

Specification for Magnetic Transducer	Page	2/9
	Revision No.	1.0
	Drawing No.	OEM9223R
Model No. : KPM-G2512A-K9223 (Z170)		

## CONTENTS

1. Scope  
范围
2. General  
概要
3. Maximum Rating  
额定极限条件
4. Electrical Characteristics  
电性能
5. Measurement Block Diagram & Response Curve  
测试图和曲线图
6. Physical Characteristics  
机械性能
7. Environmental Characteristics  
环境性能
8. Dimensions  
尺寸
9. Packaging Standard  
包装标准
10. Cautions  
警告
11. Cautions for Use  
注意事项
12. Revision  
履历表

Specification for Magnetic Transducer	Page	3/9
	Revision No.	1.0
	Drawing No.	OEM9223R

Model No. : KPM-G2512A-K9223 (Z170)

## 1. 范围 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. 概要 General

- 2.1 Out-Diameter : Ø25mm  
 外径: Ø25mm
- 2.2 Height : 12.5mm  
 高度: 12.5mm
- 2.3 Weight : 8 g.  
 重量: 8克
- 2.4 Case Material/Color : PPO/Black  
 壳体材质/颜色: PPO/黑

## 3. 额定极限条件 Maximum Rating

	项目 Item	规格 Specification
3.1	工作温度范围 Operating Temperature Range	-40 ~ +85℃
3.2	储存温度范围 Storage Temperature Range	-40 ~ +85℃
3.3	额定电压 Rated Voltage	12V
3.4	工作电压 Operating Voltage	8~15V

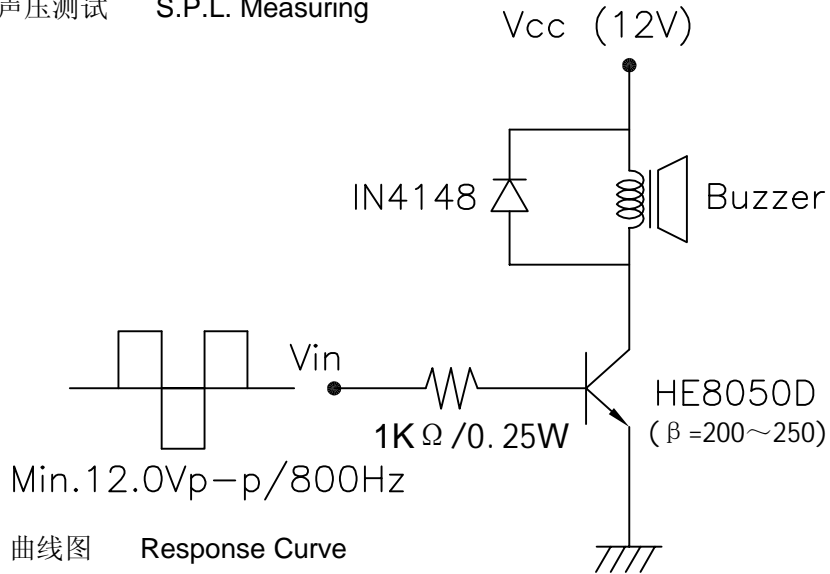
## 4. 电性能 Electrical Characteristics

	项目 Item	规格 Specification
4.1	Max.Rated Current 额定电流	60mA/12V
4.2	Resonant Frequency 谐振频率	800Hz
4.3	Min.Sound Pressure Level 最小声压	88dB/12V/800Hz/10cm
4.4	Coil Resistance 直流阻抗	120± 15 Ω
4.5	Coil Impedance 交流阻抗	280 Ω

Specification for Magnetic Transducer Model No. : KPM-G2512A-K9223 (Z170)	Page	4/9
	Revision No.	1.0
	Drawing No.	OEM9223R

## 5. 测试图和曲线图 Measurement Block Diagram & Response Curve

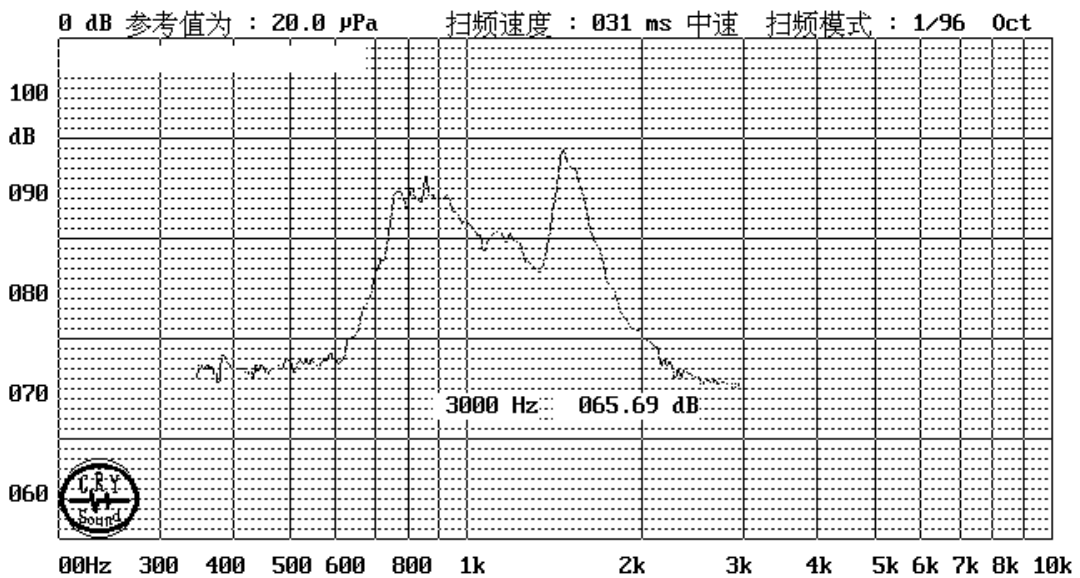
### 5.1 声压测试 S.P.L. Measuring



### 5.2 曲线图 Response Curve

06/16/2009 09:41      CRY6125F 蜂鸣器测试仪 V91      无框 滤波器1次

型号: KPM-G2512A      Fc= 800 Hz      dB  
电压:      mV      Fo= 1457 Hz      dB      正向方波



### 5.3 测试环境 Measuring Condition

温度 $+25 \pm 3^{\circ}\text{C}$ , 湿度 $60 \pm 10\% \text{R.H.}$ 标准测试状态, 在没有疑问的场合, 可以在温度 $+5 \sim +35^{\circ}\text{C}$ , 湿度 $45 \sim 85\% \text{R.H.}$ 的范围内测试.

Part shall be measured under a condition (Temperature : $+5$  to  $+35^{\circ}\text{C}$ , Humidity : $45$  to  $85\% \text{R.H.}$ ) unless the standard condition (Temperature : $+25 \pm 3^{\circ}\text{C}$ , Humidity : $60 \pm 10\% \text{R.H.}$ ) is regulated measure.

Specification for Magnetic Transducer	Page	5/9
	Revision No.	1.0
	Drawing No.	OEM9223R

Model No. : KPM-G2512A-K9223 (Z170)

## 6. 机械性能 Physical Characteristics

	实验项目 Item	实验条件 Test Condition	实验后规格 Specification
6.1	耐冲击性 Shock	<p>峰值加速度 <math>490\text{m/s}^2</math>, 正向方波, 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 square wave.</p>	<p>符合表1的要求</p> <p>The measured value shall meet Table 1.</p>
6.2	耐振动性 Vibration Resistant	<p>振动频率 <math>10\sim 30\text{ Hz}</math>, <math>1.5\text{mm}</math> 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 <math>1.5\text{mm}</math> with <math>10\text{ to }30\text{Hz}</math> band of vibration frequency to each of 3 perpendicular directions for 2 hours.</p>	
6.3	耐焊接性 Soldering Heat Resistance	<p>将产品的插针插入(插至距产品壳体<math>1.5\text{mm}</math>处为止) <math>+300\pm 5^\circ\text{C}</math>的焊锡槽<math>3\pm 0.5</math>秒或<math>+260\pm 5^\circ\text{C}</math>的焊锡槽<math>10\pm 1</math>秒, 然后在常温中放置4小时后, 进行测试。</p> <p>Lead terminal are immersed up to <math>1.5\text{mm}</math> from sounder's body in solder bath of <math>+300\pm 5^\circ\text{C}</math> for <math>3\pm 0.5</math> seconds or <math>\pm 260\pm 5^\circ\text{C}</math> for <math>10\pm 1</math> seconds, and then sounder shall be measured after being placed in natural condition for 4 hours.</p>	
6.4	可焊性 Solderability	<p>先将产品的插针浸入松香液5秒钟, 然后浸入<math>+260\pm 5^\circ\text{C}</math>熔融的锡槽中<math>3\pm 0.5</math>秒。</p> <p>Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of <math>+260\pm 5^\circ\text{C}</math> for <math>3\pm 0.5</math> seconds.</p>	
6.5	插针强度 Terminal Strength Pulling	<p>分别在每个插针的轴向施加<math>9.8</math>牛顿的静荷重<math>10</math>秒。</p> <p>The force <math>10</math> seconds of <math>9.8\text{N}</math> is applied to each terminal in axial direction.</p>	

Specification for Magnetic Transducer	Page	6/9
	Revision No.	1.0
	Drawing No.	OEM9223R
Model No. : KPM-G2512A-K9223 (Z170)		

## 7. 环境性能 Environmental Characteristics

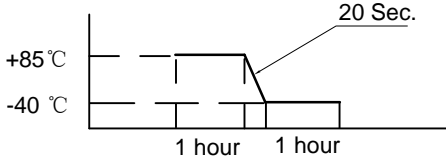
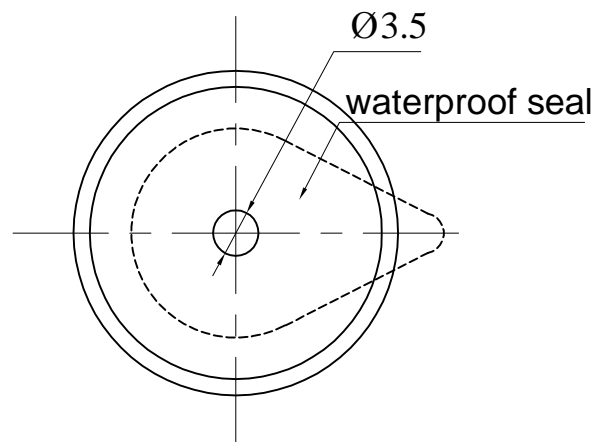
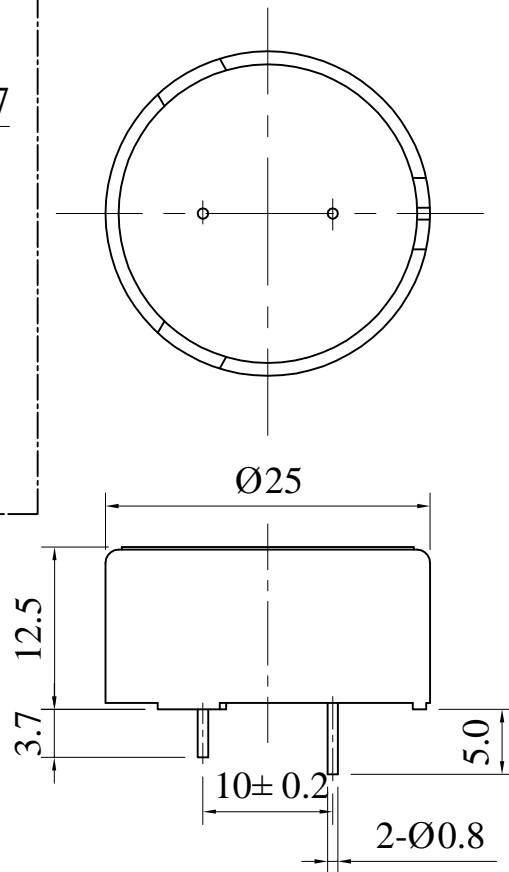
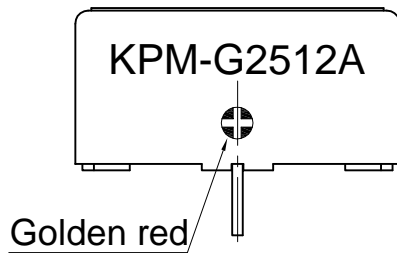
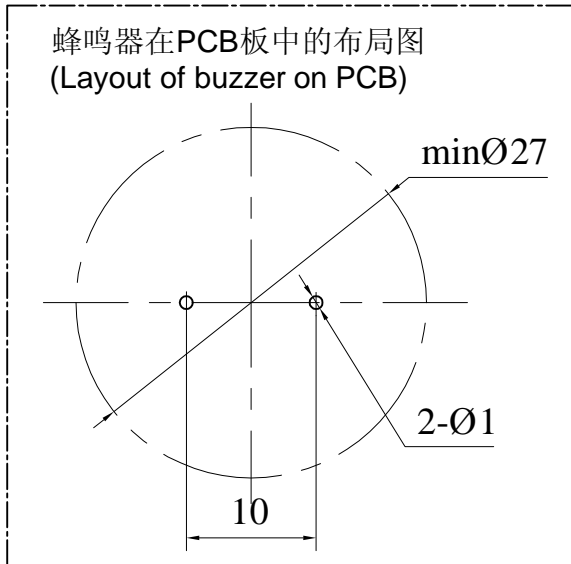
	Item	Specification
1	High Temperature Test 高温试验	<p>After being worked in a chamber with <math>+85\pm 2\text{ }^{\circ}\text{C}</math> for 2h and then being placed in natural condition for 2h, sounder shall be measured.</p> <p>将产品置于 <math>+85\pm 2\text{ }^{\circ}\text{C}</math> 试验箱中, 先工作 2 小时, 然后在正常大气压条件下恢复 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>-40\pm 2\text{ }^{\circ}\text{C}</math> for 2h and then being placed in a chamber with <math>-40\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>-40\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>+85\pm 2\text{ }^{\circ}\text{C}</math> for 1 hour, then sounder shall be placed in a chamber at <math>-40\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>85\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>-40\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> 

表 1 Table 1

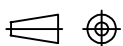
项 目 Item	试验后变化量 Specification after test
声压级 Sound Pressure Level	初始值 $\pm 10\text{dB}$ Initial Value $\pm 10\text{dB}$

Specification for Magnetic Transducer	Page	7/9
	Revision No.	1.0
Model No. : KPM-G2512A-K9223 (Z170)	Drawing No.	OEM9223R

## 8. Dimensions



FIRST ANGLE PROJECTION



UNIT : mm  
Tolerance : ±0.5

Specification for Magnetic Transducer	Page	8/9
	Revision No.	1.0
	Drawing No.	OEM9223R
Model No. : KPM-G2512A-K9223 (Z170)		

## 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.

11.0 在使用烙铁的情况下, 应注意烙铁头的温度应该保持在+350℃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℃. Moreover the soldering time should be also kept with in 3seconds.