

# SPECIFICATION

Customer :

Applied To :

Product Name : Magnetic Transducer

Model Name : SMT-G5030A

Drawing No. : KP3.840.912R

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 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 : 5.0X5.0 mm

外径: 5.0X5.0 mm

2.2 Height : 3.0 mm

高度: 3.0 mm

2.3 Weight : 0.1 g

重量: 0.1g

2.4 Operating Temperature range:

-30~+70°C without loss of function

工作温度: -30~+70°C

2.5 Store Temperature range:

-40~+85°C without loss of function

储藏温度: -40~+85°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

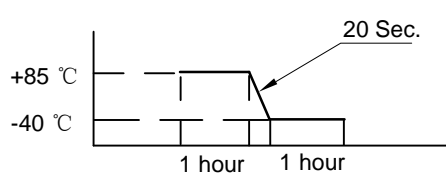
	Items 项目	Specification 规格
1	Rated Voltage 额定电压	3.0V
2	Operating Voltage 工作电压	2.5~4.0V
3	Max. Rated Current 额定电流	100mA /3.0V
4	Resonant Frequency 谐振频率	4000Hz
5	Min. Sound Pressure Level 额定声压	78dB/3.0V/10cm
6	Coil Resistance 直流阻抗	12± 3 Ω
7	Coil Impedance 交流阻抗	30 Ω
8	Case Material/Color 壳体材质/颜色	PPS/Black

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## 4. Reliability Test

After test(1~7item), the transducer S.P.L. difference shall be within  $\pm 5\text{dB}$ , and the appearance not exist any change to be harmful to normal operation(e.g.cracks,rusts,damages and especially distortion).

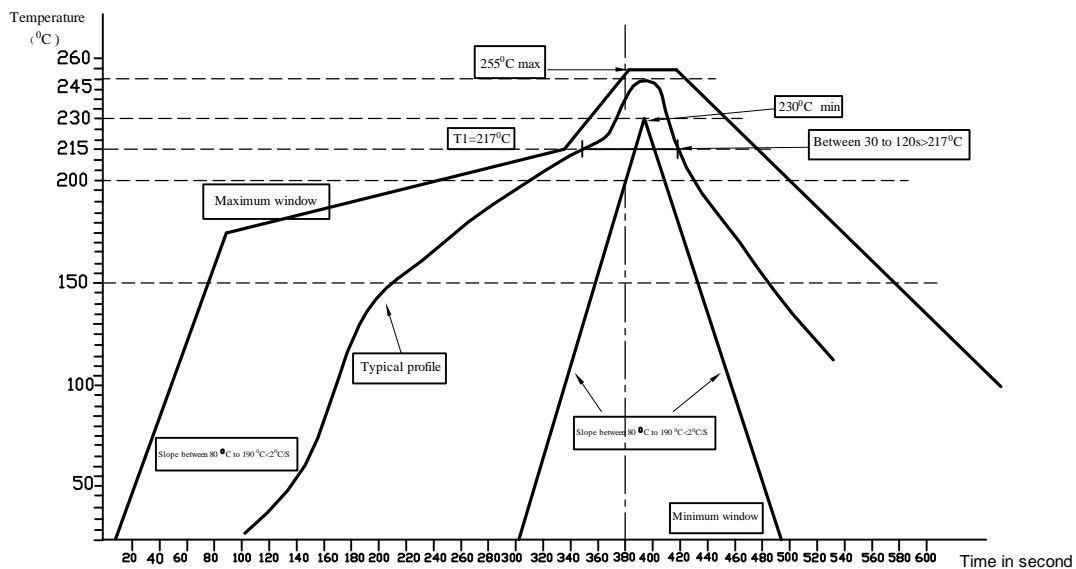
在1-7项试验后，声响器的声压变化值在  $\pm 5\text{dB}$  之内，外观无变化（例如：开裂、生锈、损伤、变形等现象）。

	Item	Specification
1	High Temperature Test 高温试验	<p>After being 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\text{ }^\circ\text{C}</math> for 1 hour, then sounder shall be placed in a chamber at <math>-40\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> 

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## 4. Reliability Test

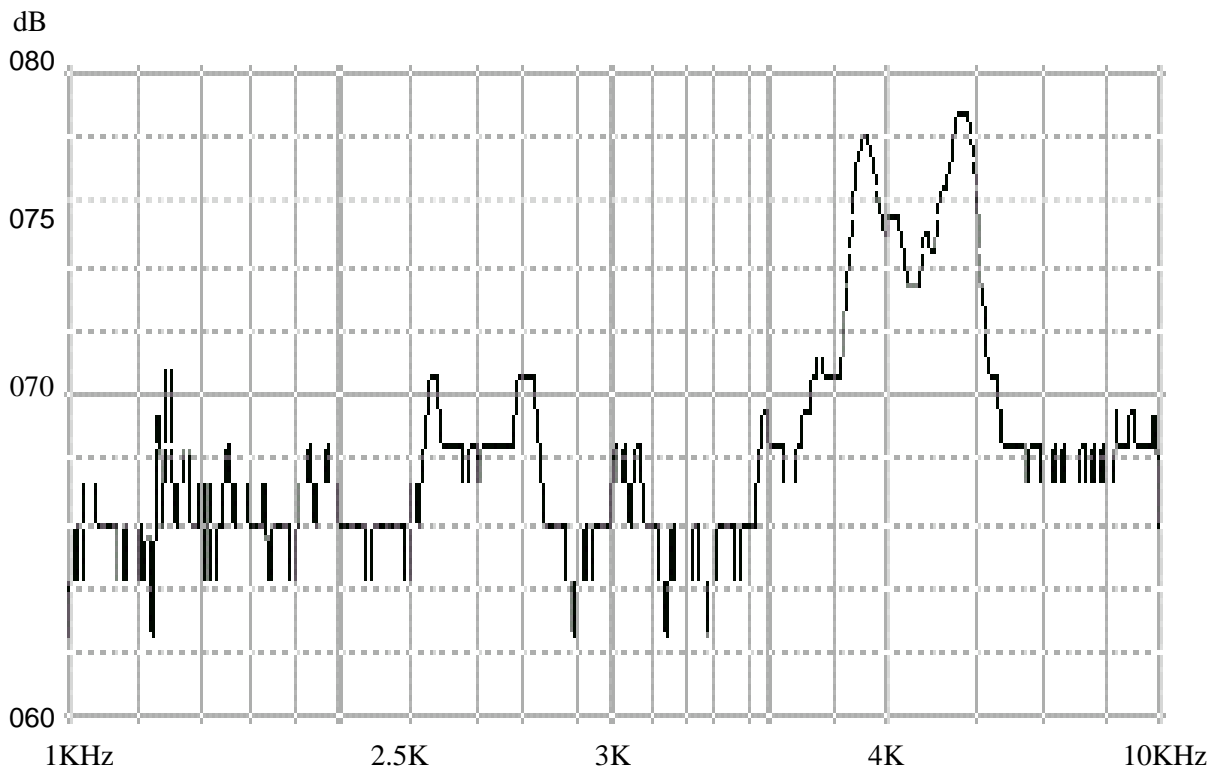
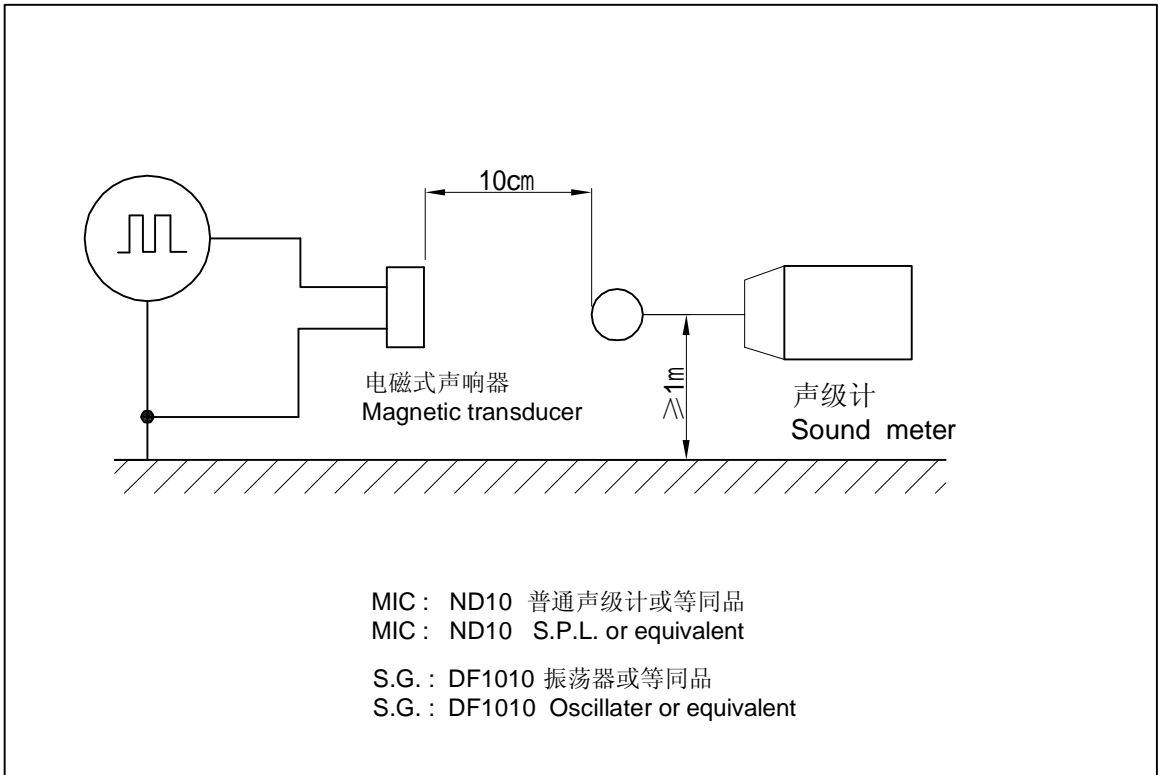
	Item	Specification
5	Vibration Resistance 振动试验	<p>Sounder shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 30Hz band of vibration frequency to each of 3 perpendicular directions for 2 hour.</p> <p>振幅为1.5mm，频率为10~30Hz，三个不同轴方向各振动2小时，试验后进行测量。</p>
6	Drop Test 跌落试验	<p>Sounder packed in the carton are dropped in six direction from the height of 80cm to the concrete floor.</p> <p>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。</p>
7	Solderability 可焊性试验	<p>Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of <math>+230\pm 5^{\circ}\text{C}</math> for <math>3\pm 0.5</math> seconds.</p> <p>插针浸入松香5秒，然后再浸入<math>+230\pm 5^{\circ}\text{C}</math>的锡炉中<math>3\pm 0.5</math>秒，插针表面应覆盖一层光滑明亮的焊料。</p>
8	Terminal Strength Pulling 插针强度试验	<p>The force 10 seconds of 9.8N is applied go each terminal in axial direction.</p> <p>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。</p>



工艺曲线图(curve)

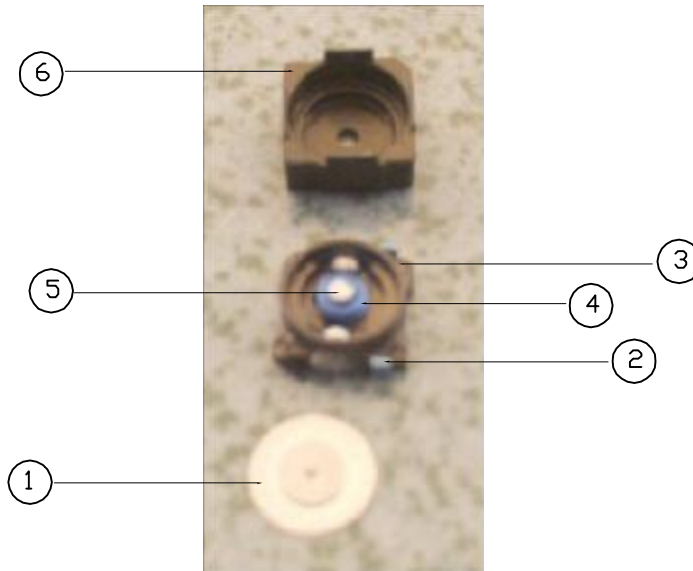
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### 5. Measurement Block Diagram & Response curve



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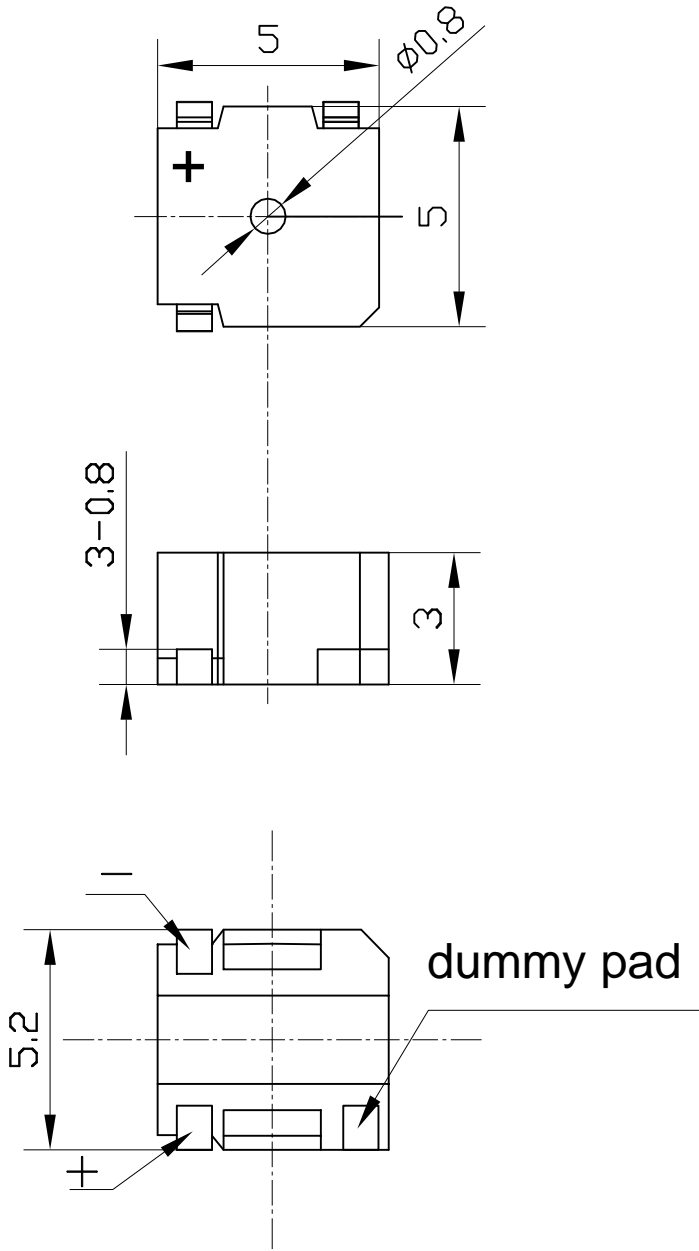
## 6. Structure



6	Case 壳体	1	PPS	SH534731/CHEM (A)
5	T Core T铁	1	Fe	SH415361/CHEM(D)
4	Coil 线圈	1	QANR	SH437207/CHEM(NO.2)
3	Magnetic ring 磁环	1	/	2083631/LD(1)
2	PCB with pin 带引脚印制板	1	/	SH543760/CHEM (A) CH411778-1/CHEM(A)
1	Diaphragm 膜片	1	/	SH415361/CHEM (A/B)
No.	Part Name 型号	数量 Q'TY	Material 材质	GSG认证号

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### 7. Dimensions



FIRST ANGLE PROJECTION

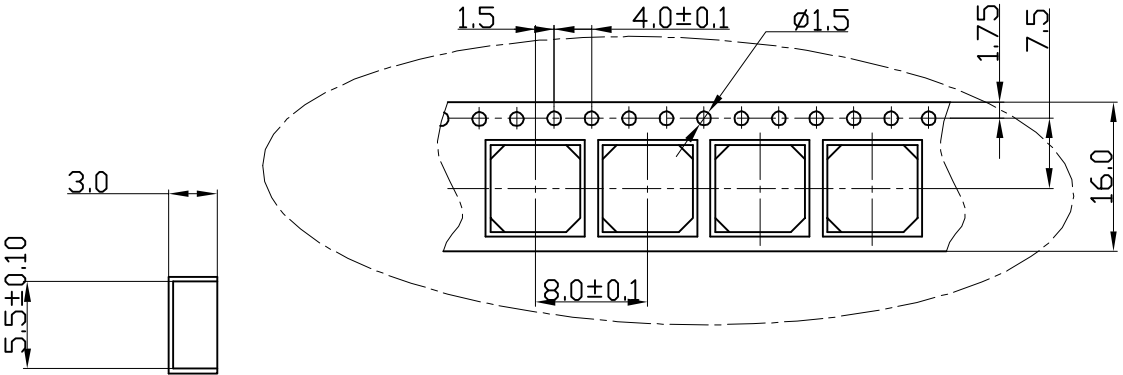
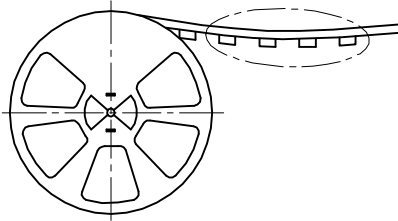
UNIT : mm  
Tolerance :  $\pm 0.5$



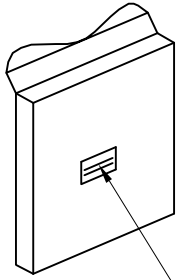
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### 8. Packing

TRAY  
:SMT-G5030C 2,000PCS



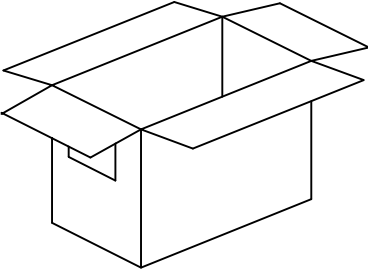
INNER BOX  
:TRAY 1PCS  
TOTAL 2,000PCS



INNER BOX  
337X337X28mm

LABEL POSITION

CARTON BOX  
:INNER BOX 5PCS  
TOTAL 10,000PCS



CARTON BOX  
345X170X345

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## 9. Revision

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1.0	2005.10.28	/	primary	