

# 规格书

# Specification

品 名  
Model name

HY1212GP

PROPRIETARY  
Huayu Electronic co.,Ltd.

CONFIDENTIAL  
Huayu Electronic co.,Ltd.

Version #	Spec V1.0
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Components Operating Div.  
Huayu Electronic co.,Ltd.

1. 适用范围: 本规范适用于 HY1212GP 蜂鸣器

This specifications apply the HY1212GP buzzer.

## 2. 基本规格/General specification

项目/Item		规格/Spec	条件/Condition
1	额定电压 Rated voltage	12VDC	
2	工作电压 Operation voltage	6~15VDC	
3	声压 Sound Pressure Level=SPL	Min 85dB	测试环境: 标准状态, 标准驱动电路, 额定电压 测试距离: 0.1m
4	平均消费电流 Average consumption current	Min 50mA Max 150mA	Standard State, Standard Drive Circuit. Rated voltage, Distance at 0.1m
5	振荡频率 Oscillation frequency	2400Hz	
6	阻值 Direct current resistance	140±14Ω	
6	响应时间 Response time	Max 50mS	
7	工作温度范围 Range of operation temperature	-30~+70°C	
8	保存温度范围 Range of preservation temperature	-40~+85°C	
10	外部尺寸 Externals size	Φ12x9.5	参阅附图 Refer to the attached drawing
11	重量 Mass	2g	

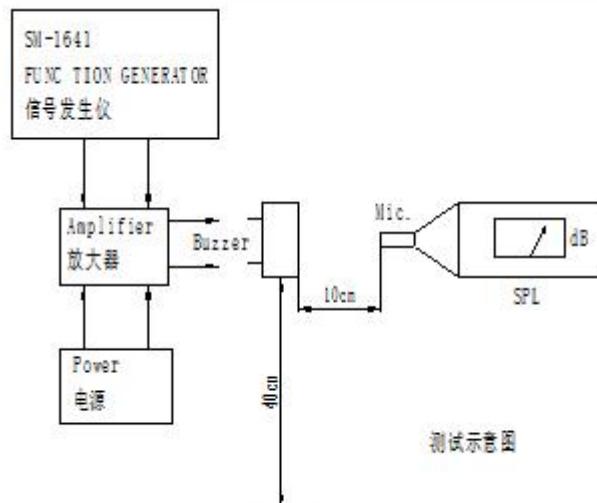
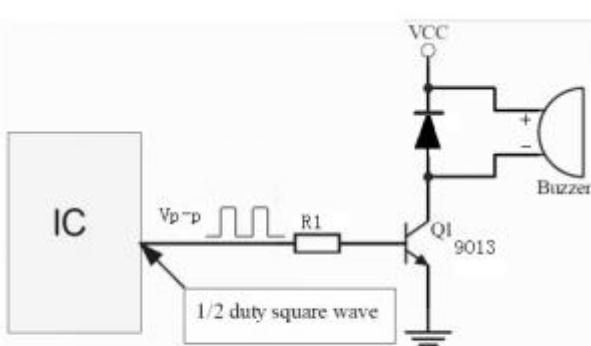
## 3. 电气和声学测试条件/Electrical And Acoustical Measuring Condition

### 驱动电路/Recommended Driving Circuit

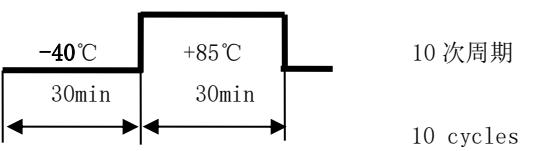
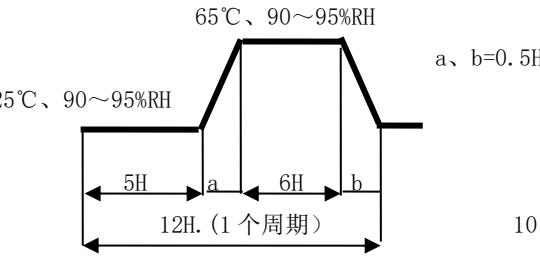
Resonant frequency, 1/2 duty cycle. Square wave.

Signal amplitude should be large enough to saturate the transistor.

### 设置 Recommended Setting



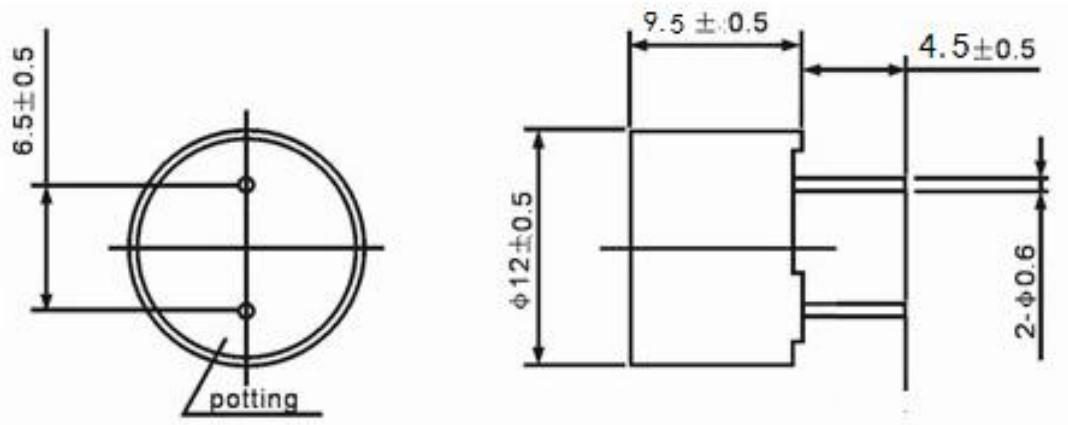
#### 4. 可靠性规范/Reliability specification

项目/Item	试验条件/Test condition	判断标准/Criteria	引用规格
1 高温保存试验 High temperature Preservation	+85°C环境下放置 96 小时 Exposure to +85°C for 96 hrs.	经过测试, 符合规格, 没有任何不合格的外观和性能, 除了是 80 分贝或以上 (2400±400 Hz) After the test the part shall meet specifications without any degradation in appearance And performance except SPL. SPL shall be 80 dB	GB/T 2423.2
2 低温保存试验 Low temperature preservation	-40°C环境下放置 96 小时 Exposure to -40°C for 96 hrs.	After the test the part shall meet specifications without any degradation in appearance And performance except SPL. SPL shall be 80 dB	GB/T 2423.1
3 耐温试验 Thermal Shock	 -40°C 30min → +85°C 30min → -40°C 30min → ... 10 次周期 10 cycles	10 次周期 10 cycles	GB/T 2423.4
4 温湿度试验 Thermal, Humidity Shock	 25°C、90~95%RH → 65°C、90~95%RH → 25°C、90~95%RH a, b=0.5H 5H → a → 6H → b → 12H. (1 个周期) 10 cycles	More. (at 2400±400 Hz)	
5 常温寿命试验 Ordinary Temp. Life	常温 (25°C±10°C) 电压 12VDC 连续测试 1000 小时 Driving the sounder at 12VDC for 1000hrs in the room temperature (25°C±10°C)		
6 高温寿命试验 High Temp. Life	高温 (+85°C) 电压 12VDC 连续测试 500 小时 Driving the sounder at 12VDC for 500hrs in the low temperature (+85°C)		
7 低温寿命试验 Low Temp. Life	低温 (-40°C) 电压 12VDC 连续测试 500 小时 Driving the sounder at 12VDC for 500hrs in the low temperature (-40°C)		
8 引脚拉力试验 Lead strength	10N 的拉力在引脚上拉 10±1 秒 Pull load on the direction of the terminal axis for 10±1 sec.		GB/T 2423.29
9 振动试验 Vibration	10~55~10Hz 正弦波测试 1 分钟, 振幅 1.52mm 最大 91m/S <sup>2</sup> X, Y, Z 三个方向每个 2 小时总计 6 小时 10~55~10Hz Sinewave, Sweep 1 min, Amplitude 1.52mm Max91m/S <sup>2</sup> X, Y, Z 3Direction 2hrs each, Total 6hrs		GB/T 2423.10
10 自由掉落试验 Free drop	70cm 高自由掉落到厚 40mm 的木板上, 每个方向一次 Free drop, 70cm height, on wood board (t40mm) X, Y, Z 3Direction 1time each, total 3times.	排除弯曲的针 Exclude bending of Pin	GB/T 2423.8
11 波峰焊耐热试验 Solder heat resistance	250±5°C 焊接温度。浸泡时间 3±0.2sec Soldering into solderbath:Solder Temp. 250±5°C Soaking Time: 3±0.2sec	经过测试, 符合规格, 没有任何不合格的外观和性能 After the test the part shall meet specifications without any degradation in appearance and performance	GB/T 2423.28
12 耐洗性试验 Washability	溶剂: 去离子水, 溶剂温度: 55±5°C, 浸泡时间: 5±0.5 分钟 Solvent:deionized water, Solvent temp:55±5°C Soaking time:5±0.5minutes	Shall meet specifications without any degradation in appearance and performance	
13 引脚可焊性试验 Solderability	40°C, 相对湿度 90~95%RH 放置 240 小时, 360±5°C 焊接温度。 浸泡时间: 2±0.5sec. Pretreatment:40°C, 90~95%RH*240hrs Soldering into solderbath:Solder Temp. 360±5°C Soaking Time: 2±0.5sec	引脚 95% 必须覆盖着焊料 95% surface of lead pins must be covered with fresh solder and no soldering holes Should be found	GB/T 2423.28

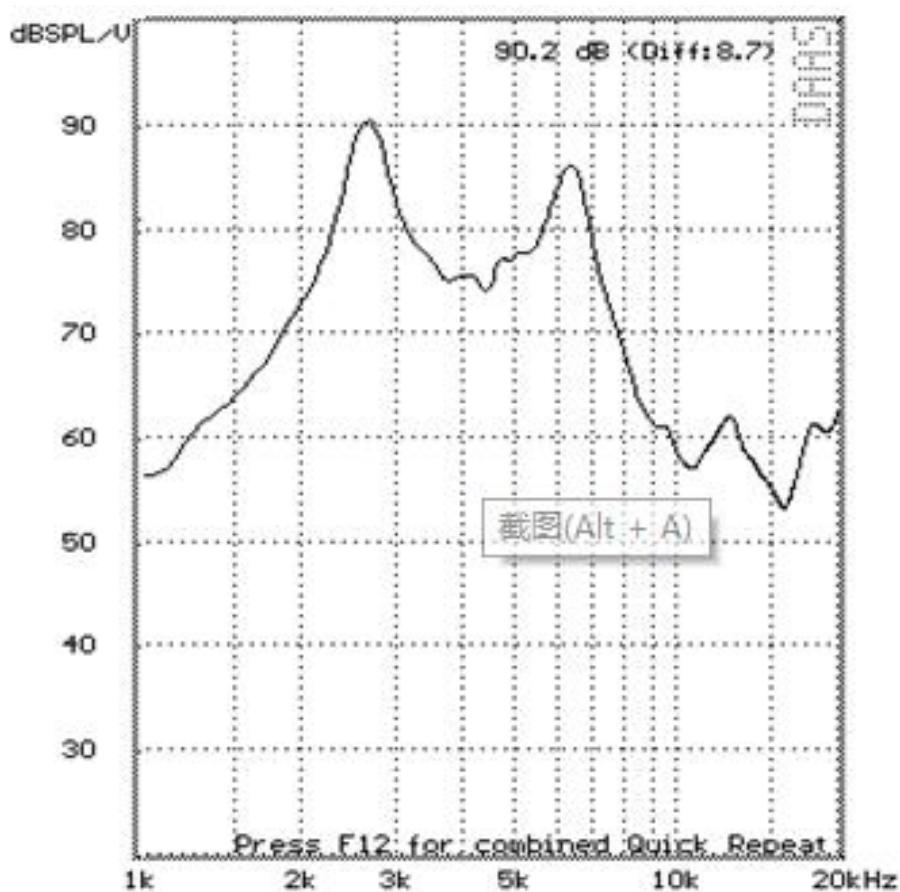
## 5.尺寸图/Dimension

(UNT: mm)

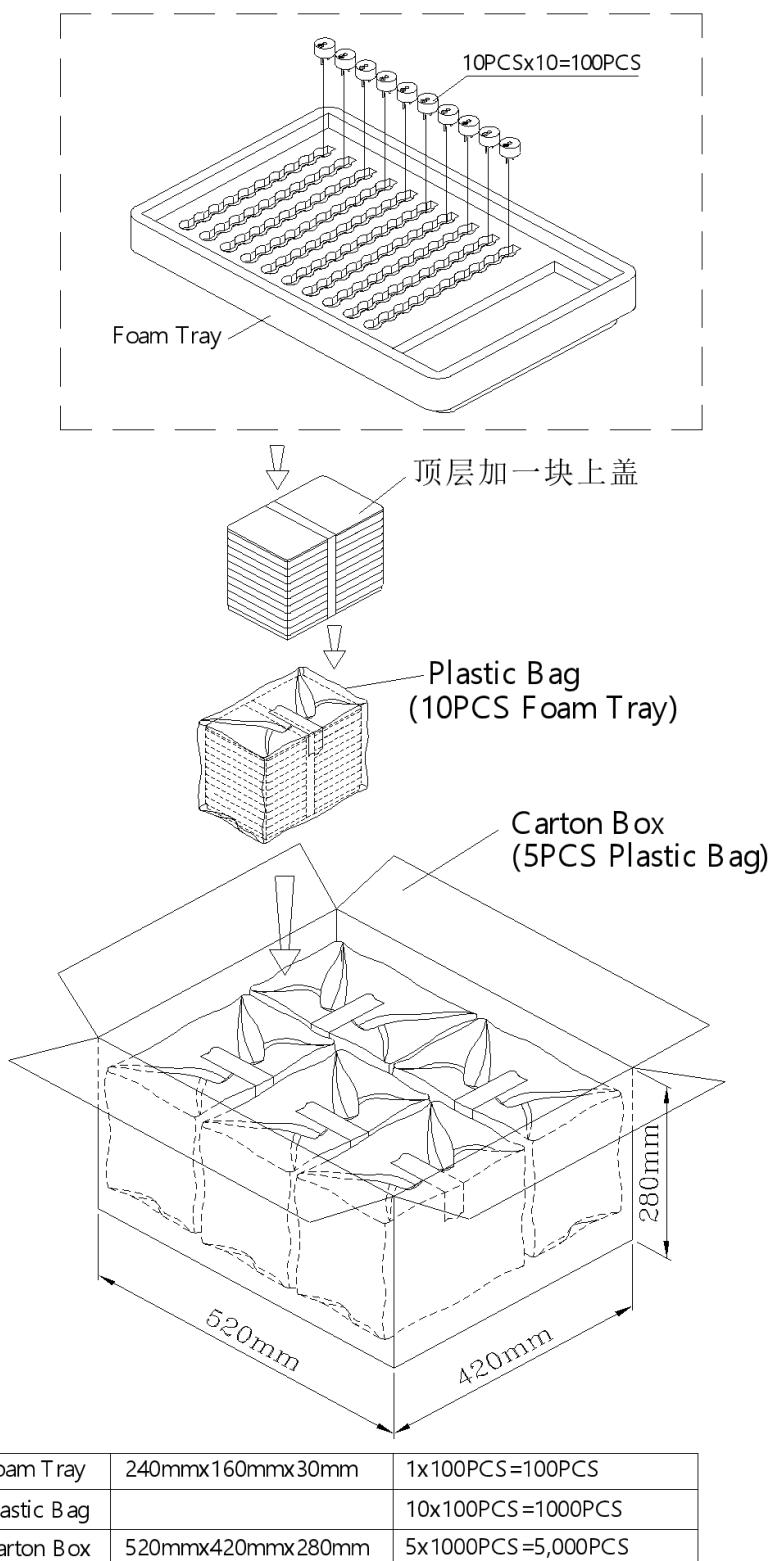
Tolerance:  $\pm 0.5$ mm Except Specified



## 6. Frequency Curve 频率图



## 7.Packing Method/包装图



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