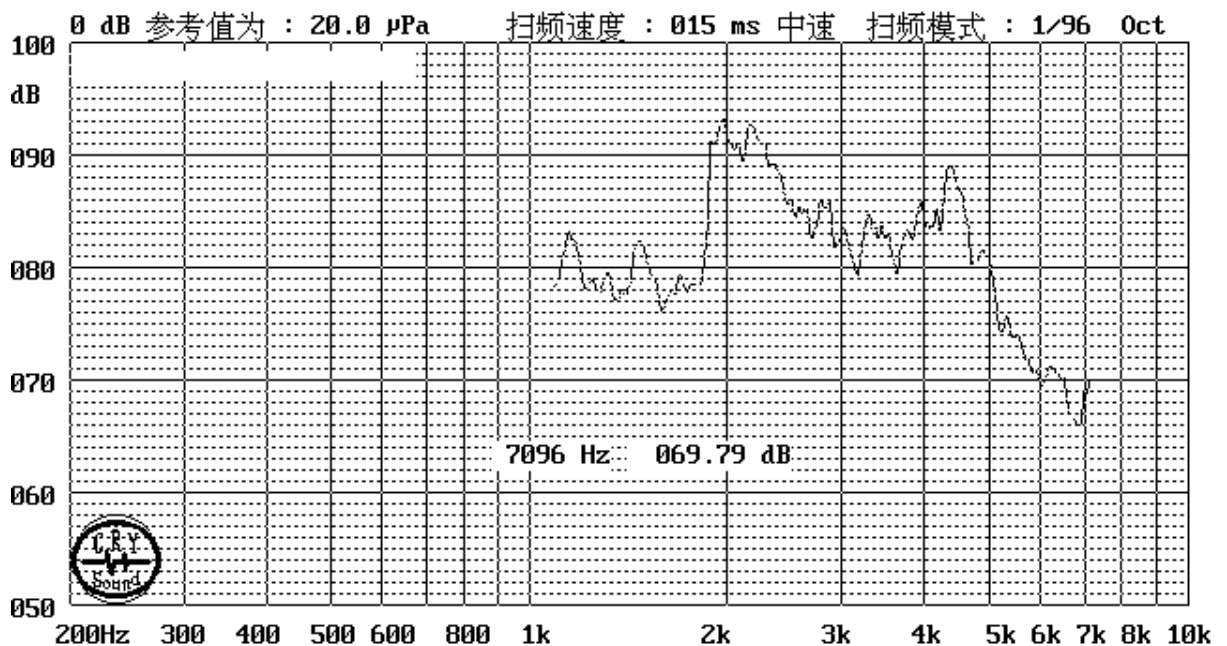
型号:KPM1205A20

Fc= 2000 Hz 091.69 dB

正向方波

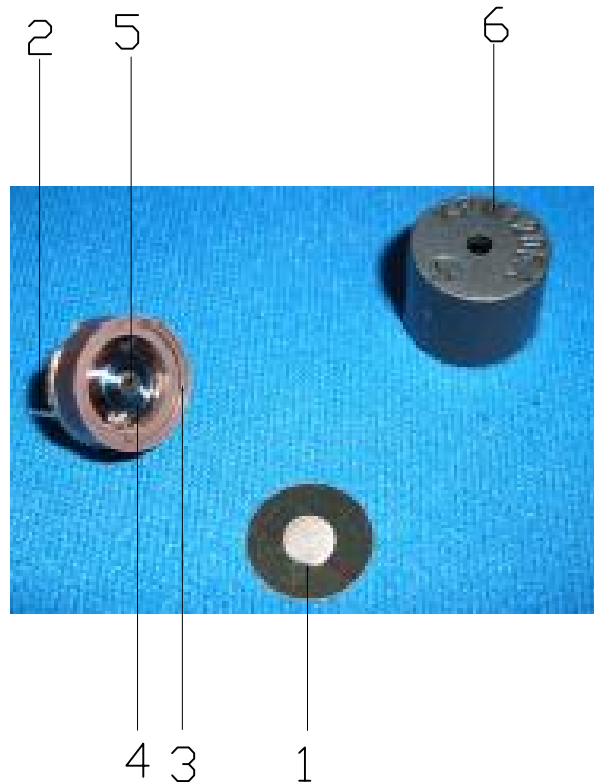
电压:5000 mV

Fo= 1971 Hz 093.36 dB



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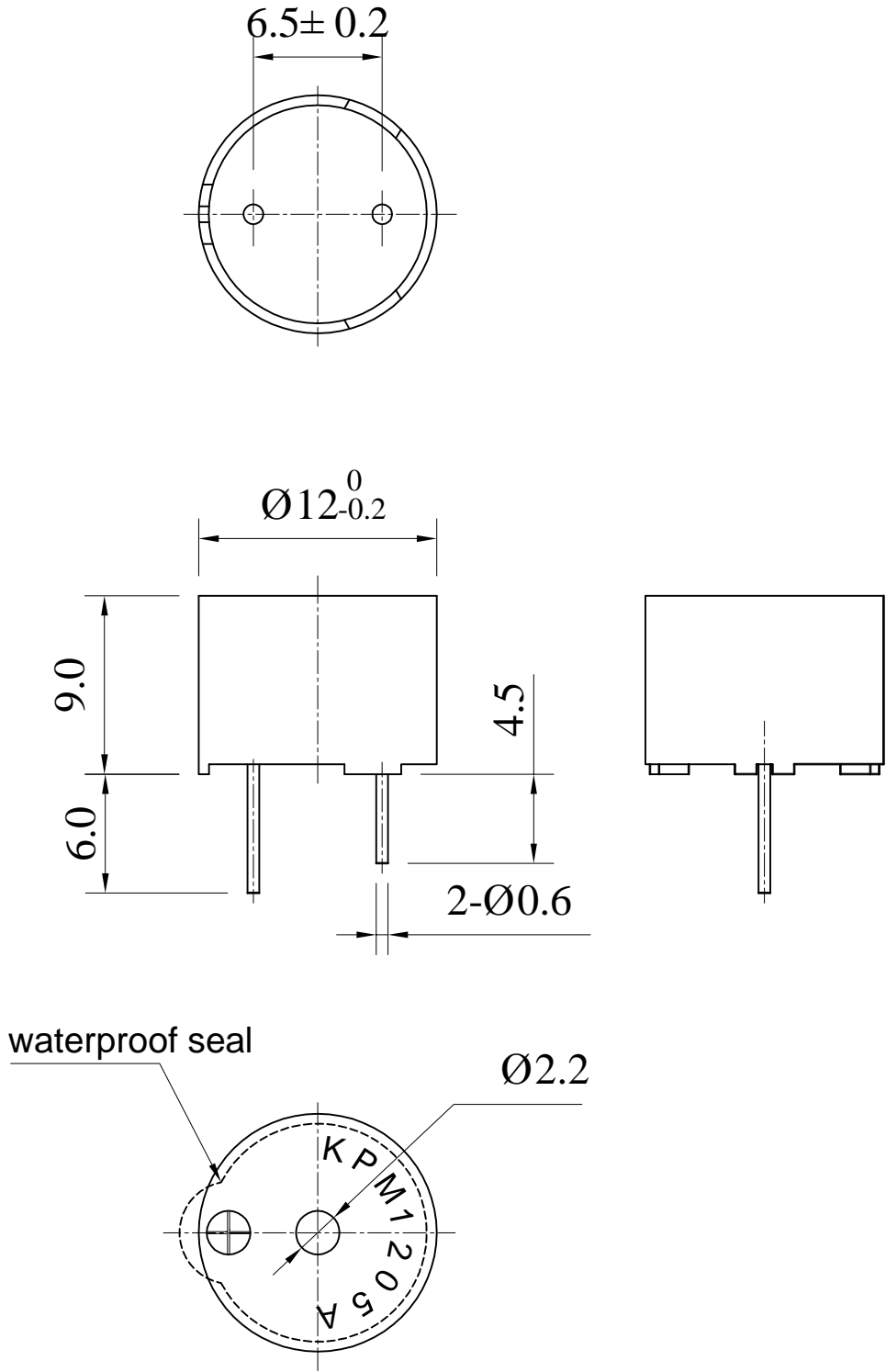
## 6. Structure



6	Case 壳体	1	PBT	
5	T Core T铁	1	Fe	
4	Coil 线圈	1	QANR	
3	Magnetic ring 磁环	1	/	
2	PCB with pin 带导针印制板	1	/	
1	Diaphragm 膜片	1	/	
No.	Part Name 型号	数量 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



Picture1 100PCS



Picture2 500PCS



Picture3 500PCS



Picture4 6000PCS

QTY: 6000Pcs  
425 x400 x315

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## 9. Revision

Rev. No.	DATE	PAGE	DESCRIPTION	SIGN
1.0	2012.08.29	10	primary	