

# 规格书 Specification

品名  
Model name

## TMB12A03

**PROPRIETARY**  
Huaneng Electronic co.,Ltd.

**CONFIDENTIAL**  
Huaneng Electronic co.,Ltd.

<b>Version #</b>	<b>Spec V1.0</b>
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## 江苏华能电子有限公司

*Components Operating Div.*  
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1.适用范围：本规范适用于TMB12A03蜂鸣器。  
This specifications apply the TMB12A03 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	
2 工作电压 Operation voltage	1.5~4VDC	
3 声压 Sound Pressure Level=SPL	Min 87dB	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
4 电流 current	≤ 30mA	
5 振荡频率 Oscillation frequency	2300±300Hz	
6 响应时间 Response time	Max 50mS	最低工作电压 Lowest operation voltage
7 工作温度范围 Range of operation temperature	-20~+85℃	声压 ≥85dB SPL ≥85dB
8 保存温度范围 Range of preservation temperature	-20~+85℃	
9 端子强度 Terminal strength	10N	拉负荷方向的终端轴 Pull load on the direction of the terminal axis
10 外部尺寸 Externals size	Φ12x9.5	参阅附图 Refer to the attached drawing
11 重量 Mass	2g	

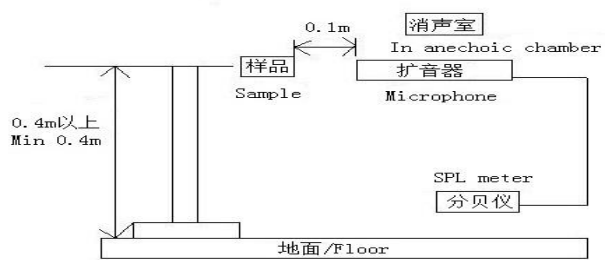
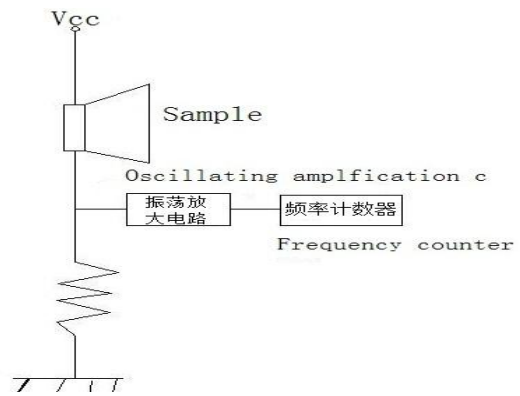
☆标准状态：常温（15~35℃），湿度（25~85%相对湿度），空气压力（860~1060hpa）  
在假设的情况判断，测试是一基本状态下进行。

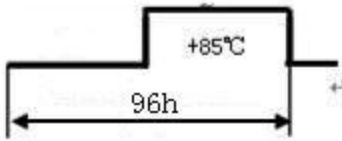
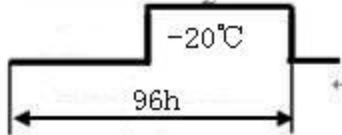
Standard State:Ordinary Temp(15~35℃),Humidity(25~85%RH),Air pressure(860~1060hPa)  
In case of doubtful judgment,the test is re—performed under Basic State.

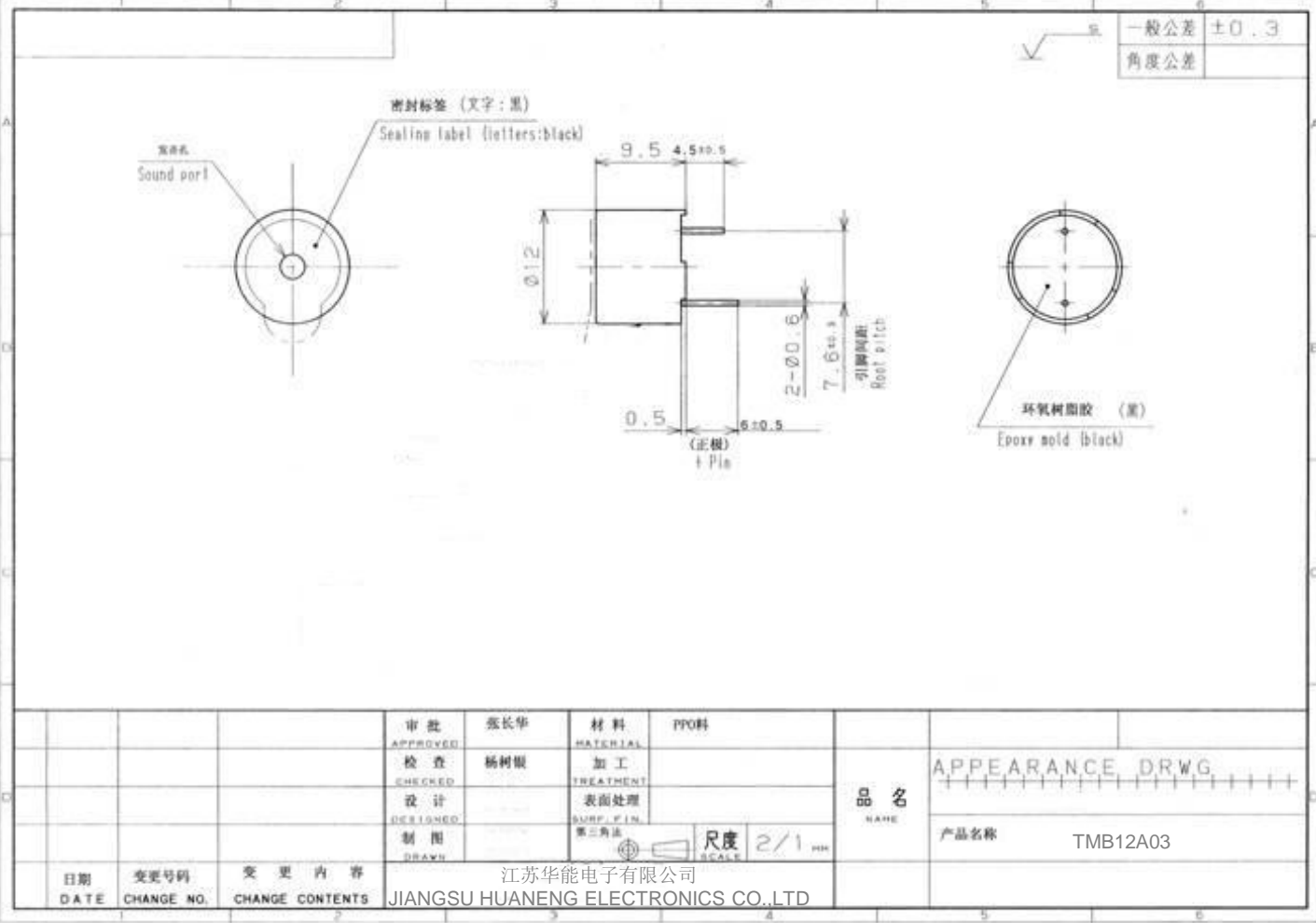
☆基本情况：温度。（20±2℃），湿度（60~70%相对湿度），空气压力（860~1060hpa）  
Basic State: Temp.(20±2℃),Humidity(60~70%RH),Air pressure(860~1060hPa)

<标准驱动电路>/<Standard Drive Circuit>

<标准测试治具>/<Standard Test Fixture>



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24小时 Exposure to +85℃ for 24 hrs.	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 specificati -ons without any degra.	
2	低温保存试验 Low temperature preservation	-20℃环境下放置24小时 Exposure to -20℃ for 24 hrs.		
3	高温试验 High temperature Shock			
4	低温试验 Low temperature Shock			
5	常温寿命试验 Ordinary Temp. Life	常温 (25℃ ± 10℃) 电压3VDC连续测试48小时 Driving the sounder at 3VDC for 48hrs 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2小时 Driving the sounder at 3VDC for 2hrs in the low temperature (+85℃)		
7	低温寿命试验 Low Temp. Life	低温 (-20℃) 电压3VDC连续测试2小时 Driving the sounder at 3VDC for 2hrs in the low temperature (-20℃)		
8	端子拉力试验 Lead strength	10N的拉力在端子上拉10±1秒 Pull load on the direction of the terminal axis for 10±1 sec.		
9	跌落试验 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	
10	端子可焊性试验 Solderability	260 ± 5℃ 焊接温度。时间: 5 ± 0.5sec。 Temp. 260 ± 5℃ Soaking Time: 5 ± 0.5sec	端子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	



产品特征图

