

# SPECIFICATION

Customer :

Applied To :

Product Name : Piezo Transducer

Model Name : KPT3-2438P18

Drawing No. : KP3.840.220.01

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 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 : Ø24 mm

外径: Ø24 mm

2.2 Height : 11 mm

高度: 11 mm

2.3 Weight : 3.8 g

重量: 3.8克

2.4 Operating Temperature range:

-20~+80°C without loss of function

工作温度: -20~+80°C

2.5 Store Temperature range:

-30~+100°C without loss of function

储藏温度: -30~+100°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

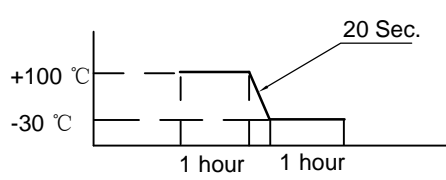
	Items 项目	Specification 规格
1	Rated Voltage 额定电压	9VDC
2	Max.Allowable Voltage 最大输入电压	3~30VDC
3	Max.Rated Current 额定电流	≤9mA at 9VDC
4	Resonant Frequency 谐振频率	4.0± 0.5KHz
5	Min.Sound Pressure Level 额定声压	≥80dB at 9VDC/30cm
6	Capacitance at 100Hz 电容量 (at 100Hz)	—
7	Case Material/Color 壳体材质/颜色	PA66/BLACK

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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：无开裂、生锈、损伤、变形等现象）。

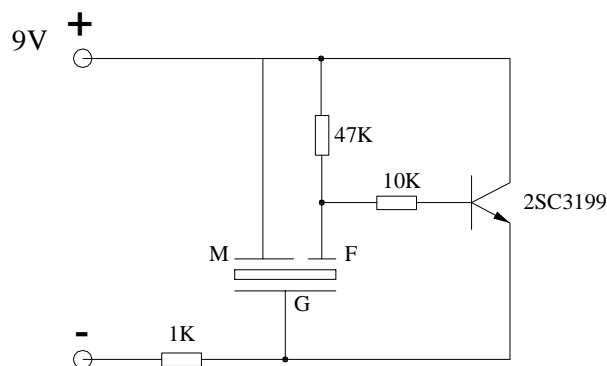
	Item	Specification
1	High Temperature Test 高温试验	<p>After being worked in a chamber with <math>+100\pm 2\text{ }^\circ\text{C}</math> for 2h and then being placed in natural condition for 2h, sounder shall be measured.</p> <p>将产品置于 <math>+100\pm 2\text{ }^\circ\text{C}</math> 试验箱中，先工作 2小时，然后在正常大气压条件下恢复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>+100\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>+100\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> 

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## 4. Reliability Test

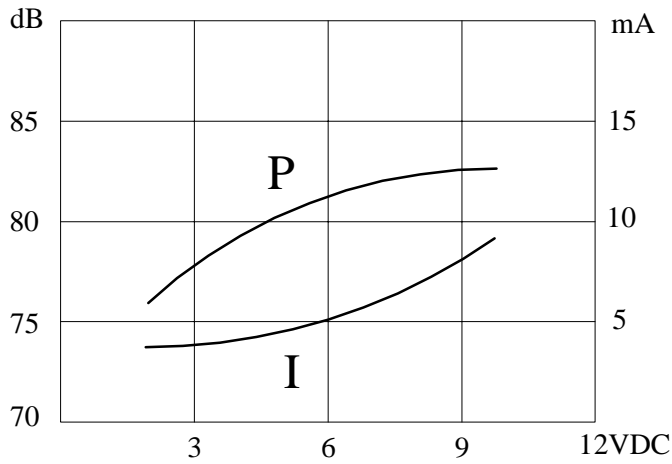
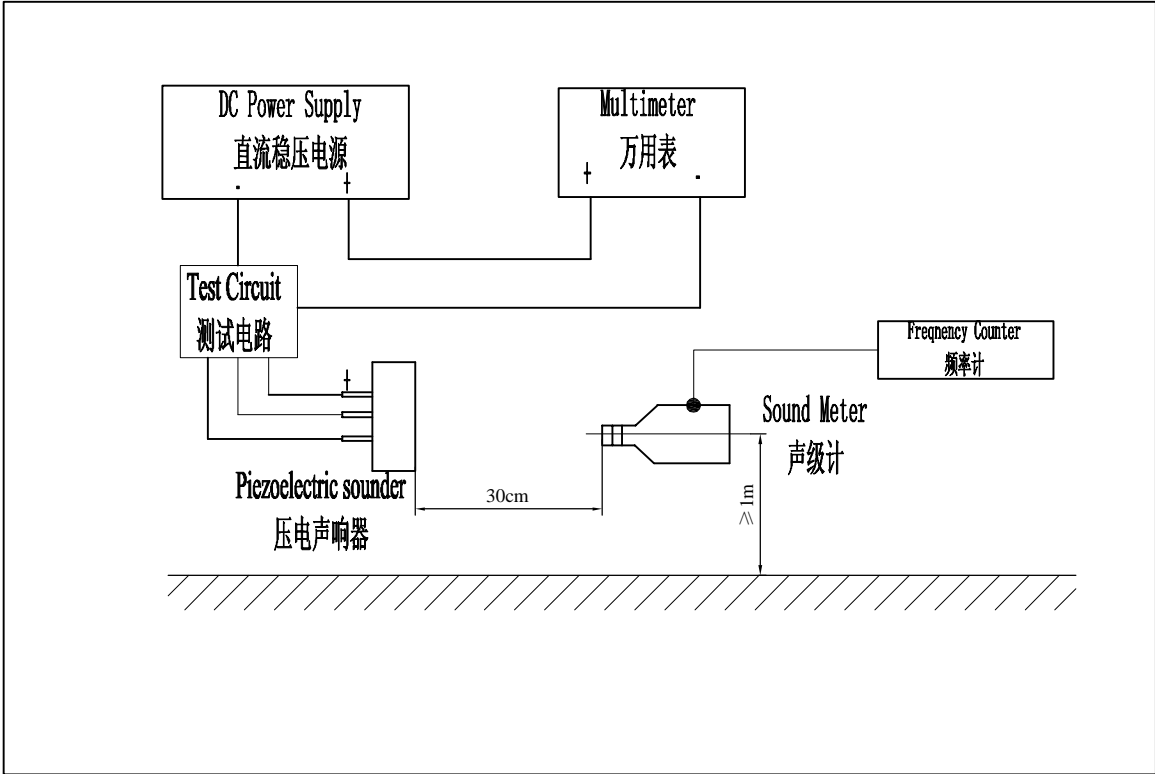
	Item	Specification
5	Vibration Resistance 振动试验	<p>Sounder shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 30Hz band of vibration frequency to each of 3 perpendicular directions for 2 hour.</p> <p>振幅为1.5mm，频率为10-30Hz，三个不同轴方向各振动2小时，试验后进行测量。</p>
6	Drop Test 跌落试验	<p>Sounder 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 the 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，插针无松动和脱落现象。</p>

## 5. Test Circuit



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### 6. Measurement Block Diagram & Response curve



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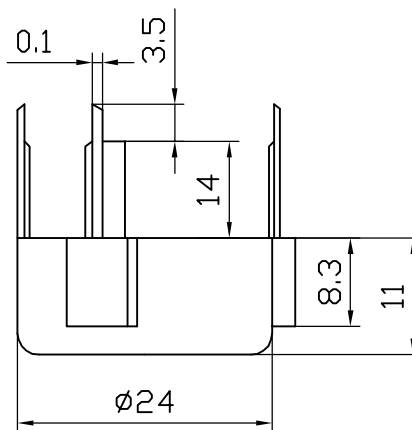
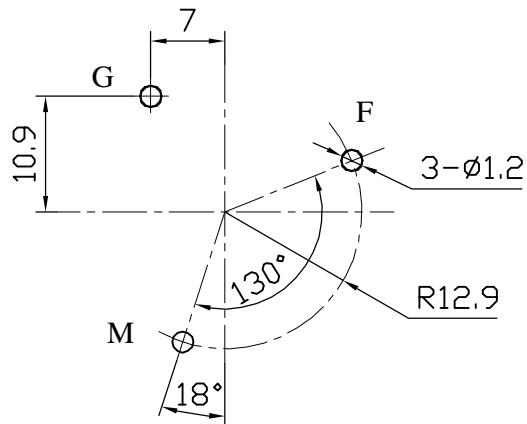
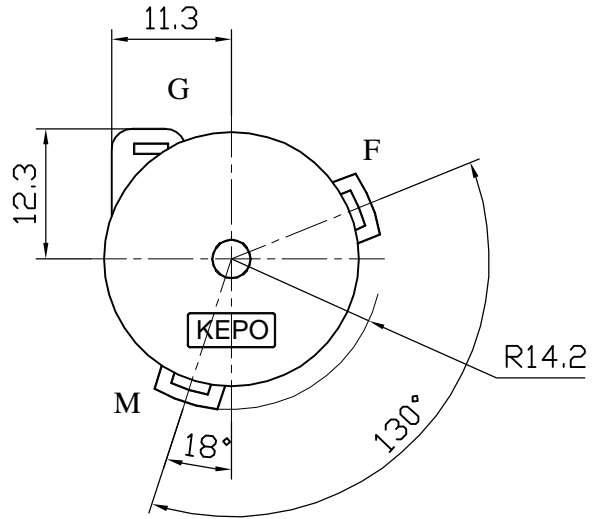
## 7. Structure



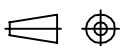
3	Case 壳体	1	PA66	
2	Pin 插针	2	QSn	
1	Piezp-Element 蜂鸣片	1	H65	
			Piezo Ceramic	
No.	Part Name 型号	Q'TY 数量	Material 材质	Remarks 备注

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## 8. Dimensions



FIRST ANGLE PROJECTION



UNIT : mm  
Tolerance : ±0.5



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9. Packing



Picture1(28PCS)



Picture2(28PCS)



Picture3(840PCS)



Picture4(840PCS)

QTY: 840Pcs  
 SIZE:445 x240x330