

Part No: XHxDZ-HC1404

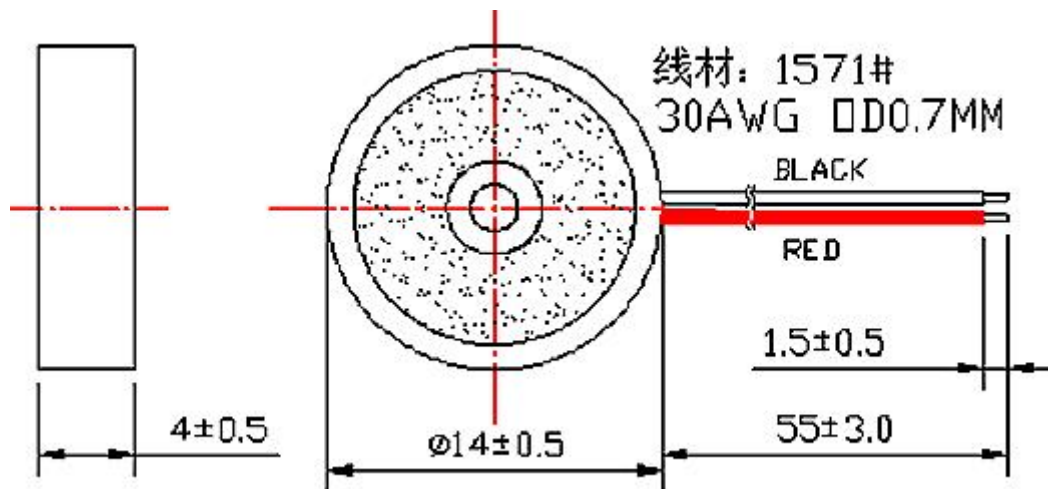
|   |                            |                                 |
|---|----------------------------|---------------------------------|
| 1 | Resonance Frequency (KHz)  | 4.0                             |
| 2 | Max Input Voltage (Vp-p)   | 30                              |
| 3 | Capacitance at 120Hz (nF)  | 12±30%                          |
| 4 | Sound Output at 10cm (dB)  | ≥75 at 4.0KHz Square Wave 5Vp-p |
| 5 | Current Consumption (mA)   | ≤5 at 4.0KHz Square Wave 5Vp-p  |
| 6 | Operating Temperature (°C) | -20~+70                         |
| 7 | Storage Temperature (°C)   | -30~+80                         |
| 8 | Weight (g)                 | 0.6                             |
| 9 | Housing Material           | Black PBT                       |

| Buzzer Soldering process | Soldering Parameter |                                            |       |
|--------------------------|---------------------|--------------------------------------------|-------|
|                          | Temp.( °C)          | Time(Sec.)                                 | Times |
| Reflow soldering         | 245±15              | 180℃ 40~70 245℃ 3<br>above 180℃ time 40~70 | 3     |
| ★Wave soldering          | 255±5               | 4~6                                        | 2~3   |
| ★Manual soldering        | 350±10              | 2~5                                        | 2~3   |

Remark:★ XHxDZ Instance Soldering Process

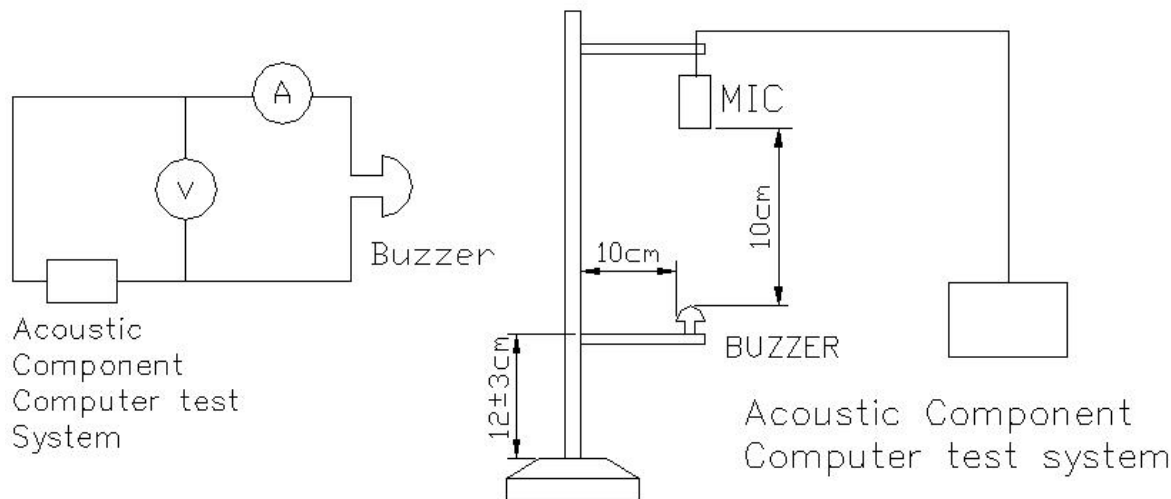
DIMENSIONS (UNIT: mm)

±0.5mm 计算 Tolerance: ±0.5mm Except Specified

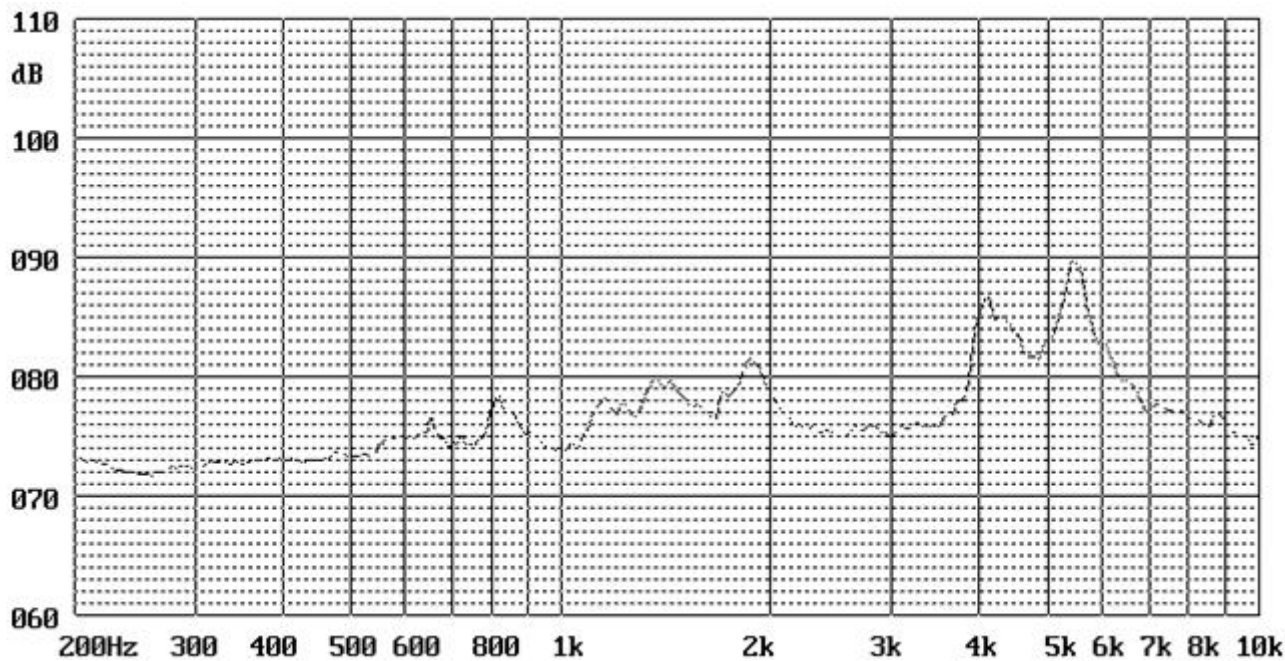


Part No: XHXDZ-HC1404

TEST METHOD



频响曲线 FREQUENCY RESPONSE



# 深圳市兴华鑫电子科技有限公司

## 产品规格内容

| 型号 Part No: XHXDZ-HC1404 引线无源压电 |                                 |                                                                                                                                                                                      |                                                                                                      |
|---------------------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 可靠性测试 RELIABLY TEST             |                                 |                                                                                                                                                                                      |                                                                                                      |
| NO                              | 项目 ITEM                         | 测试条件<br>TESTING CONDITION                                                                                                                                                            | 试验后要求<br>VARIANCE AFTER TEST                                                                         |
| 1                               | 湿 热<br>Humidity                 | 蜂鸣器置于温度在 $50 \pm 5^{\circ}\text{C}$ ，相对湿度在 $93\%-3\%\sim 93\%+2\%$ 中，保持 48 小时后，试验后在常温下恢复 2 小时测试                                                                                      | 测试后性能指标应满足承认书要求<br><br>All specifications must be satisfied after the test.                          |
|                                 |                                 | $50 \pm 5^{\circ}\text{C}$ , $93(+2/-3)\%\text{RH}$ , 48HRS                                                                                                                          |                                                                                                      |
| 2                               | 高温测试<br>High temp.              | 蜂鸣器放置在 $+80 \pm 2^{\circ}\text{C}$ 中, 48 小时后测试性能指标                                                                                                                                   |                                                                                                      |
|                                 |                                 | $+80 \pm 2^{\circ}\text{C}$ , 48HRS                                                                                                                                                  |                                                                                                      |
| 3                               | 低温测试<br>Low temp.               | 将蜂鸣器放置在 $-30 \pm 2^{\circ}\text{C}$ 中, 48 小时后测试性能指标                                                                                                                                  |                                                                                                      |
|                                 |                                 | $-30 \pm 2^{\circ}\text{C}$ , 48HRS                                                                                                                                                  |                                                                                                      |
| 4                               | 温度循环测试<br>Temperature Cycling   | 蜂鸣器在 $-30^{\circ}\text{C}$ 暴露 30min, 在 $80^{\circ}\text{C}$ 暴露 30min, 五次循环后, 试验后在常温下恢复 2 小时                                                                                          |                                                                                                      |
|                                 |                                 | $-30 \pm 2^{\circ}\text{C}$ , 30minutes<br>room temp. 15 minutes<br>$+80 \pm 2^{\circ}\text{C}$ , 30 minutes<br>room temp. 15 minutes<br>5 cycles                                    |                                                                                                      |
| 5                               | 跌 落<br>Drop test                | 将蜂鸣器放置在水平位置, 从 700mm 高度自由跌落到 10mm 硬木版上, 跌落 3 次后, 检查外观并测量电性能                                                                                                                          |                                                                                                      |
|                                 |                                 | 3 times from height of 70cm onto the surface of 10mm thick wooden board.                                                                                                             |                                                                                                      |
| 6                               | 振 动<br>Vibration test           | 将蜂鸣器置于 10~55Hz、振幅在 1.0mm、X Y Z 轴线方向上振动 0.5 小时                                                                                                                                        |                                                                                                      |
|                                 |                                 | Make the test for the directions of X Y and Z (total 0.5 hours).<br>To-and-fro. sweep time (from 10 to 55 Hz and then from 55 to 10Hz ) under single amplitude of 1.0mm is 1 minute. |                                                                                                      |
| 7                               | 焊锡耐热性<br>Solder heat resistance | 将产品针脚放置在 $250 \pm 10^{\circ}\text{C}$ 的锡炉里, 持续 10 秒                                                                                                                                  | 测试后产品外形尺寸和性能指标应满足承认书要求                                                                               |
|                                 |                                 | The part leads (pins) shall be immersed in molten solder maintained at $250 \pm 10^{\circ}\text{C}$ for a period of 10 seconds.                                                      | After the test part shall meet specifications without any degradation in appearance and performance. |

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## 产品规格内容

|                     |    |                                        |  |         |  |          |  |            |    |        |  |         |  |          |  |
|---------------------|----|----------------------------------------|--|---------|--|----------|--|------------|----|--------|--|---------|--|----------|--|
| 产 品 型 号             |    |                                        |  | 数 量     |  |          |  | 测试数据       |    |        |  |         |  |          |  |
| XHXDZ-HC1404 引线无源压电 |    |                                        |  | 10 PCS  |  |          |  | 10 PCS     |    |        |  |         |  |          |  |
| 测试条件                |    | 5VP-P，4000Hz 方波信号，在 10cm 处测试           |  |         |  |          |  |            |    |        |  |         |  |          |  |
| 技术要求                |    | 声压级 ≥75dB      电流≤5mA      电容:12±30%nF |  |         |  |          |  |            |    |        |  |         |  |          |  |
| 检测项目                |    | 声压(dB)                                 |  | 电 流(mA) |  | 电 容 (nF) |  | 检测项目       |    | 声压(dB) |  | 电 流(mA) |  | 电 容 (nF) |  |
| 录<br><br>记          | 1  | 78                                     |  | 0.51    |  | 12.1     |  | 录<br><br>记 | 26 |        |  |         |  |          |  |
|                     | 2  | 80                                     |  | 0.56    |  | 11.6     |  |            | 27 |        |  |         |  |          |  |
|                     | 3  | 79                                     |  | 0.56    |  | 12.0     |  |            | 28 |        |  |         |  |          |  |
|                     | 4  | 80                                     |  | 0.54    |  | 12.7     |  |            | 29 |        |  |         |  |          |  |
|                     | 5  | 81                                     |  | 0.52    |  | 11.3     |  |            | 30 |        |  |         |  |          |  |
|                     | 6  | 79                                     |  | 0.48    |  | 11.9     |  |            | 31 |        |  |         |  |          |  |
|                     | 7  | 79                                     |  | 0.42    |  | 12.8     |  |            | 32 |        |  |         |  |          |  |
|                     | 8  | 80                                     |  | 0.51    |  | 12.6     |  |            | 33 |        |  |         |  |          |  |
|                     | 9  | 79                                     |  | 0.55    |  | 13.2     |  |            | 34 |        |  |         |  |          |  |
|                     | 10 | 80                                     |  | 0.53    |  | 12.4     |  |            | 35 |        |  |         |  |          |  |
|                     | 11 |                                        |  |         |  |          |  |            | 36 |        |  |         |  |          |  |
|                     | 12 |                                        |  |         |  |          |  |            | 37 |        |  |         |  |          |  |
|                     | 13 |                                        |  |         |  |          |  |            | 38 |        |  |         |  |          |  |
|                     | 14 |                                        |  |         |  |          |  |            | 39 |        |  |         |  |          |  |
|                     | 15 |                                        |  |         |  |          |  |            | 40 |        |  |         |  |          |  |
|                     | 16 |                                        |  |         |  |          |  |            | 41 |        |  |         |  |          |  |
|                     | 17 |                                        |  |         |  |          |  |            | 42 |        |  |         |  |          |  |
|                     | 18 |                                        |  |         |  |          |  |            | 43 |        |  |         |  |          |  |
|                     | 19 |                                        |  |         |  |          |  |            | 44 |        |  |         |  |          |  |
|                     | 20 |                                        |  |         |  |          |  |            | 45 |        |  |         |  |          |  |
|                     | 21 |                                        |  |         |  |          |  |            | 46 |        |  |         |  |          |  |
|                     | 22 |                                        |  |         |  |          |  |            | 47 |        |  |         |  |          |  |
|                     | 23 |                                        |  |         |  |          |  |            | 48 |        |  |         |  |          |  |
|                     | 24 |                                        |  |         |  |          |  |            | 49 |        |  |         |  |          |  |
|                     | 25 |                                        |  |         |  |          |  |            | 50 |        |  |         |  |          |  |
| 备 注                 |    |                                        |  |         |  |          |  |            |    |        |  |         |  |          |  |
| 结 论                 |    | 合 格                                    |  | 测 试     |  | 唐海兵      |  | 审 核        |    | 唐国兴    |  |         |  |          |  |