

规格书

Specification

品 名
Model name

HY1201GP

PROPRIETARY
Huayu Electronic co.,Ltd.

CONFIDENTIAL
Huayu Electronic co.,Ltd.

Version #	Spec V1.0
制作日期 Date	2019/12/11
准备 Prepared	yisheng Acoustic specialist,R&D Dept.
承认 Approved	Qianwanjin Executive Manager,R&D Dept.



兴化市华宇电子有限公司

地址：江苏省兴化市陈堡工业区人民路 1 号
电话：13625199874 传真：0523-83723118
邮箱：391245375@qq.com 网址：www.js-huayu.com

Components Operating Div.
Huayu Electronic co.,Ltd.

1.适用范围：本规范适用于 HY1201GP 蜂鸣器

This specifications apply the HY1201GP buzzer.

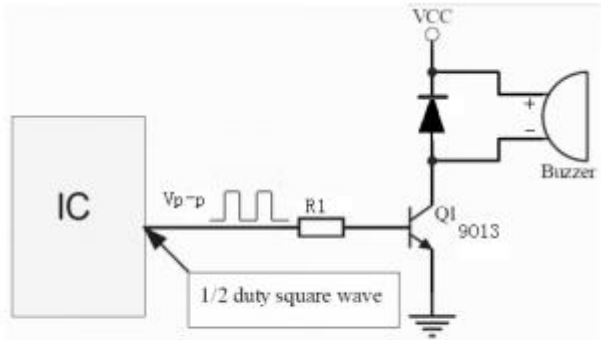
2.基本规格/General specification

项目/Item		规格/Spec	条件/Condition
1	额定电压 Rated voltage	3VDC	测试环境：标准状态，标准驱动电路，额定电压 测试距离：0.1m Standard State,Standard Drive Circuit. Rated voltage,Distance at 0.1m
2	工作电压 Operation voltage	2~5VDC	
3	声压 Sound Pressure Level=SPL	Min 85dB	
4	平均消费电流 Average consumption current	Min 50mA Max 150mA	
5	振荡频率 Oscillation frequency	2400Hz	
6	阻值 Direct current resistance	16±4 Ω	
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	参阅附图 Refer to the attached drawing
10	外部尺寸 Externals size	Φ12x9.5	
11	重量 Mass	2g	

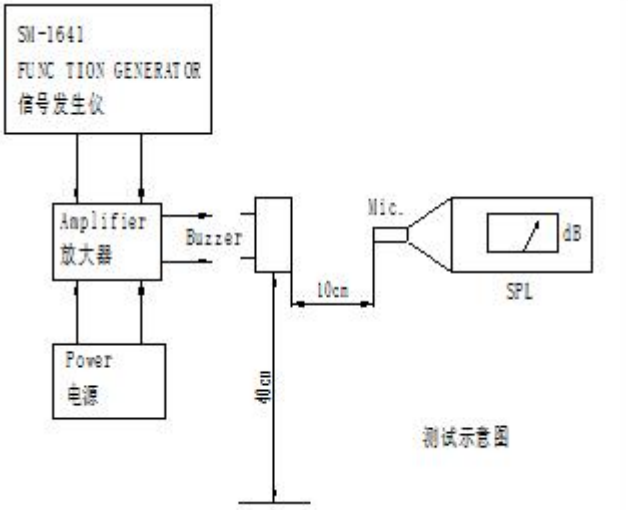
3. 电气和声学测试条件/Electrical And Acoustical Measuring Condition

驱动电路/Recommended Driving Circuit

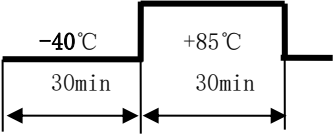
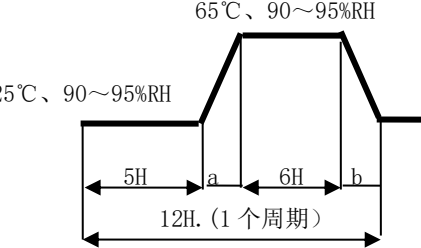
Resonant frequency, 1/2 duty cycle. Square wave.
Signal amplitude should be large enough tosaturate the transistor.



设置 Recommended Setting



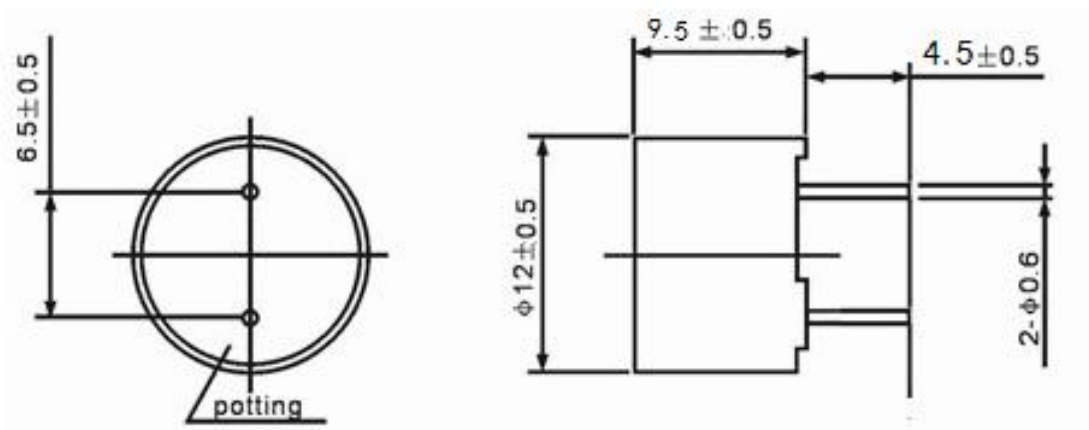
4.可靠性规范/Reliability specification

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℃环境下放置 96 小时 Exposure to +85℃ 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 More. (at 2400±400 Hz)	GB/T 2423.2
2	低温保存试验 Low temperature preservation	-40℃环境下放置 96 小时 Exposure to -40℃ for 96 hrs.		GB/T 2423.1
3	耐温试验 Thermal Shock	 -40℃ 30min +85℃ 30min 10 次周期 10 cycles		GB/T 2423.4
4	温湿度试验 Thermal, Humidity Shock	 65℃、90~95%RH 25℃、90~95%RH a、b=0.5H 5H 6H 12H. (1 个周期) 10 cycles		
5	常温寿命试验 Ordinary Temp. Life	常温 (25℃±10℃) 电压 3VDC 连续测试 1000 小时 Driving the sounder at 3VDC for 1000hrs in the room temperature (25℃±10℃)		
6	高温寿命试验 High Temp. Life	高温 (+85℃) 电压 3VDC 连续测试 500 小时 Driving the sounder at 3VDC for 500hrs in the low temperature (+85℃)		
7	低温寿命试验 Low Temp. Life	低温 (-40℃) 电压 3VDC 连续测试 500 小时 Driving the sounder at 3VDC for 500hrs in the low temperature (-40℃)		
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.	排除弯曲的针 Exclude bending of Pin	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 ² 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 Max 91m/S ² 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.		GB/T 2423.8
11	波峰焊耐热试验 Solder heat resistance	250±5℃焊接温度。浸泡时间 3±0.2sec Soldering into solderbath: Solder Temp. 250±5℃ 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℃, 浸泡时间: 5±0.5 分钟 Solvent: deionized water, Solvent temp: 55±5℃ Soaking time: 5±0.5 minutes		
13	引脚可焊性试验 Solderability	40℃, 相对湿度 90~95%RH 放置 240 小时, 360±5℃焊接温度。 浸泡时间: 2±0.5sec。 Pretreatment: 40℃, 90~95%RH*240hrs Soldering into solderbath: Solder Temp. 360±5℃ 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

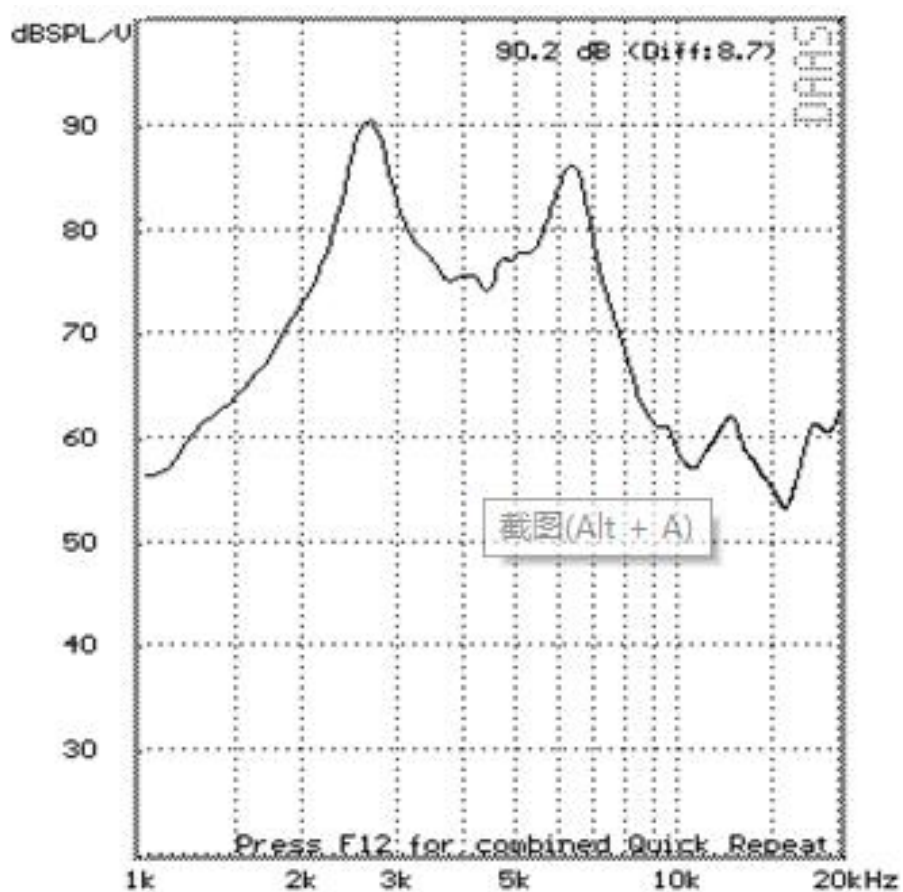
5.尺寸图/Dimension

(UNT: mm)

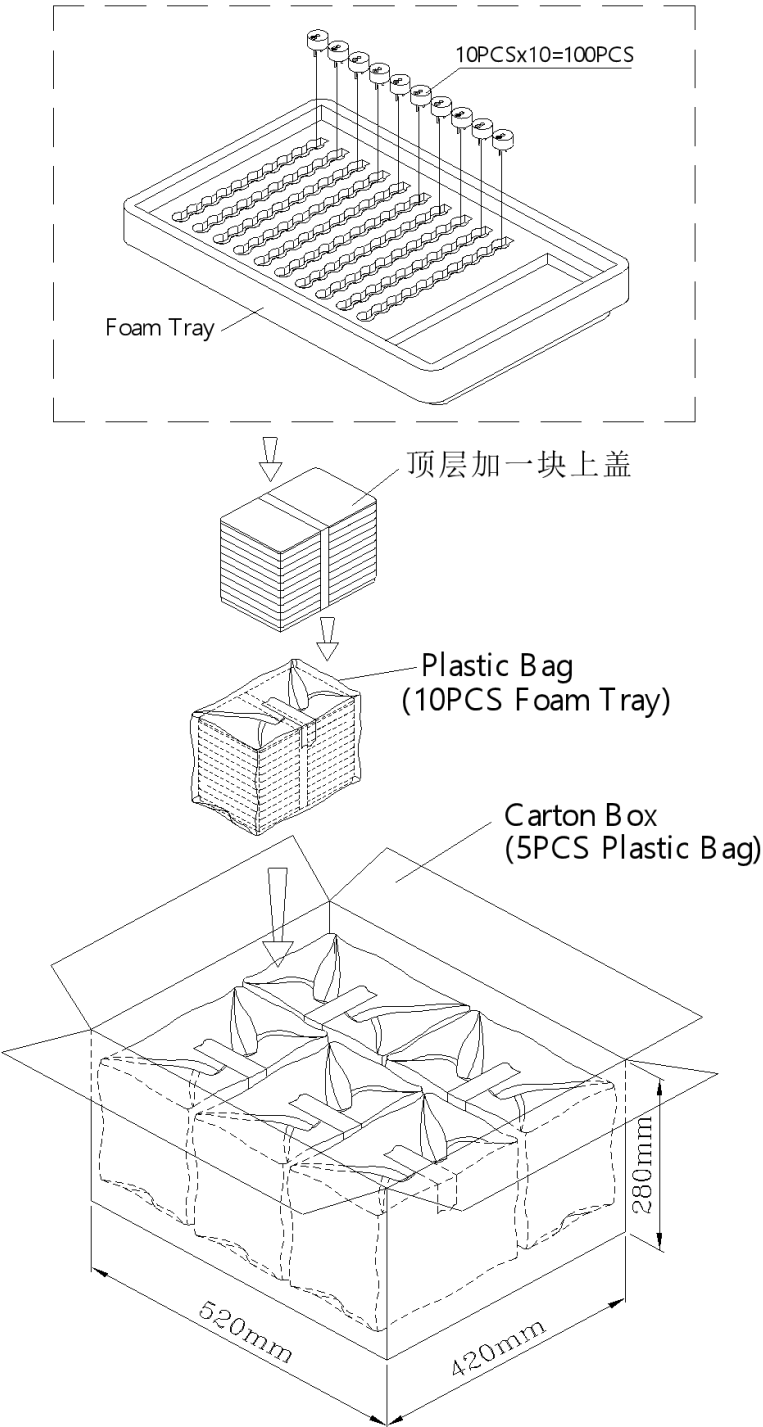
Tolerance: $\pm 0.5\text{mm}$ Except Specified



6.Frequency Curve 频率图



7.Packing Method/包装图



Foam Tray	240mmx160mmx30mm	1x100PCS=100PCS
Plastic Bag		10x100PCS=1000PCS
Carton Box	520mmx420mmx280mm	5x1000PCS=5,000PCS



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