

SPECIFICATION

Customer :

Applied To :

Product Name : Magnetic Transducer

Model Name : SMT-8030C

Drawing No. : KP3.840.864R

Compliance with RoHS

Signature of Approval

| |
|--|
| |
|--|

Signature of KEPO

| Approved by | Checked by | Issued by | Date |
|-------------|------------|-----------|------|
| | | | |



宁波凯普电子有限公司

宁波东钱湖镇东钱湖工业区宝源路 25 号

TEL:+86-574-88370330 FAX:+86-574-88370329

No.25 Baoyuan road Dongqian Lake, Industry Area, Dongqian town,
Ningbo City, China(Post Code:315121)

Sales@chinaacoustic.com www.chinaacoustic.com

| | | |
|---------------------------------------|--------------|--------------|
| Specification for Magnetic Transducer | Page | 2/10 |
| | Revision No. | 1.1 |
| | Drawing No. | KP3.840.864R |
| Model No. : | SMT-8030C | |

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 Transducer | | Page | 3/10 |
| | | Revision No. | 1.1 |
| Model No. : | SMT-8030C | Drawing No. | KP3.840.864R |

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

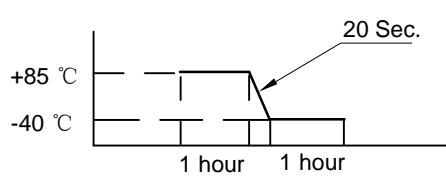
| | Items 项目 | Specification 规格 |
|---|-----------------------------------|---------------------|
| 1 | Rated Voltage 额定电压 | 3.6V |
| 2 | Operating Voltage 工作电压 | 2.5~4.5V |
| 3 | Max. Rated Current 额定电流 | 90mA /3.6V |
| 4 | Resonant Frequency 谐振频率 | 2700Hz |
| 5 | Min. Sound Pressure Level 额定声压 | 88dB/3.6V/10cm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

| | | | |
|---------------------------------------|-----------|--------------|--------------|
| Specification for Magnetic Transducer | | Page | 4/10 |
| | | Revision No. | 1.1 |
| Model No. : | SMT-8030C | Drawing No. | KP3.840.864R |

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 $+85\pm 2\text{ }^\circ\text{C}$ for 2h and then being placed in natural condition for 2h, sounder shall be measured.</p> <p>将产品置于 $+85\pm 2\text{ }^\circ\text{C}$ 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 $-40\pm 2\text{ }^\circ\text{C}$ for 2h and then being placed in a chamber with $-40\pm 2\text{ }^\circ\text{C}$ for 16h, finally being placed in natural condition for 2h, sounder shall be measured.</p> <p>将产品置于 $-40\pm 2\text{ }^\circ\text{C}$ 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 $+40\pm 2\text{ }^\circ\text{C}$ 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$40\pm 2\text{ }^\circ\text{C}$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 $+85\text{ }^\circ\text{C}$ for 1 hour, then sounder shall be placed in a chamber at $-40\text{ }^\circ\text{C}$ 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$+85\pm 2\text{ }^\circ\text{C}$试验箱中，先工作1小时，然后将产品置于$-40\pm 2\text{ }^\circ\text{C}$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>  |

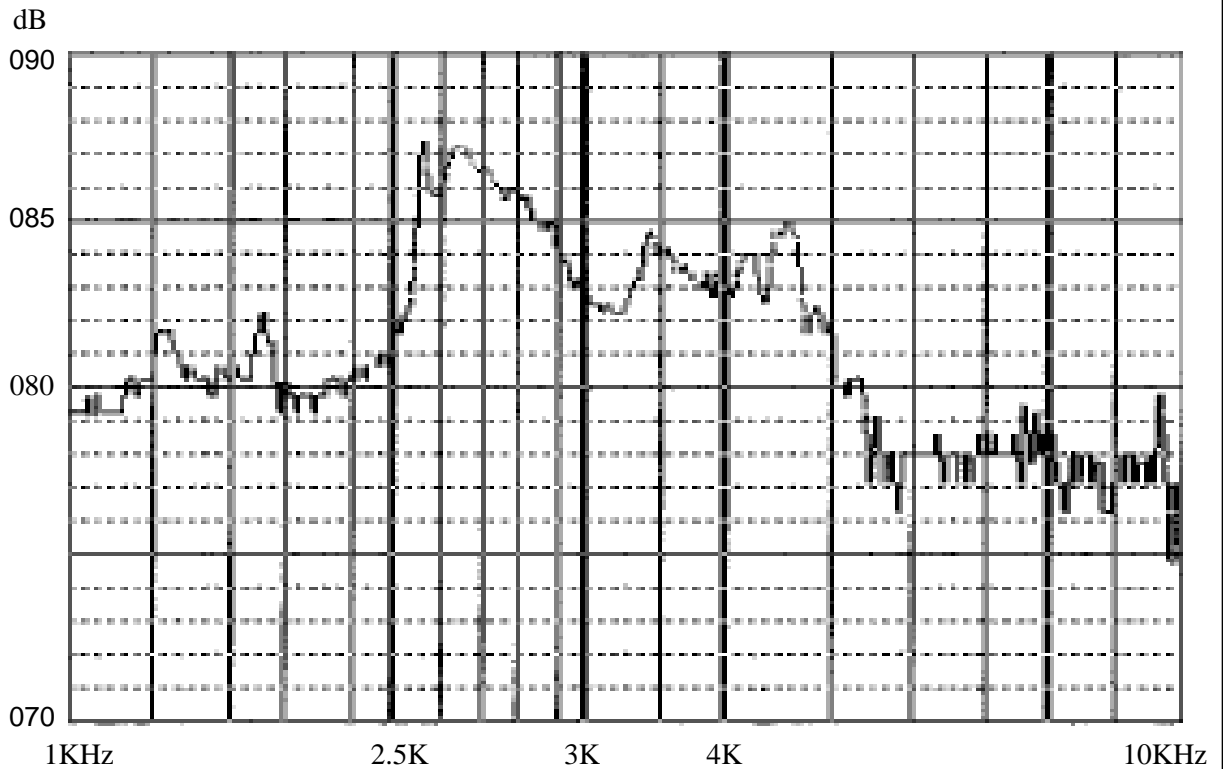
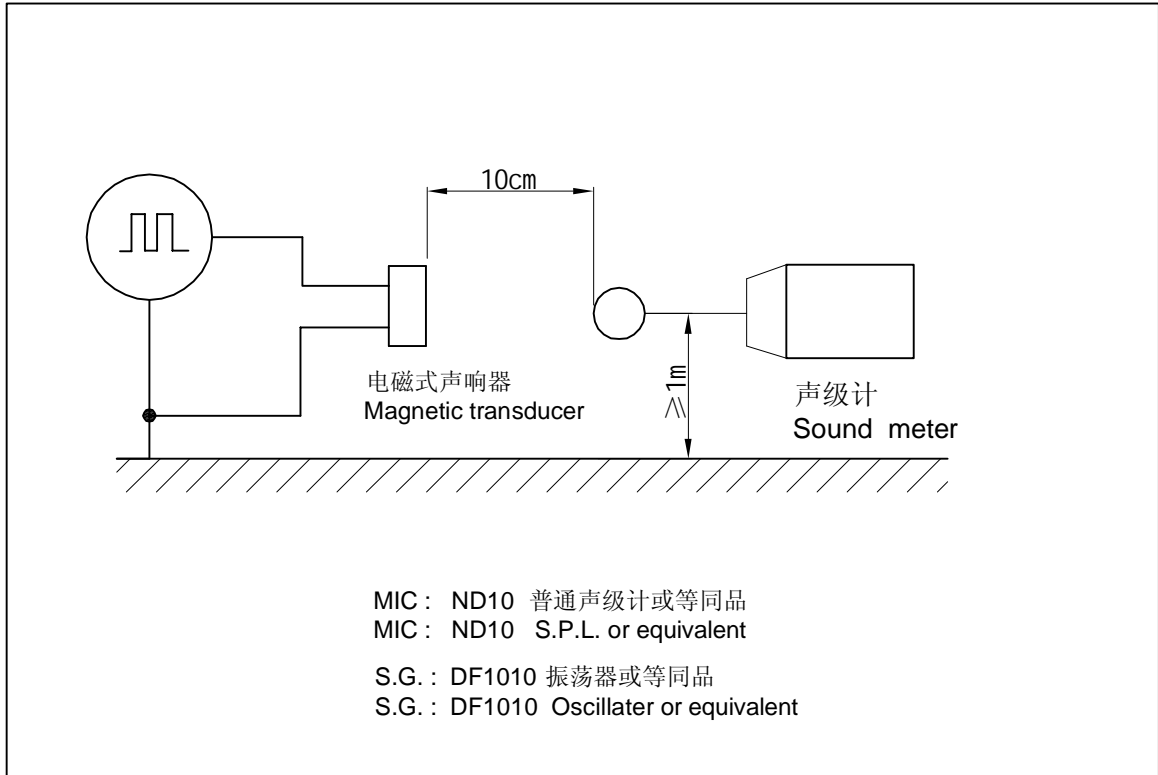
| | | | |
|---------------------------------------|--|--------------|--------------|
| Specification for Magnetic Transducer | | Page | 5/10 |
| Model No. : SMT-8030C | | Revision No. | 1.1 |
| | | Drawing No. | KP3.840.864R |

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 $+260 \pm 5^{\circ} \text{C}$ for 3 ± 0.5 seconds.</p> <p>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。</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> |

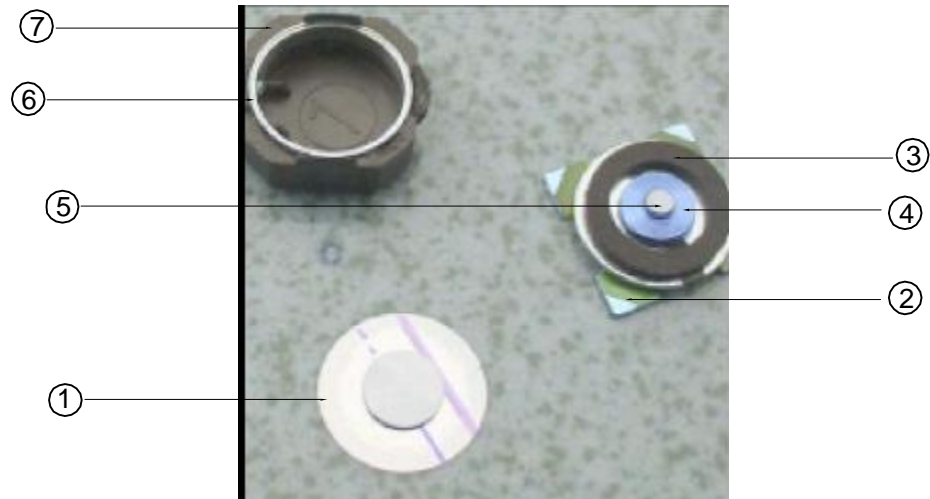
| | | |
|---------------------------------------|--------------|--------------|
| Specification for Magnetic Transducer | Page | 6/10 |
| | Revision No. | 1.1 |
| Model No. : SMT-8030C | Drawing No. | KP3.840.864R |

5. Measurement Block Diagram & Response curve



| | | | |
|---------------------------------------|--|--------------|--------------|
| Specification for Magnetic Transducer | | Page | 7/10 |
| | | Revision No. | 1.1 |
| Model No. : SMT-8030C | | Drawing No. | KP3.840.864R |

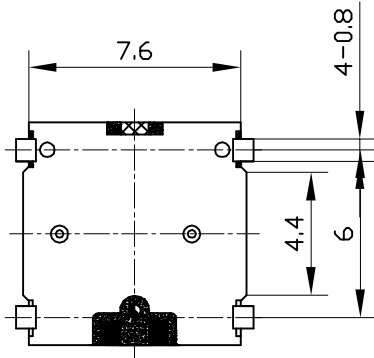
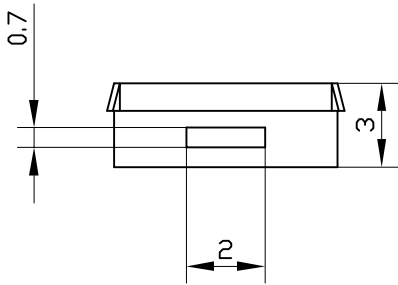
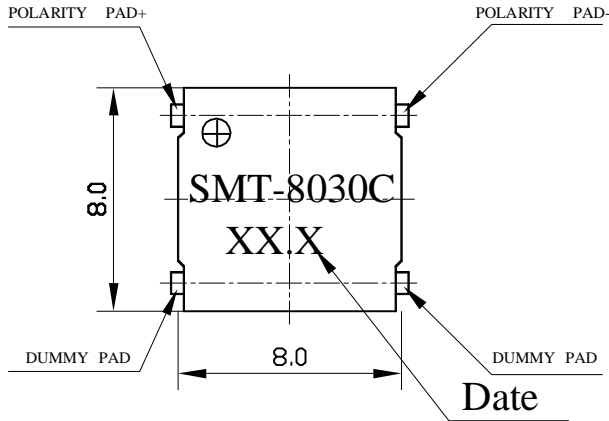
6. Structure



| | | | | |
|-----|---------------------|------------|----------------|--------------|
| 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 |

| | | |
|---------------------------------------|--------------|--------------|
| Specification for Magnetic Transducer | Page | 8/10 |
| | Revision No. | 1.1 |
| Model No. : SMT-8030C | Drawing No. | KP3.840.864R |

7. Dimensions



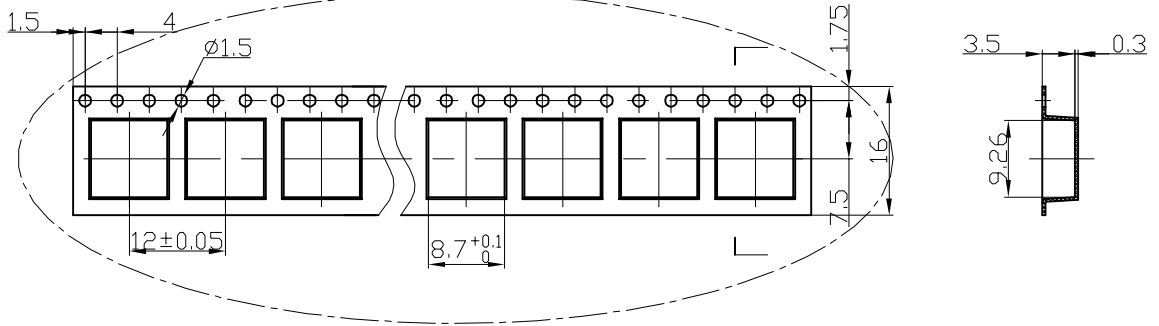
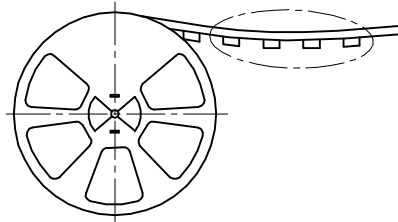
FIRST ANGLE PROJECTION

UNIT : mm
Tolerance : ±0.5

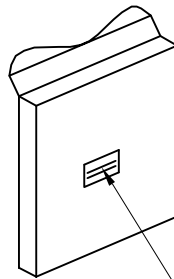
| | | |
|---------------------------------------|--------------|--------------|
| Specification for Magnetic Transducer | Page | 9/10 |
| | Revision No. | 1.1 |
| | Drawing No. | KP3.840.864R |
| Model No. : | SMT-8030C | |

8. Packing

TRAY
:SMT-8030C 1,000PCS



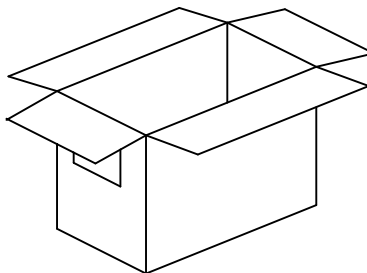
INNER BOX
:TRAY 1PCS
TOTAL 1,000PCS



INNER BOX
337X337X28mm

LABEL POSITION

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



CARTON BOX
345X170X345

