

SPECIFICATION

Customer :

Applied To :

Product Name : Piezo Transducer

Model Name : KPR-3060

Drawing No. : KP3.840.368

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 Transducer | Page | 2/10 |
| Model No. : KPR-3060 | Revision No. | 1.0 |
| | Drawing No. | KP3.840.368 |

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 Transducer | Page | 3/10 |
| | Revision No. | 1.0 |
| | Drawing No. | KP3.840.368 |
| Model No. : KPR-3060 | | |

1. Scope

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

本规格书适用于压电式声响器，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 : Ø30 mm
 外径: Ø30 mm
- 2.2 Height : 5.5mm
 高度: 5.5 mm
- 2.3 Weight : 4 g
 重量: 4克
- 2.4 Operating Temperature range:
 -20~+60°C without loss of function
 工作温度: -20~+60°C
- 2.5 Store Temperature range:
 -30~+70°C without loss of function
 储藏温度: -30~+70°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

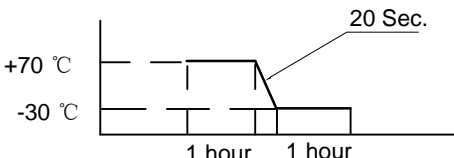
| | Items 项目 | Specification 规格 |
|---|--|--|
| 1 | Rated Voltage 额定电压 | 12Vp-p Square Wave |
| 2 | Max.Allowable Voltage 最大输入电压 | 30Vp-p Square Wave |
| 3 | Max.Rated Current 额定电流 | 4mA at 1.3KHz/12Vp-p Square Wave |
| 4 | Resonant Frequency 谐振频率 | 1.3±0.5KHz |
| 5 | Min.Sound Pressure Level 额定声压 | 75dB at 1.3KHz/12Vp-p Square Wave/30cm |
| 6 | Capacitance at 100Hz 电容量 (at 100Hz) | 45000pF ± 30% |
| 7 | Case Material/Color 壳体材质/颜色 | ABS/BLACK |

| | | | |
|------------------------------|--|--------------|-------------|
| Specification for Transducer | | Page | 4/10 |
| Model No. : KPR-3060 | | Revision No. | 1.0 |
| | | Drawing No. | KP3.840.368 |

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：无开裂、生锈、损伤、变形等现象）。

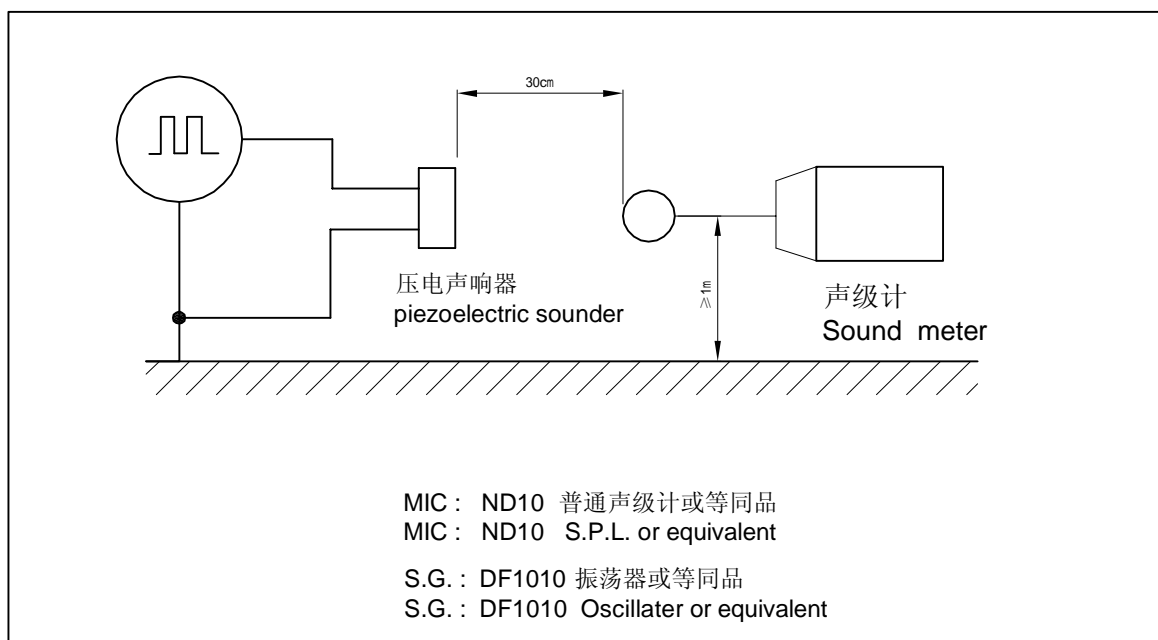
| | Item | Specification |
|---|-------------------------------|---|
| 1 | High Temperature Test 高温试验 | <p>After being worked in a chamber with $+70\pm 2^\circ\text{C}$ for 2h and then being placed in a chamber with $+70\pm 2^\circ\text{C}$ for 16h,finally being placed in natural condition for 2h, sounder shall be measured.</p> <p>将产品置于 $+70\pm 2^\circ\text{C}$ 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> |
| 2 | Low Temperature Test 低温试验 | <p>First being worked in a chamber with $-30\pm 2^\circ\text{C}$ for 2h and then being placed in a chamber with $-30\pm 2^\circ\text{C}$ for 16h, finally being placed in natural condition for 2h, sounder shall be measured.</p> <p>将产品置于 $-30\pm 2^\circ\text{C}$ 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 $+40\pm 2^\circ\text{C}$ 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$+40\pm 2^\circ\text{C}$ 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 $+70\pm 2^\circ\text{C}$ for 1 hour, then sounder shall be placed in a chamber at $-30\pm 2^\circ\text{C}$ 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$+70\pm 2^\circ\text{C}$ 试验箱中，先工作1小时，然后将产品置于$-30\pm 2^\circ\text{C}$ 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 Transducer | | Page | 5/10 |
| Model No. : KPR-3060 | | Revision No. | 1.0 |
| | | Drawing No. | KP3.840.368 |

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. |

5. Measurement Block Diagram & Response curve



Model No. : KPR-3060

Revision No.

1.0

Drawing No.

KP3.840.368

09/15/2006 10:57

CRY6125F 蜂鸣器测试仪 V86

无框 滤波器无

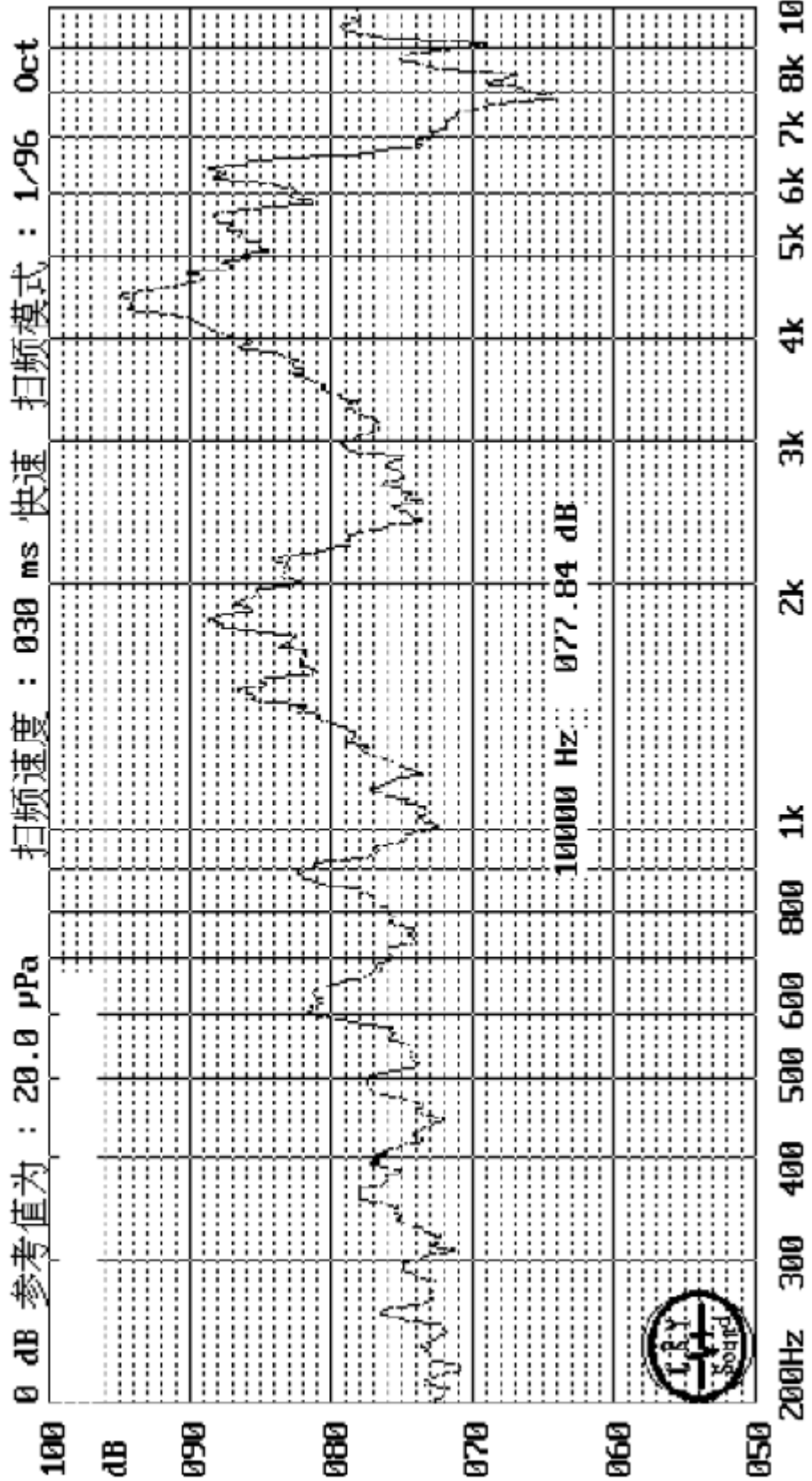
型号: kpr-3060

Fc= 1299 Hz 078.31 dB

电压:6000 mV

Fo= 4477 Hz 095.37 dB

方波

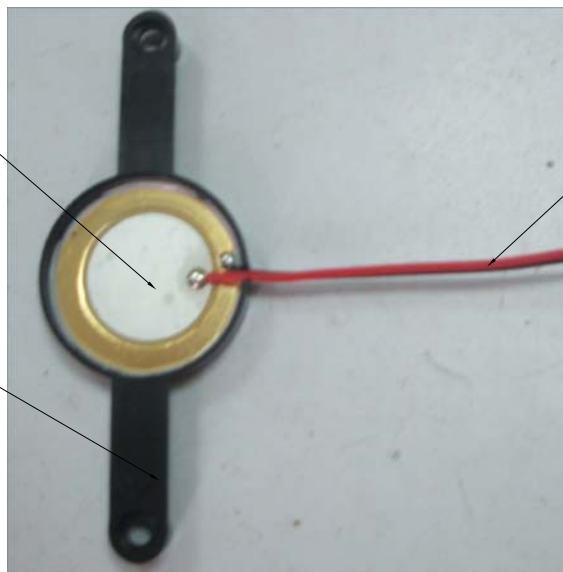


| | | | |
|------------------------------|--|--------------|-------------|
| Specification for Transducer | | Page | 7/10 |
| Model No. : KPR-3060 | | Revision No. | 1.0 |
| | | Drawing No. | KP3.840.368 |

6. Structure



④



②

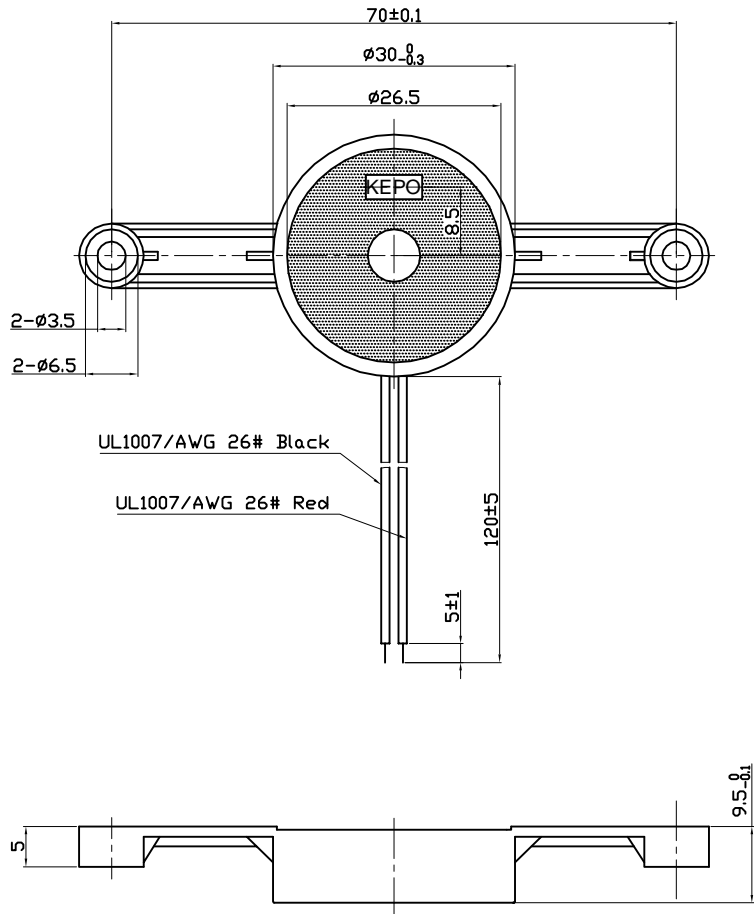
①

③

| 5 | | | | |
|-----|----------------------|------------|----------------|---------------|
| 4 | Cover 后盖 | 1 | ABS | |
| 3 | Case 壳体 | 1 | ABS | |
| 2 | Piezp-Element 蜂鸣片 | 1 | H65 | |
| | | | Piezo Ceramic | |
| 1 | Wire 引线 | 2 | | |
| No. | Part Name 型号 | Q'TY 数量 | Material 材质 | Remarks 备注 |

| | | | |
|------------------------------|----------|--------------|-------------|
| Specification for Transducer | | Page | 8/10 |
| | | Revision No. | 1.0 |
| Model No. : | KPR-3060 | Drawing No. | KP3.840.368 |

7. Dimensions



FIRST ANGLE PROJECTION



Unit : mm

Tolerance : ± 0.5

| | | | |
|--------------------------------|-------------|--------------|-------------|
| Specification for Transducer | | Page | 9/10 |
| | | Revision No. | 1.0 |
| Model No. : KPR-3060 | Drawing No. | | KP3.840.368 |

8. Packing



Picture1(100PCS)



Picture2(2000PCS)

QTY: 2000Pcs

SIZE:460 x295 x220

