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	Revision No.	1.2
	Drawing No.	OEM3575
Model No. : SPT-1210A-K3575		

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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: 12x12 mm

外径: 12x12 mm

2.2 Height : 3.0 mm

高度: 3.0 mm

2.3 Weight: 0.7 g

重量: 0.7克

2.4 Operating Temperature range:

-40~+85°C without loss of function

工作温度: -40~+85°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

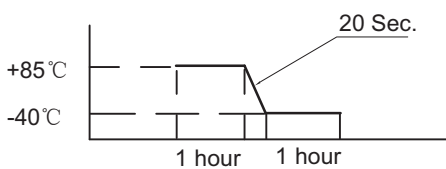
	Items 项目	Specification 规格
1	Rated Voltage 额定电压	3Vp-p Square Wave
2	Max.Allowable Voltage 最大输入电压	20Vp-p Square Wave
3	Rated Frequency 额定频率	4.0KHz
4	Min.Sound Pressure Level 声压	75dB at 4.0KHz/3Vp-p Square Wave/10cm
5	Capacitance at 100Hz 电容量 (at 100Hz)	16000pF ± 30%
6	Case Material/Color 壳体材质/颜色	LCP (BLACK)

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4. Reliability Test

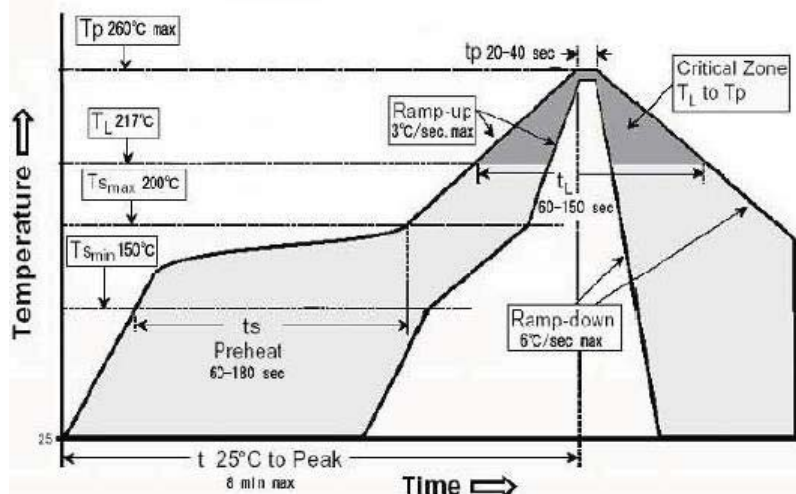
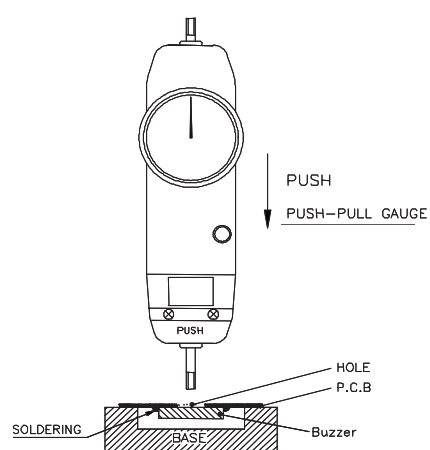
After test(1~9item), the transducer S.P.L. difference shall be within $\pm 10\text{dB}$, and the appearance not exist any change to be harmful to normal operation(e.g. cracks,rusts,damages and especially distortion).

在1-9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 placed in a chamber with $+85\pm 2\text{ }^\circ\text{C}$ for 240h and then being placed in natural condition for 2h, sounder shall be measured.</p> <p>将产品置于 $+85\pm 2\text{ }^\circ\text{C}$ 试验箱内放置240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 placed in a chamber with $-40\pm 2\text{ }^\circ\text{C}$ for 240h, then 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240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>  <p>The diagram illustrates a thermal shock cycle. It starts at a constant temperature of $+85\text{ }^\circ\text{C}$ for 1 hour. A ramp with a slope of 20 Sec. leads to a constant temperature of $-40\text{ }^\circ\text{C}$ for 1 hour. This cycle repeats.</p>
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>

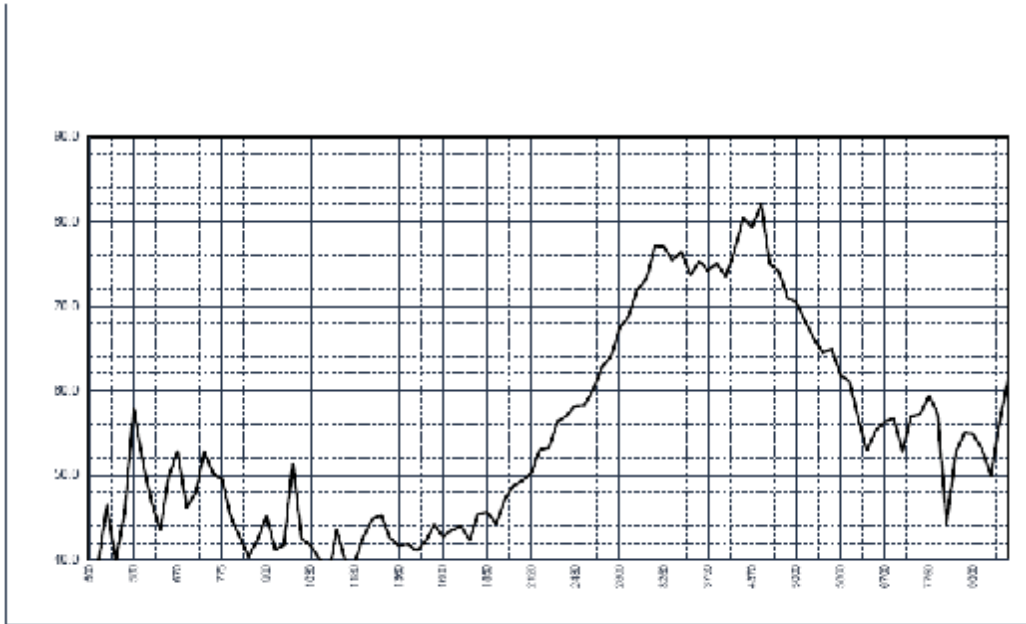
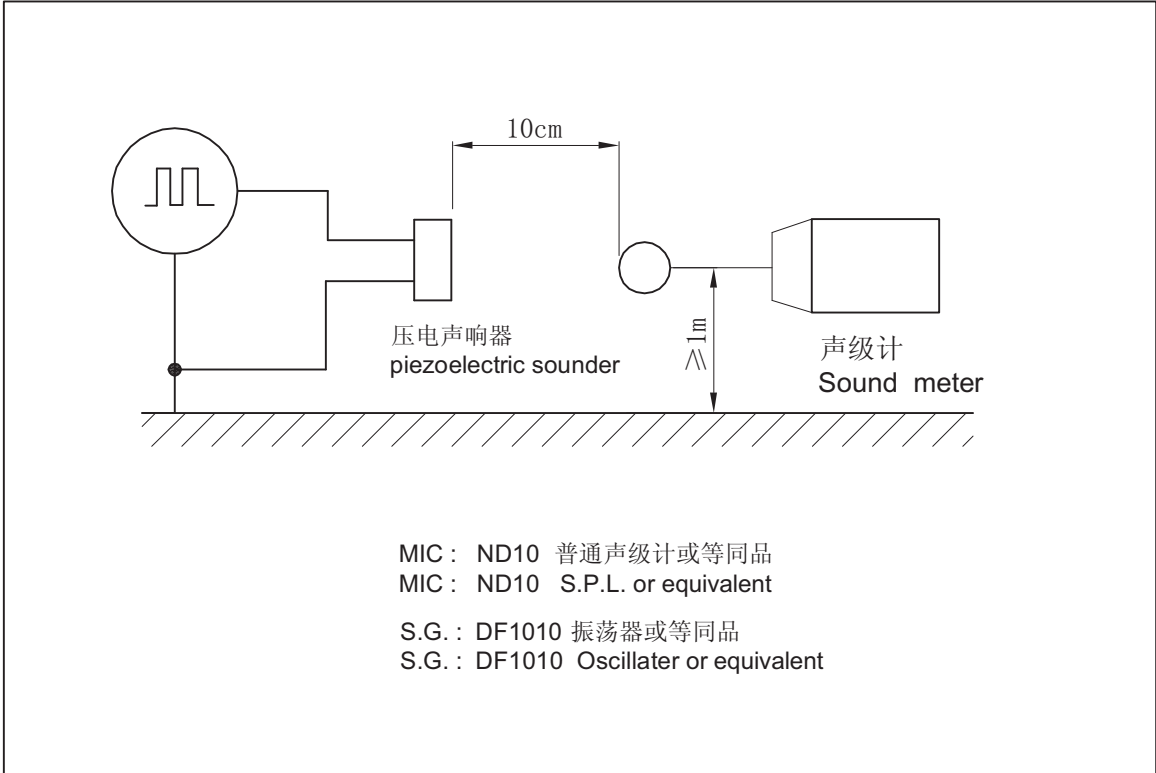
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4. Reliability Test

	Item	Specification
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	可焊性试验 Solderability	<p>Lead terminals are immersed in rosin for 5 seconds and the immersed in solder bath of $+230\pm 5^{\circ}\text{C}$ for 3 ± 0.5 seconds.</p> <p>焊片浸入松香5秒, 然后再浸入$+230\pm 5^{\circ}\text{C}$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	Reflow Soldering 回流焊接	<p>Recommendable reflow soldering condition is as follows.</p> <p>Note 1; It is requested that reflow soldering should be executed after heat of product goes down to normal temperature.</p> <p>Note 2; Peak reflow temperature of 260°C, with a maximum duration of 60 sec. between 220°C and 260°C</p>  <p>The graph shows a temperature profile over time. It starts at 25°C, rises to a preheat temperature T_{Smin} of 150°C (duration t_s Preheat 60-180 sec), then continues to rise to a liquidus temperature T_L of 217°C. The peak temperature T_p is 260°C max, with a maximum duration t_p of 20-40 sec. The temperature then ramps down at 6°C/sec max to a final temperature T_L (60-150 sec). A 'Critical Zone' is defined between T_L and T_p. The total time from 25°C to the peak is t 25°C to Peak, 8 min max.</p>
9	Pad Test 焊片强度测试	<p>Pad Tensile Strength Test Condition, In the pad direction, push the buzzer for 10 sec. with tensile strength of 1.0kg, Refer to the following.</p> <p>用1.0kg强度, 垂直压蜂鸣器10秒, 如下图所示.</p>  <p>The diagram shows a 'PUSH-PULL GAUGE' being used to apply force to a 'Buzzer' mounted on a 'P.C.B.' (Printed Circuit Board). The buzzer is soldered to a 'BASE'. Labels include 'PUSH', 'PUSH-PULL GAUGE', 'HOLE P.C.B', 'Buzzer', 'BASE', and 'SOLDERING'.</p>

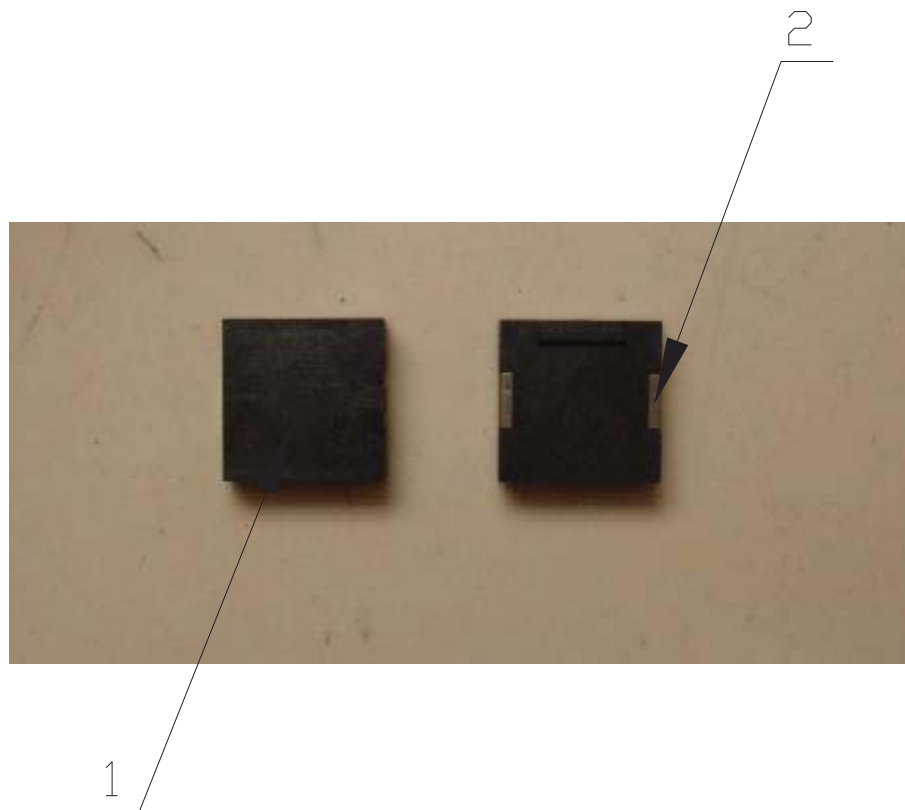
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5. Measurement Block Diagram & Response curve



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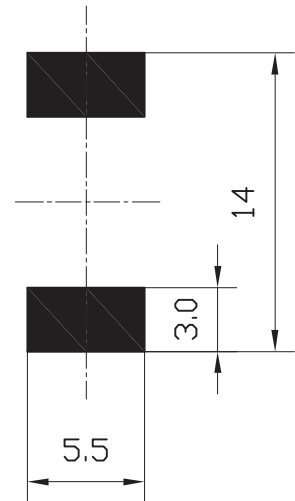
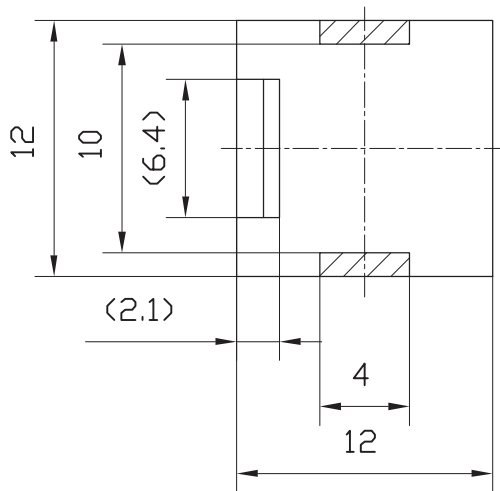
6. Structure



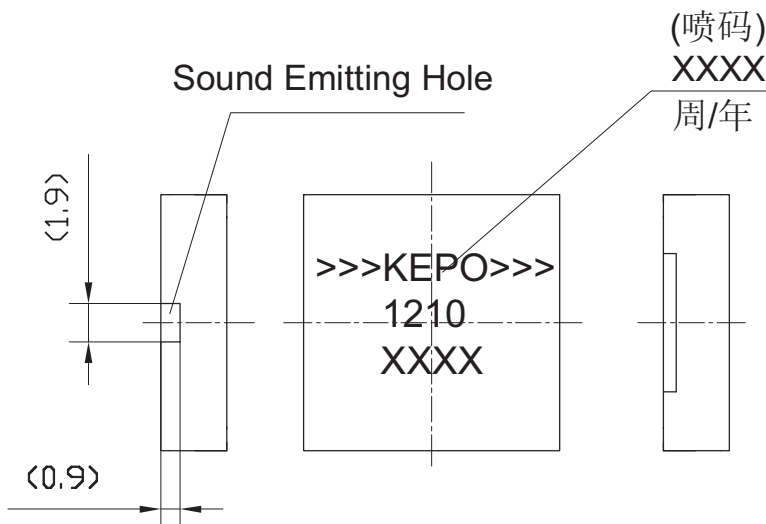
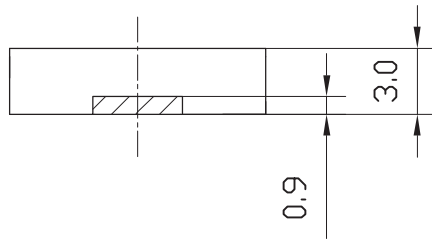
2	weld silce 焊片	2		
1	Case 壳体	1	LCP (BLACK)	
No.	Part Name 型号	Q'TY 数量	Material 材质	Remarks 备注

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7. Dimensions



RECOMMENDED
SMD FOOT PATTERN



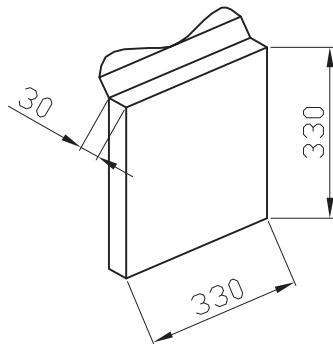
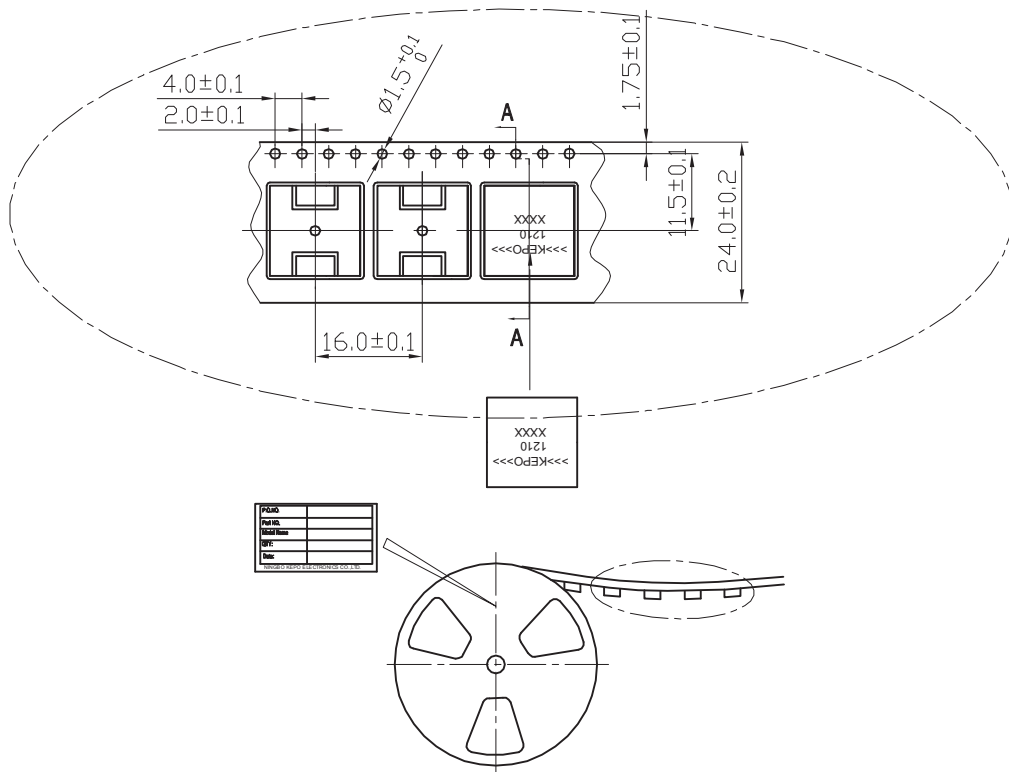
FIRST ANGLE PROJECTION



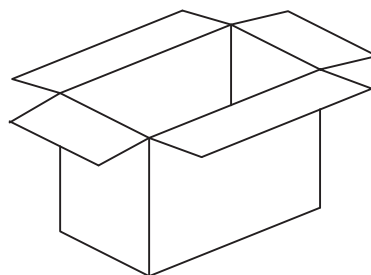
UNIT : mm
Tolerance : ±0.2

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8. Packing



QTY: 1000Pcs
 SIZE:330 x30 x330mm
 N.W.: 0.6KG
 G.W.: 0.95KG



QTY: 10000Pcs
 SIZE:350x450x350mm
 N.W.: 6KG
 G.W.: 10.5KG

注：QC PASS标贴和RoHS标贴和物料标贴都贴于内外箱包装