

# SPECIFICATION

Customer :

受 控

Applied To :

Product Name : Magnetic Buzzer

Model Name : SMA-G1205B

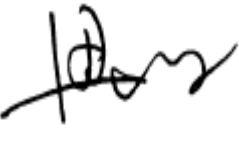
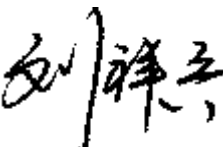
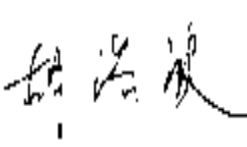
Drawing No. : KP3.840.861R

Compliance with RoHS

Signature of Approval

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Signature of KEPO

Approved by	Checked by	Issued by	Date
			



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Specification for Magnetic Buzzer	Page	2/10
	Revision No.	1.1
	Drawing No.	KP3.840.861R
Model No. : SMA-G1205B		

## CONTENTS

1. Scope  
范围
2. General  
概要
3. Electrical and Acoustic Characteristics.  
电声参数
4. Reliability Test  
可靠性试验
5. Measurement Block Diagram & Response curve  
测试图和曲线图
6. Structure  
结构
7. Dimensions  
尺寸
8. Packing  
包装
9. Revision  
履历表

Specification for Magnetic Buzzer	Page	3/10
	Revision No.	1.1
	Drawing No.	KP3.840.861R
Model No. : SMA-G1205B		

## 1. Scope

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

本规格书适用于电磁式蜂鸣器，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 : 12.5×12.5 mm  
 外径: 12.5×12.5mm
- 2.2 Height : 6.9 mm  
 高度: 6.9 mm
- 2.3 Weight : 2 g  
 重量: 2克
- 2.4 Operating Temperature range:  
 -20~+70℃ without loss of function  
 工作温度: -20~+70℃
- 2.5 Store Temperature range:  
 -30~+80℃ without loss of function  
 储藏温度: -30~+80℃

## 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

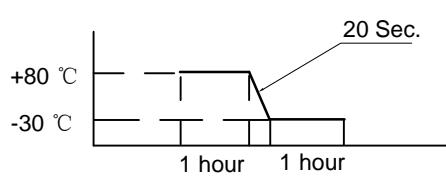
	Items 项目	Specification 规格
1	Rated Voltage 额定电压	5VDC
2	Operating Voltage 工作电压	4-7VDC
3	Max.Rated Current 额定电流	40mA/5VDC
4	Resonant Frequency 谐振频率	2.3±0.3KHz
5	Min.Sound Pressure Level 额定声压	87dB 5VDC/10cm
6	Tone Nature 音调	Continuous (直音)
7	Case Material/Color 壳体材质/颜色	PPS/BLACK

Specification for Magnetic Buzzer	Page	4/10
	Revision No.	1.1
	Drawing No.	KP3.840.861R
Model No. : SMA-G1205B		

## 4. Reliability Test

After test(1~7item), 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).

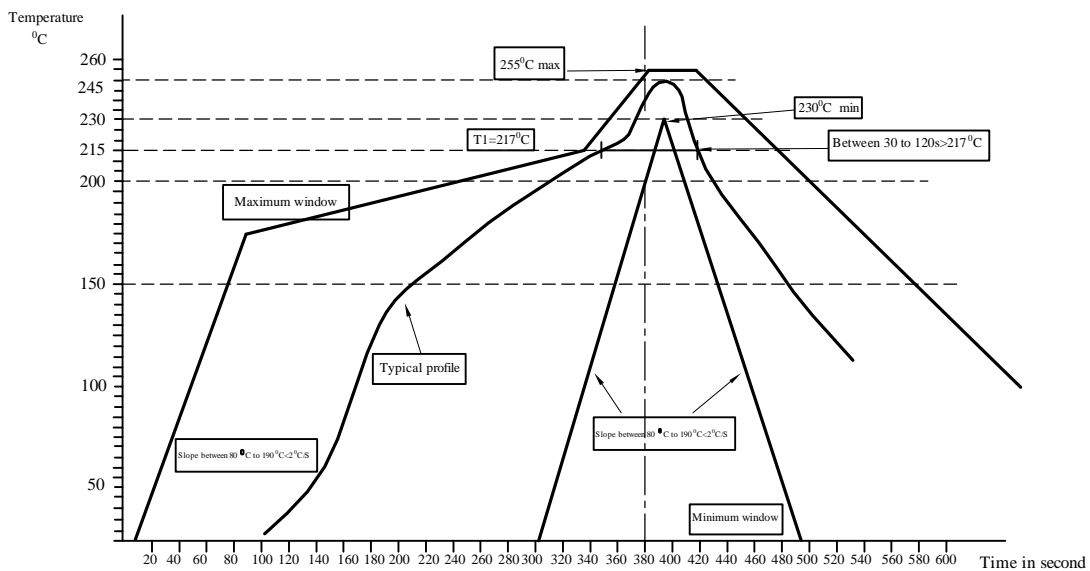
在1-7项试验后，蜂鸣器的声压变化值在 $\pm 10\text{dB}$ 之内，频率变化在 $\pm 0.5\text{KHz}$ 之内。外观无变化（例如：开裂、生锈、损伤、变形等现象）。

	Item	Specification
1	High Temperature Test 高温试验	<p>After being worked in a chamber with <math>+80\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>+80\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>-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>+80\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>80\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> 

Specification for Magnetic Buzzer	Page	5/10
	Revision No.	1.1
	Drawing No.	KP3.840.861R
Model No. : SMA-G1205B		

## 4. Reliability Test

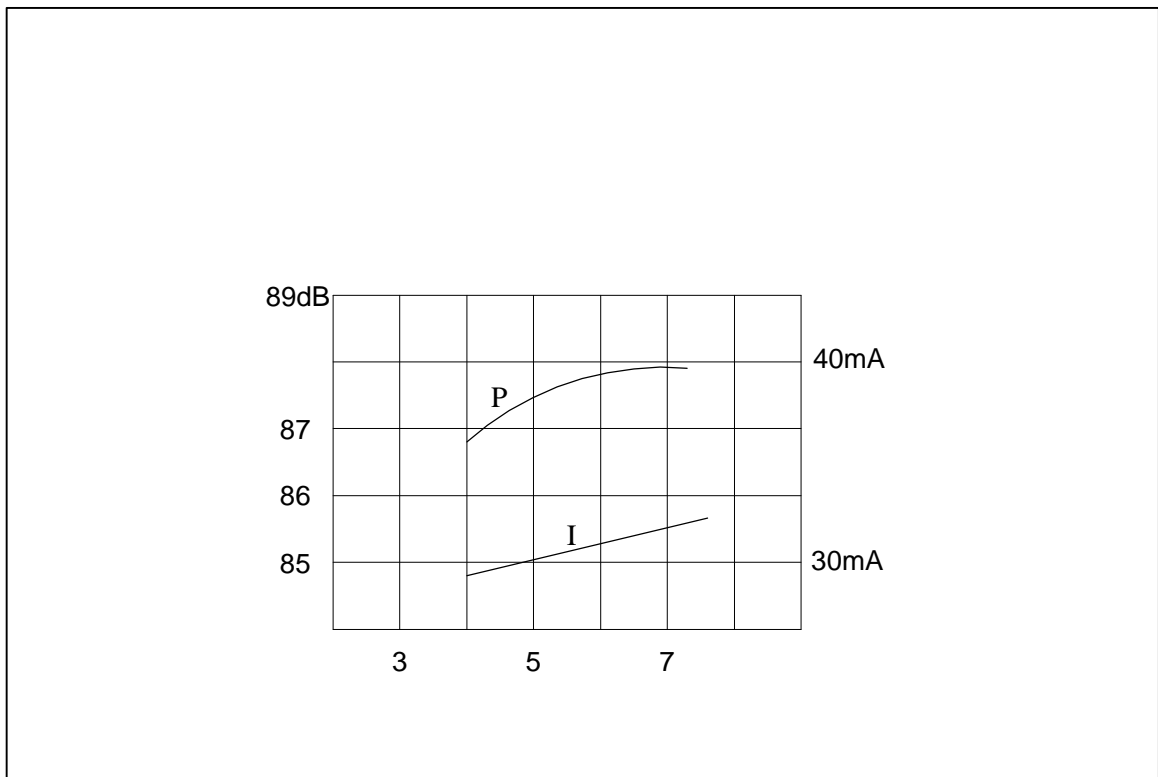
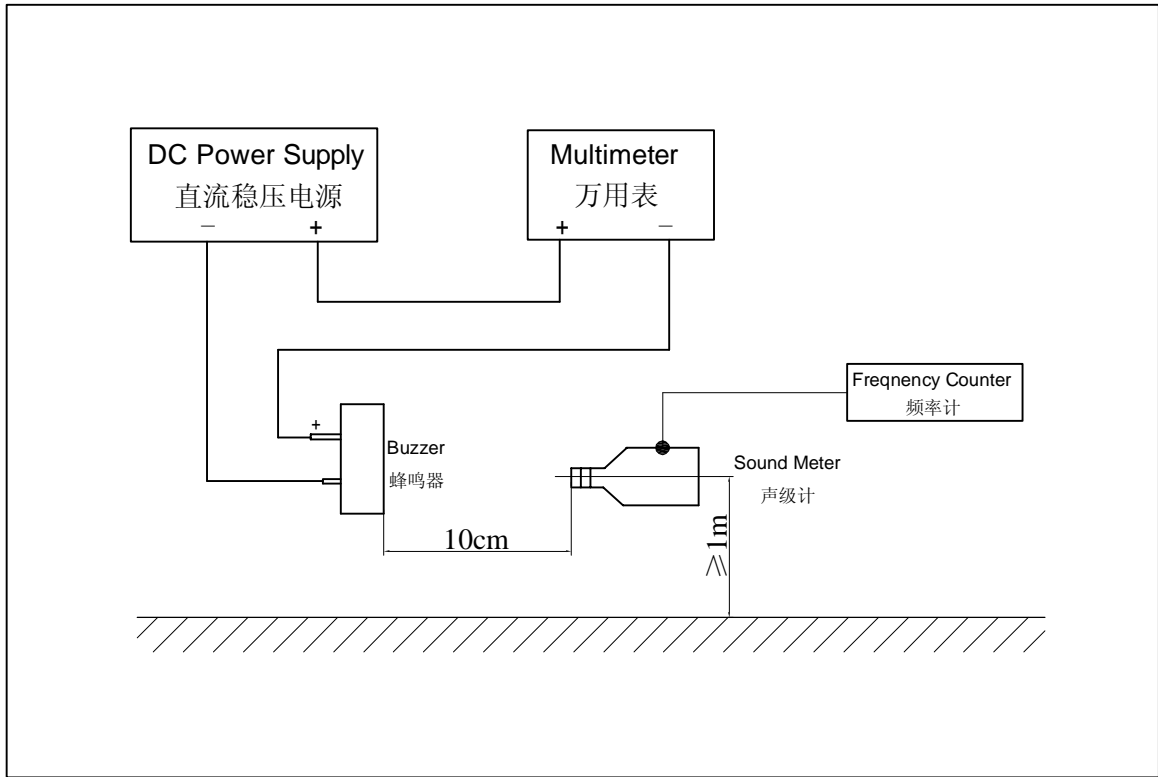
	Item	Specification
5	Vibration Resistance 振动试验	Sounder shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 30Hz band of vibration frequency to each of 3 perpendicular directions for 2 hour. 振幅为1.5mm, 频率为10~30Hz, 三个不同轴方向各振动2小时, 试验后进行测量.
6	Drop Test 跌落试验	Sounder packed in the 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 $+245 \pm 5^\circ \text{C}$ for $3 \pm 0.5$ seconds. 插针浸入松香5秒, 然后再浸入 $+245 \pm 5^\circ \text{C}$ 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.



工艺曲线图 (curve)

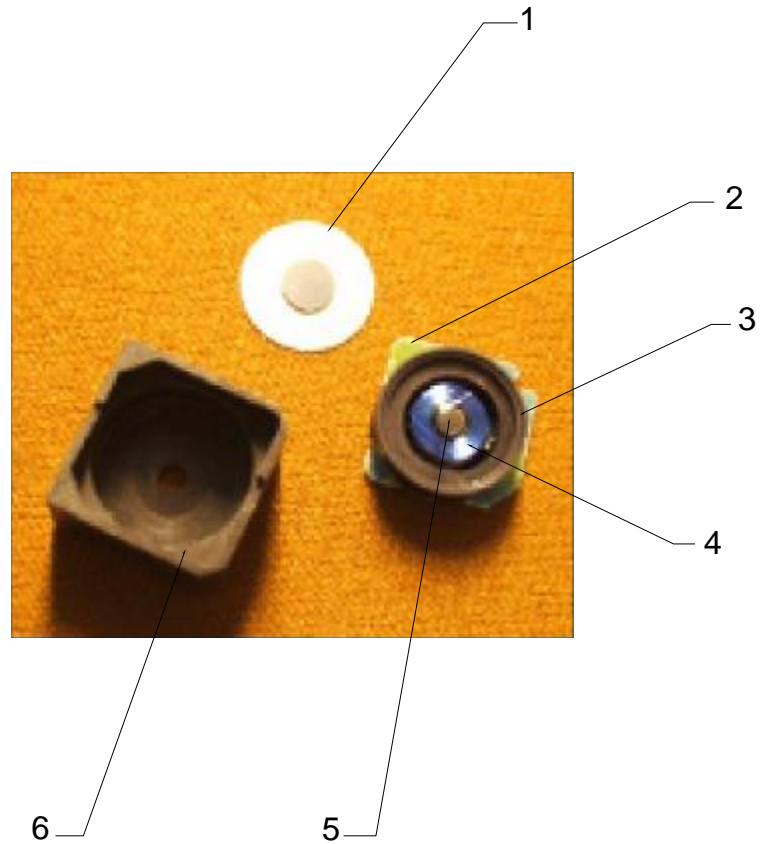
Specification for Magnetic Buzzer	Page	6/10
	Revision No.	1.1
Model No. :SMA-G1205B	Drawing No.	KP3.840.861R

### 5. Measurement Block Diagram & Response curve



Specification for Magnetic Buzzer	Page	7/10
	Revision No.	1.1
	Drawing No.	KP3.840.861R
Model No. : SMA-G1205B		

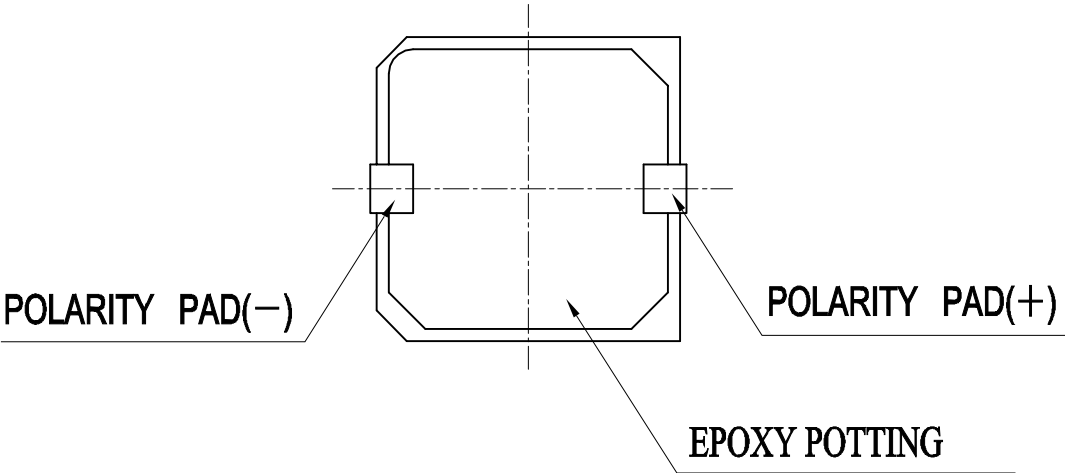
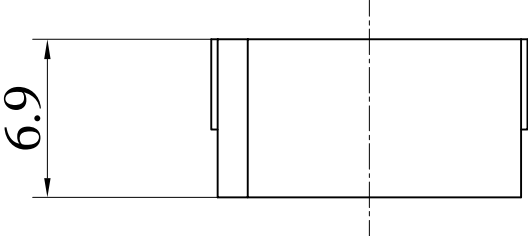
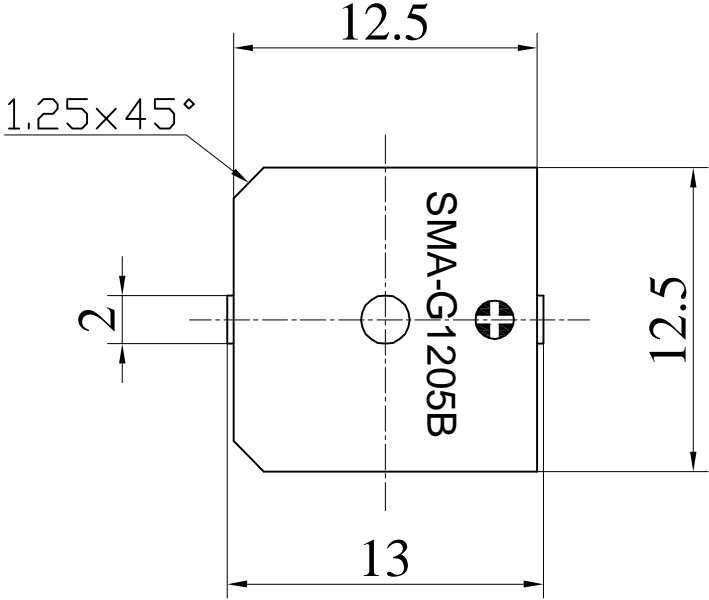
## 6. Structure



6	Case 壳体	1	PPS	
5	T Core T 铁	1	Fe	
4	Coil 线圈	1	SU/H	
3	Magnetic ring 磁环	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

Specification for Magnetic Buzzer		Page	8/10
		Revision No.	1.1
Model No. :	SMA-G1205B	Drawing No.	KP3.840.861R

7. Dimensions



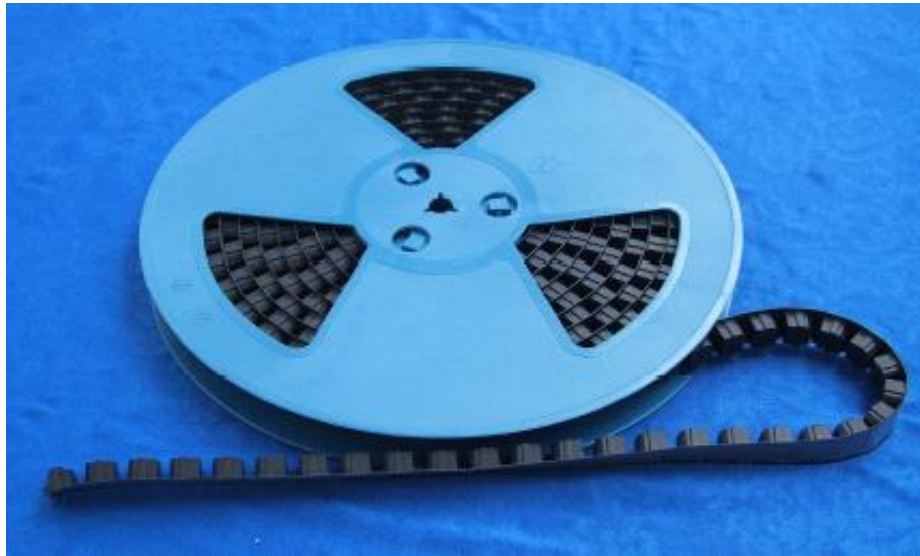
FIRST ANGLE PROJECTION

UNIT : mm  
Tolerance : ±0.5



Specification for Magnetic Buzzer	Page	9/10
	Revision No.	1.1
	Drawing No.	KP3.840.861R
Model No. : SMA-G1205B		

## 8. Packing



QTY: 300Pcs



QTY: 1500Pcs

