

# SPECIFICATION FOR APPROVAL

## 承 认 书

Description : **Piezoelectric Buzzer**

Vender's Part No. : **SNR-2240A**

Customer's. Part No. :

**Serial No.** :

Version No. : **1.1**

CUSTOMER'S APPROVED SIGNATURE		

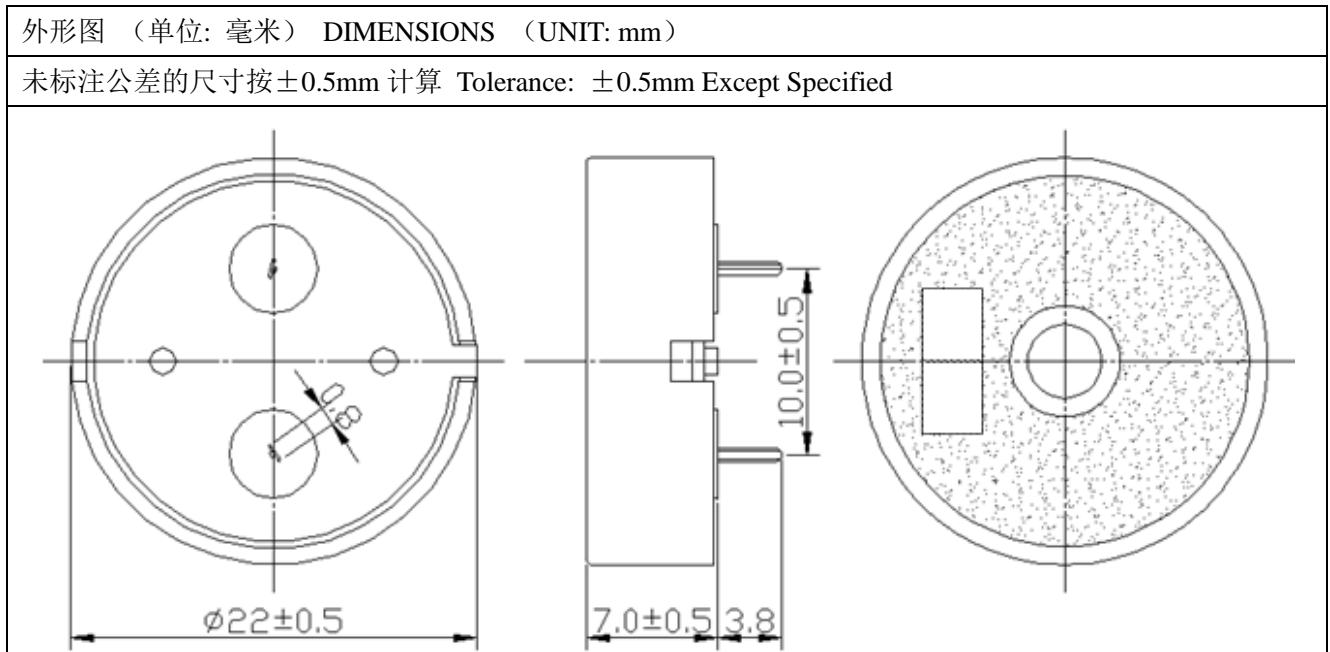
Approved By	Checked By	Made By
		曹小丽

### A. SCOPE

This specification applies piezoelectric buzzer, SNR-2240A

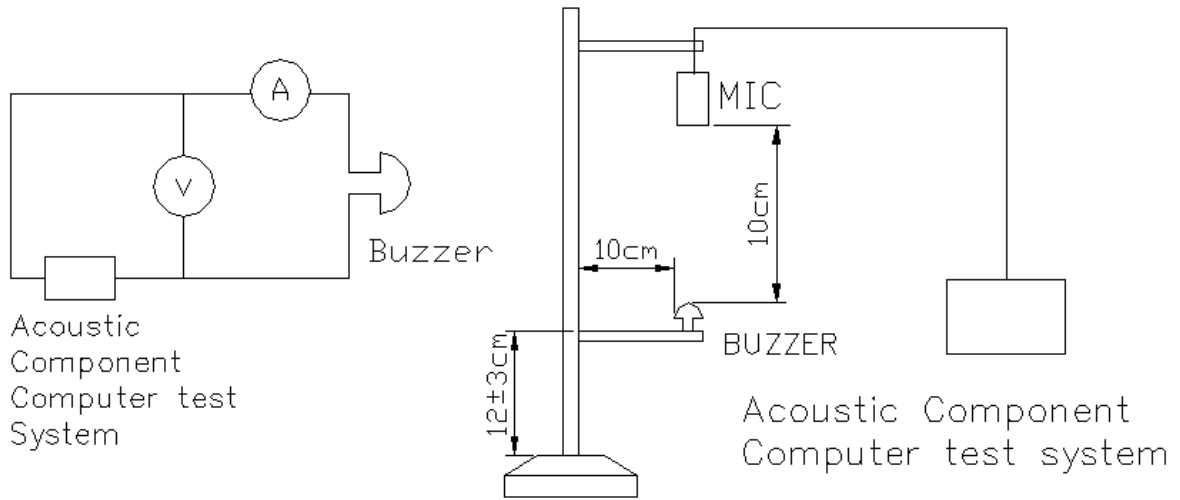
型号 part No: SNR-2240A		
1	额定频率 Resonance Frequency (KHz)	4.0
2	最大电压 Max Input Voltage (Vp-p)	25
3	电容量 Capacitance at 120Hz (nF)	28±30%
4	*声压级 Sound Output at 10cm (dB)	≥90 at 4.0KHz Square Wave 5Vp-p
5	*消耗电流 Current Consumption (mA)	≤5 at 4.0KHz Square Wave 5Vp-p
6	工作温度 Operating Temperature (°C)	-20~+70
7	储存温度 Storage Temperature (°C)	-30~+80
8	单品重量 Weight (g)	2.5
9	外壳材料 Housing Material	黑色 Black PBT
带*号指标需要在额定电压下测试 *Applying rated voltage		

蜂鸣器焊接方法 Buzzer Soldering process	Soldering Parameter		
	温度 Temp.( °C)	时间 Time(Sec.)	可焊接次数 Times
回流焊 Reflow soldering	245±15	180°C 预热 40~70 秒 245°C 3 秒 above 180°C time 40~70	3
★波峰焊 Wave soldering	255±5	4~6	2~3
★手工焊 Manual soldering	350±10	2~5	2~3
带★号为推荐的焊接方法 Remark:★ Instance Soldering Process			

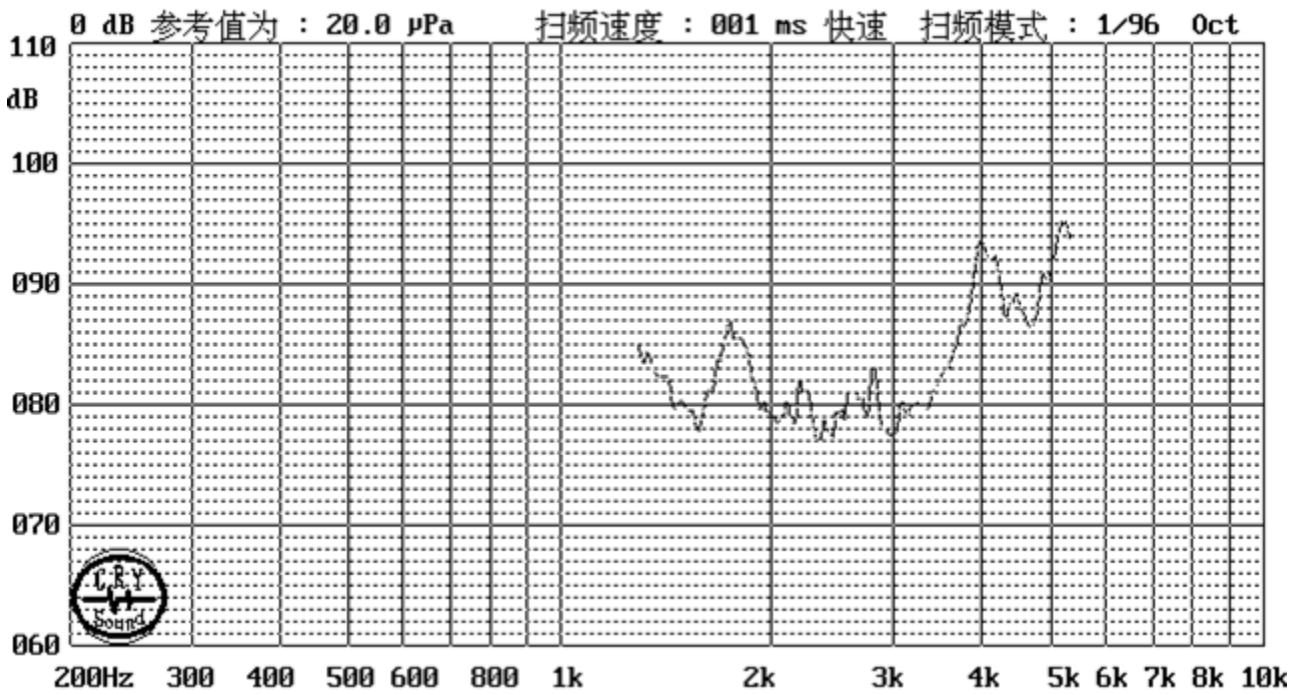


型号 Part No: SNR-2240A

### 测试方法 TEST METHOD



### 频响曲线 FREQUENCY RESPONSE



## 型号 Part No: SNR-2240A

### 可靠性测试 RELIABLY TEST

NO	项目 ITEM	测试条件 TESTING CONDITION	试验后要求 VARIANCE AFTER TEST
1	湿 热 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 96 小时后，试验后在常温下恢复 2 小时测试 ----- $50 \pm 5^{\circ}\text{C}$ , 93(+2/-3)%RH, 96HRS	测试后性能指标应满足承认书要求  All specifications must be satisfied after the test.
2	高温测试 High temp.	蜂鸣器放置在 $+80 \pm 2^{\circ}\text{C}$ 中，96 小时后测试性能指标 ----- $+80 \pm 2^{\circ}\text{C}$ , 96HRS	
3	低温测试 Low temp.	将蜂鸣器放置在 $-30 \pm 2^{\circ}\text{C}$ 中，96 小时后测试性能指标 ----- $-30 \pm 2^{\circ}\text{C}$ , 96HRS	
4	温度循环测试 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 room temp. 15 minutes $+80 \pm 2^{\circ}\text{C}$ , 30 minutes room temp. 15 minutes 5 cycles	
5	跌 落 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 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). 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 Solder heat resistance	将产品针脚放置在 $250 \pm 10^{\circ}\text{C}$ 的锡炉里，持续 30 秒 ----- The part leads (pins) shall be immersed in molten solder maintained at $250 \pm 10^{\circ}\text{C}$ for a period of 30 seconds.	