

# SPECIFICATION

Customer :

Applied To :

Product Name : Magnetic Transducer

Model Name : SMT-8030C

Drawing No. : KP3.840.864R

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 : 8.0X8.0 mm

外径: 8.0X8.0 mm

2.2 Height : 3.0 mm

高度: 3.0 mm

2.3 Weight : 0.4 g

重量: 0.4g

2.4 Operating Temperature range:

-40~+80°C without loss of function

工作温度: -40~+80°C

Store Temperature range:

-40~+85°C without loss of function

储藏温度: -40~+85°C

2.5 According to the No.7 of RoHS Exemptions, lead-based solder alloys containing 85% by weight or more lead(Sn10Pb90)

根据"欧盟RoHS指令豁免条款"第7条规定,使用了铅含量超过85%的锡铅合金焊料(Sn10Pb90)

## 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

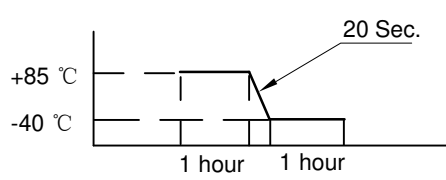
	Items 项目	Specification 规格
1	Rated Voltage 额定电压	3.6V
2	Operating Voltage 工作电压	2.5~4.5V
3	Max. Rated Current 额定电流	90mA /3.6V
4	Resonant Frequency 谐振频率	2700Hz
5	Min. Sound Pressure Level 额定声压	88dB/3.6V/10cm
6	Coil Resistance 直流阻抗	16±3Ω
7	Coil Impedance 交流阻抗	40Ω
8	Case Material/Color 壳体材质/颜色	PPS/BLACK

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## 4. Reliability Test

After test(1~7item), the transducer S.P.L. difference shall be within  $\pm 10\text{dB}$ , 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 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> 

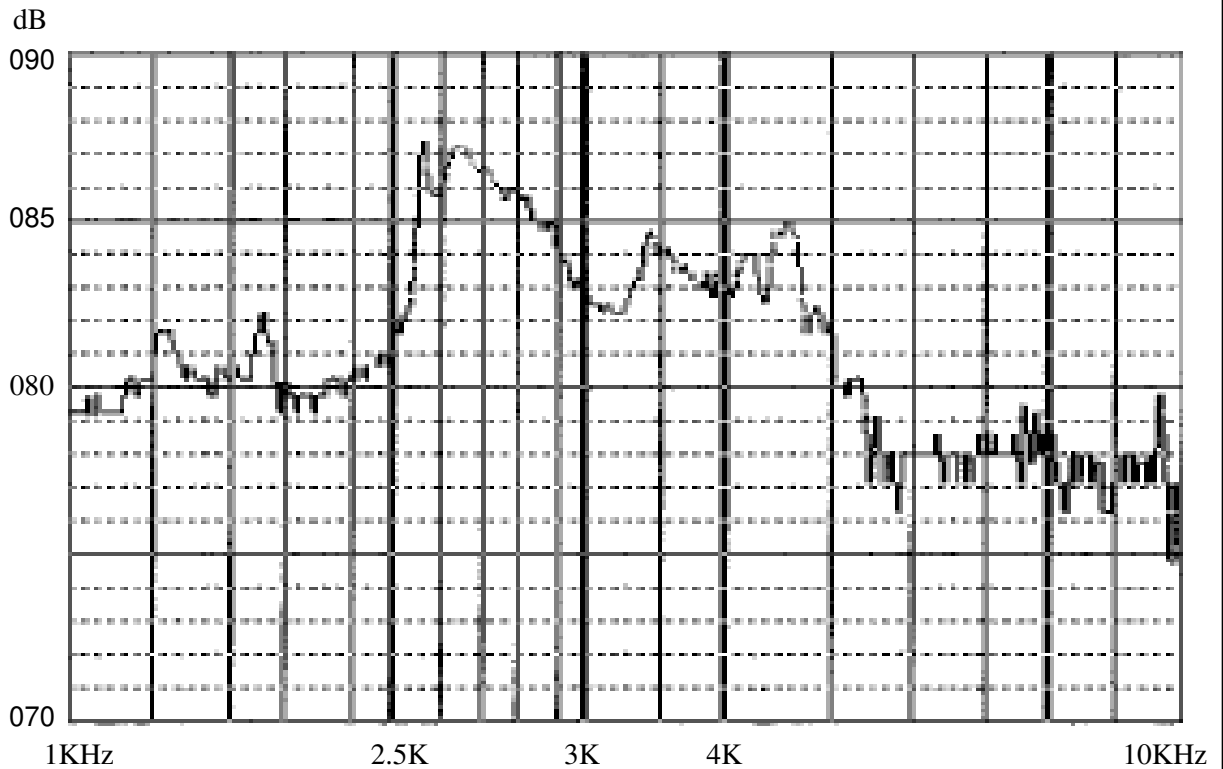
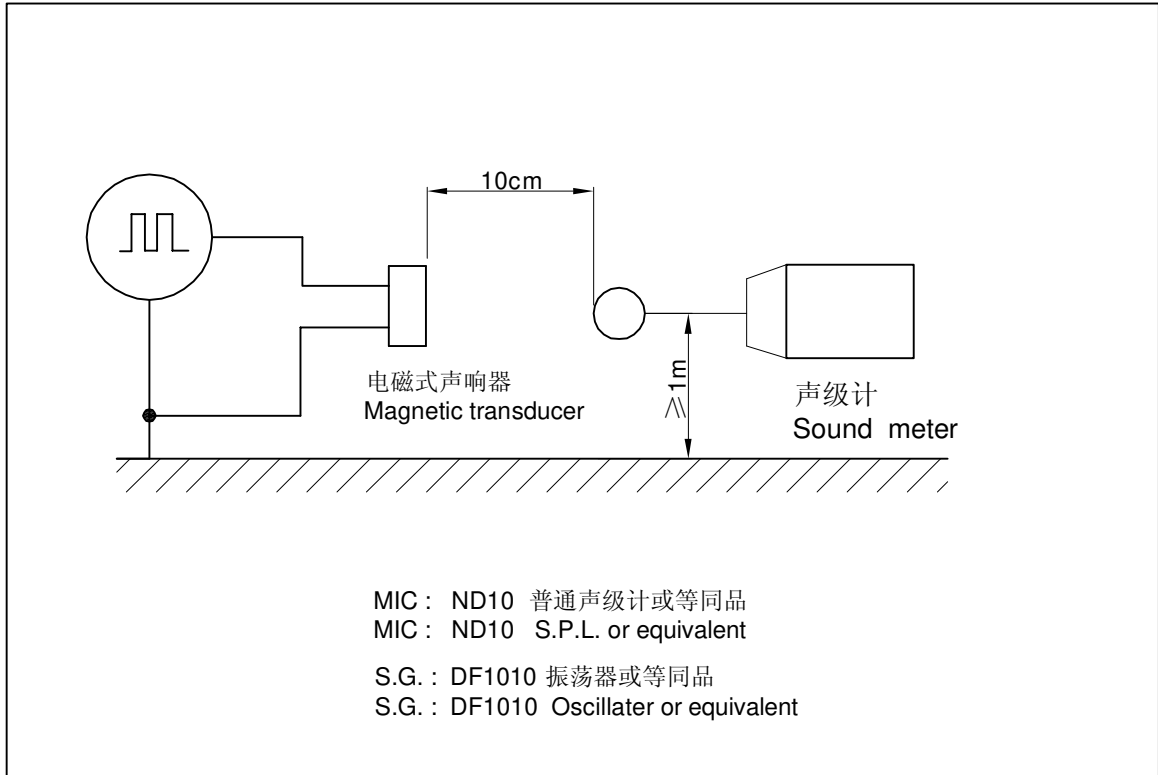
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#### 4. Reliability Test

	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>+260 \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>+260 \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 to 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>

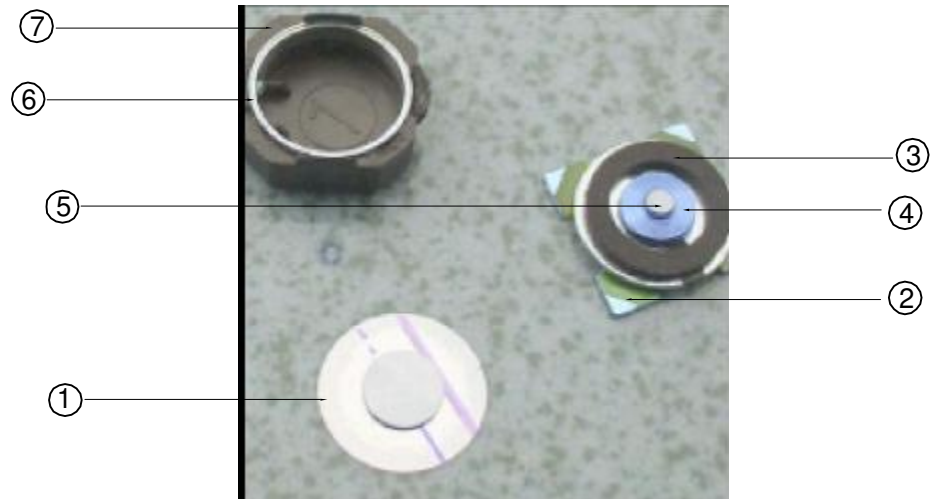
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## 5. Measurement Block Diagram & Response curve



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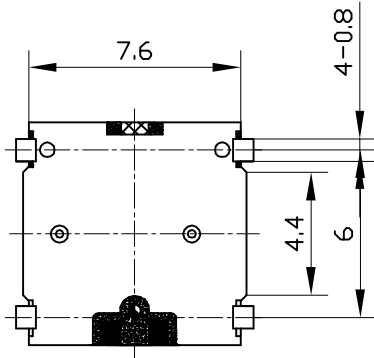
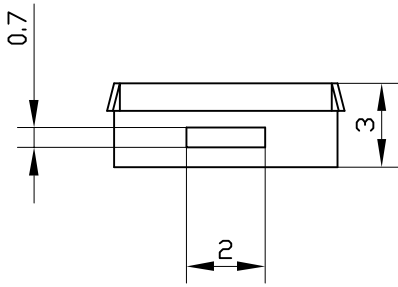
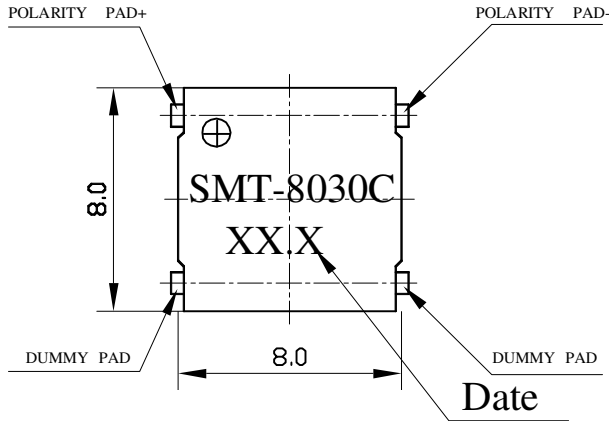
## 6. Structure



7	Case 壳体	1	PA66	
6	Cuprum sheath 铜套	1	Cu	
5	T Core T铁	1	Fe	
4	Coil 线圈	1	QANR	
3	Magnetic ring 磁环	1	/	
2	PCB 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



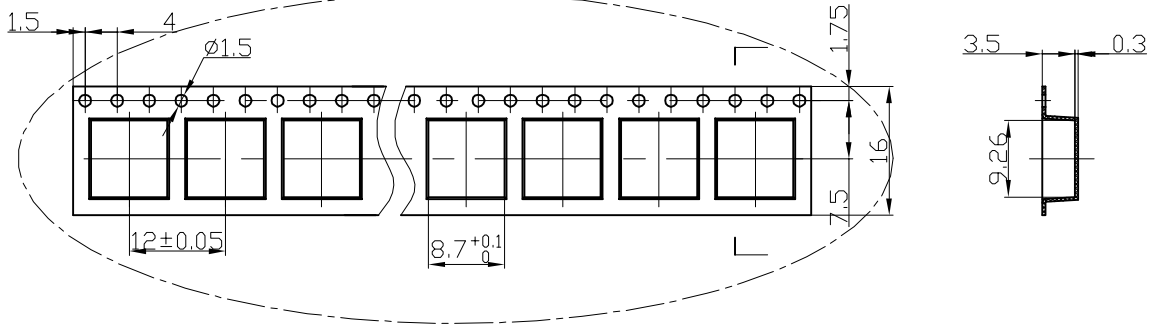
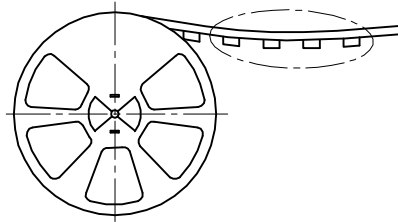
UNIT : mm  
Tolerance :  $\pm 0.5$



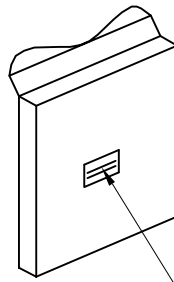
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## 8. Packing

TRAY  
:SMT-8030C 1,000PCS



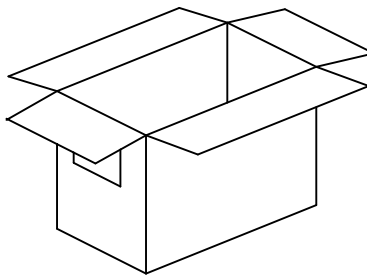
INNER BOX  
:TRAY 1PCS  
TOTAL 1,000PCS



INNER BOX  
337X337X28mm

LABEL POSITION

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



CARTON BOX  
345X170X345

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### 9. Revision

Rev. No.	DATE	PAGE	DESCRIPTION	SIGN
1.0	2005.10.28	/	primary	
1.1	2008.07.29	8/10	DUMMY PAD	