

兴化市华宇电子有限公司

MESSRS:

SPECIFICATION FOR APPROVAL

产品规格书

DESCRIPTION : PIEZO TRANSDUCER
PART NO. : HYR-1240A
USER' S PART NO. :
DATE : 2014/12/19
CUSTOMER APPROVED :

Approved By	Checked By	Made By

兴化市华宇电子有限公司

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1. APPLICATION RANGE (应用范围)

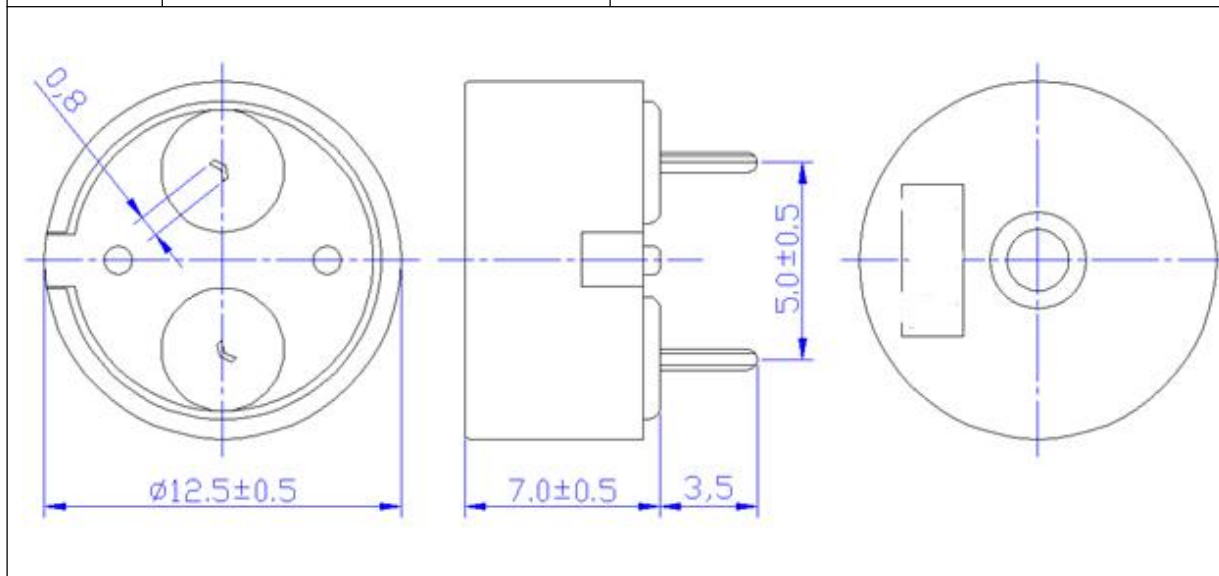
This product specification is applied to the piezoelectric buzzer used for sounder in alarm systems. (产品属于压电蜂鸣器，广泛应用于发声系统)。

2. SPECIFICATIONS (规格)

Standard test condition: Temperature of $25\pm 3^{\circ}\text{C}$, humidity $60\pm 10\%$ R.H.

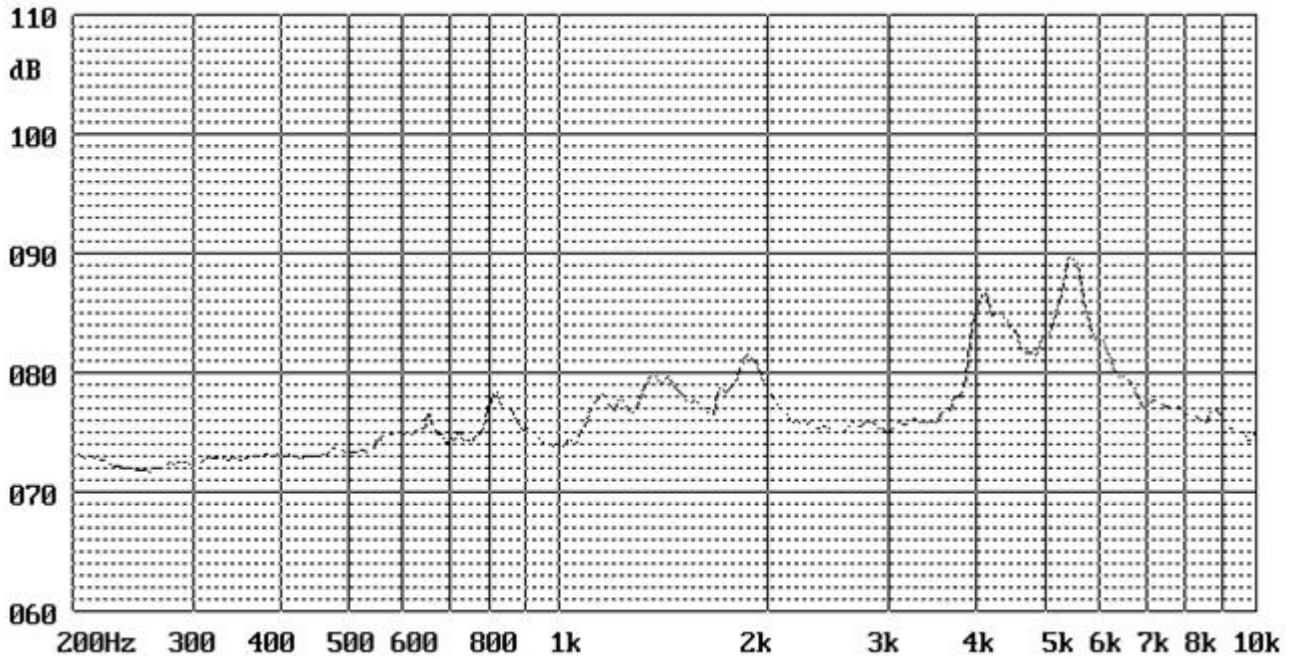
(标准测试条件: 温度 $25\pm 3^{\circ}\text{C}$, 湿度 $60\pm 10\%$ R.H)。

型 号	Part Number	HYR-1240A	
谐振频率	Resonance Frequency	Hz	4000 ± 500
声 压	Sound Pressure Level	dB	85min. At 4kHz Square wave/6.0Vp-p/10cm
自由电容	Free Capacitance	pF	$9000\pm 30\%$ at 100Hz
输入电压	Input Voltage	Vp-p	25 max. Sine wave
消耗电流	Current Consumption	mA	6Vp-p 8mA max
工作温度	Operating Temperature	$^{\circ}\text{C}$	$-20 \sim +70$
贮存温度	Storage Temperature	$^{\circ}\text{C}$	$-30 \sim +85$
尺 寸	Dimension	As shown in Figure	
基片材料	Plate material	Brass	
外壳材料	Case material	PBT	
插针材料	Pin material	Phosphor bronze	

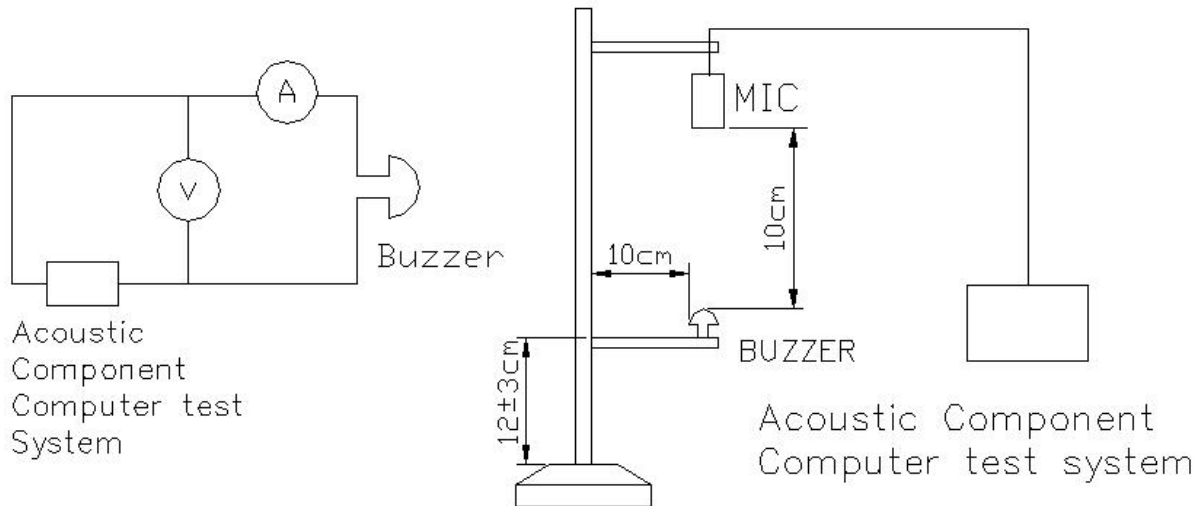


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3. FREQUENCY RESPONSE (频率响应曲线图)

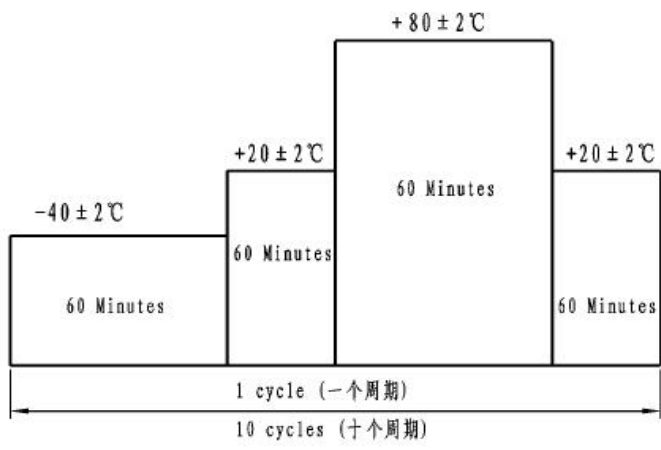


3. SOUND PRESSURE TESTING CIRCUIT DIAGRAM (声压测试线路图)



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4. RELIABILITY TEST (可靠性试验)

序号	ITEM (项目)	METHOD OF TEST (试验方法)	VARIANCE AFTER CONDITIONIN (标准)	
1	Dry Heat Test (Storage) 高温储存试验	After being placed in a chamber with $80\pm 2^{\circ}\text{C}$ for 2 hours and then Being placed in natural condition for 2 hours, buzzer shall Be measured. 在 $80\pm 2^{\circ}\text{C}$ 的试验箱里放置2小时, 然后在室温下放置2小时后测试。		
2	Cold Test (Storage) 低温储存试验	After being placed in a chamber with $-30\pm 2^{\circ}\text{C}$ for 20 hours and then Being placed in natural condition for 2 hours, buzzer shall Be measured. 在 $-30\pm 2^{\circ}\text{C}$ 的试验箱里放置20小时后, 然后在室温下放置2小时后测试。		
3	Humidity Test 耐湿性试验	After being placed in a chamber with 90 to 95%R.H. at $40\pm 2^{\circ}\text{C}$ for 240 hours and then being placed in natural condition for 4 hours, Buzzer shall be measured. 在湿度为90—95%, 温度为 $40\pm 2^{\circ}\text{C}$ 的温湿箱里放置240小时后, 然后在室温下放置4小时后测试。		
4	Temperature Cycle Test 温度循环试验	Make the test for 5 cycles without applying power as fig then expose to the room temperature for 4 hours. 不接电源按下图做5个周期试验, 然后在室温下放置4小时再测试。 		Sound Pressure Level (Specification after test): Initial Value $\pm 10\text{dB}$. 声压 (试验后变化量): 初始值 $\pm 10\text{dB}$.
5	Vibration Resistant 耐振动性	Buzzer shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours. 振动频率 $10\sim 55\text{Hz}$, 振幅为1.5mm, 朝X、Y、Z轴三个方向振动2小时后测试。		
6	Drop Test	Drop a product naturally form the height of 1000mm		Sound Pressure Level

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	跌落试验	onto the surface of 100mm thick wooden board. Two directions: This is upper and side of the product are to be applied for this drop test respectively once. 从1000mm高度将产品自然跌落在100mm厚板上按正、侧面方向各做二次跌落试验，观察此产品能否承受跌落试验。	(Specification after test): Initial Value±10dB. 声压(试验后变化量): 初始值±10dB。
7	Soldering Heat Resistance 耐焊接热试验	Lead terminal are immersed up to 1.5mm from buzzer' s body in solder bath of 260°C for 10 seconds, and then buzzer shall be measured after being placed in natural condition for 4 hours. 将插针端子浸入260°C的焊料至距离蜂鸣器本体1.5mm, 持续10秒, 然后在室温下放置4小时后测试。	
8	Solder ability 可焊性	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of 250°C for 3 seconds. 将插针端子进入松香助焊剂5秒, 然后浸入250°C的焊料中3秒。	95%min. lead terminals shall be wet with solder. (Except the edge of terminal) 上锡面积≥95%。
9	Terminal Strength Pulling 端子强度	The force 10 seconds of 9.8N is applied to each terminal in axial direction. 插针端子能承受9.8N的负荷10秒。	No visible damage and cutting off. 端子没有明显的损伤和断裂、脱落。

4. PACKING INFORMATION (包装信息)

1 盒 (box) =100pcs/板 (pearl cotton vest) ×5 板 (pearl cotton vest) =500pcs

1箱 (carton) =500pcs/盒 (box) ×20盒 (box) =10000pcs

