EN: This Datasheet/Document is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

规格书
Specification

品 名
Model name

TMB12A03 ROHS

PROPRIETARY
Huaneng Electronic co.,Ltd.

CONFIDENTIAL
Huaneng Electronic co.,Ltd.

Version #	**Spec V1.0**
制作日期 Date	**2017/05/16**
准备 Prepared	**Yang shu yin Acoustic specialist,R&D Dept.**
审核 Approved	**Zhang chang hua Executive Manager,R&D Dept.**

HNDZ

江苏华能电子有限公司

Components Operating Div.
HuanengElectronic co.,Ltd.

1.适用范围：本规范适用于TMB12A03 ROHS蜂鸣器。 TMB12A03 ROHS SPEC V1.0

This specifications apply the TMB12A03 ROHS 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 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 Standard State,Standard Drive Circuit. Rated voltage,Distance at 0.1m
4	平均消费电流 Average consumption current	Max 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～+70℃	声压 ≥80dB SPL ≥80dB
8	保存温度范围 Range of preservation temperature	-30～+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－基本状态下进行。

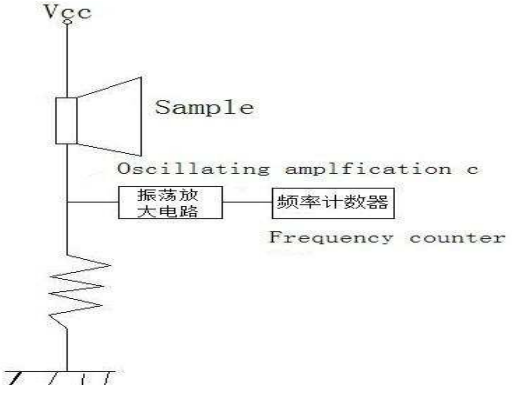
Standard State:Ordinary Temp(15～35℃),Humidity(25～85%RH),Air pressure(860～1060hPa)

In case of doubtful judgment,the test is re－performed under Basic State.

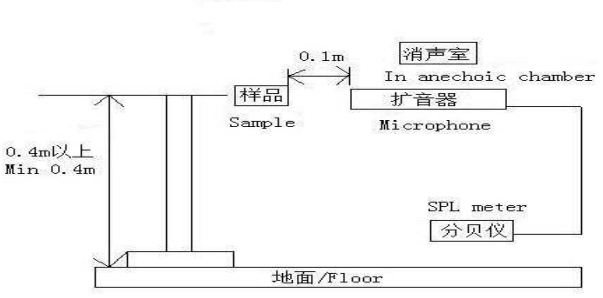
☆基本情况：温度。（20±2℃），湿度（60～70%相对湿度），空气压力（860～1060hpa）

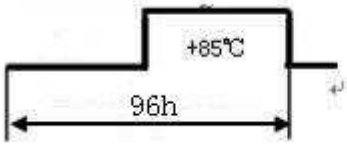
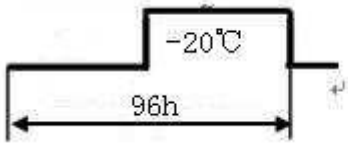
Basic State: Temp.(20±2℃),Humidity(60～70%RH),Air pressure(860～1060hPa)

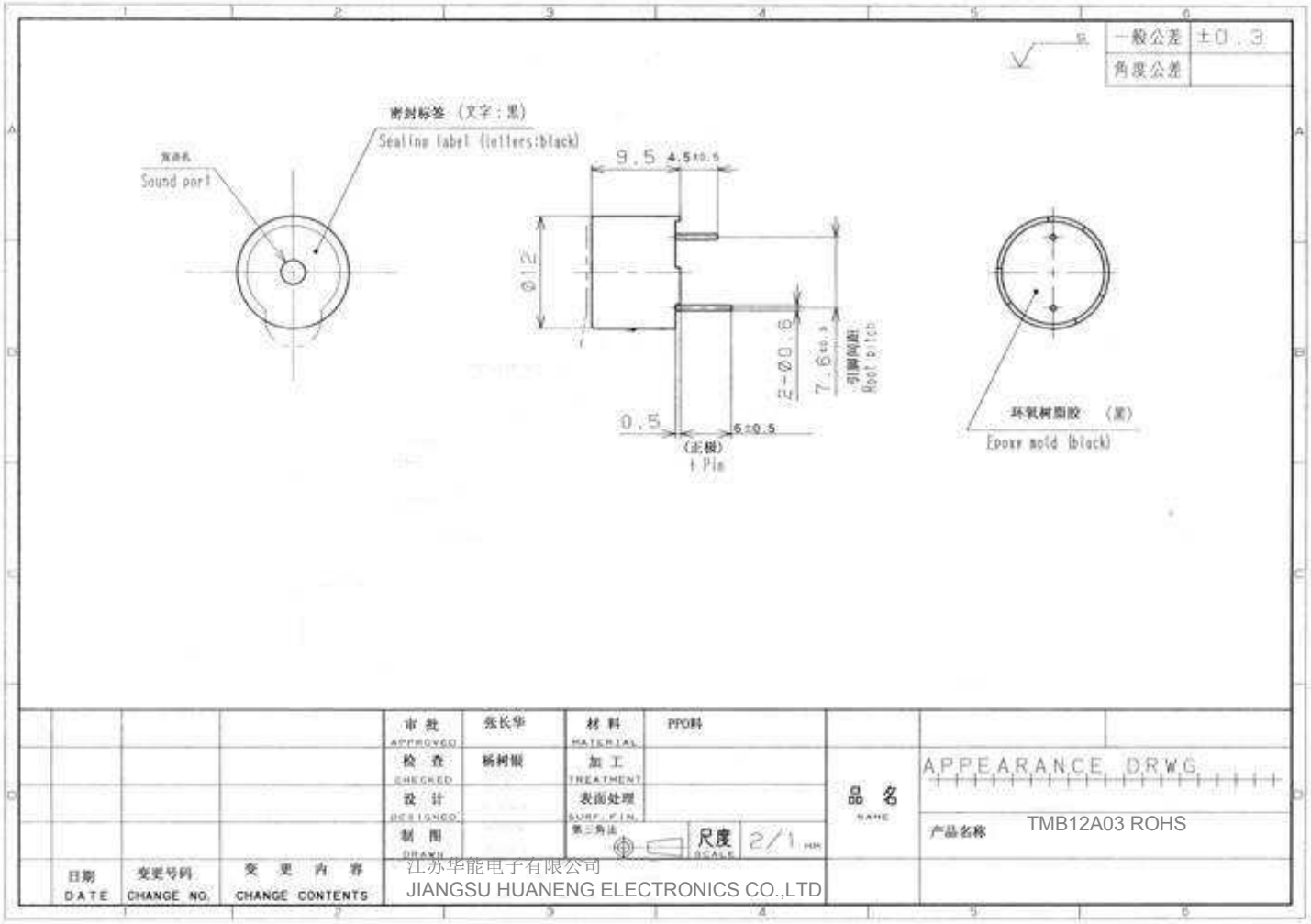
〈标准驱动电路〉/〈Standard Drive Circuit〉



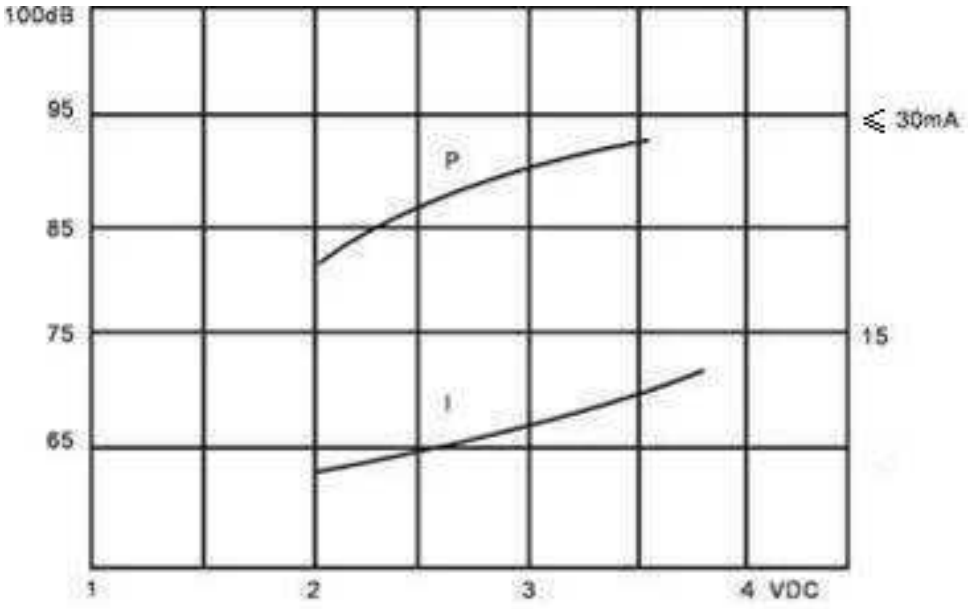
〈标准测试治具〉/〈Standard Test Fixture〉



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 boad (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	


一般公差 ±0.3
角度公差
密封标签 (文字：黑)
Sealing label (letters:black)
Sound port
9.5 4.5±0.5
Ø12
2-Ø0.6
7.6±0.3
引脚间距
Pitch of lead
0.5
5±0.5
(正极)
+ Pin
环氧树脂胶 (黑)
Epoxy mold (black)
审批 APPROVED 张长华
检查 CHECKED 杨树银
设计 DESIGNED
制图 DRAWN
材料 MATERIAL PPO料
加工 TREATMENT
表面处理 SURF. FIN.
第三角法
尺度 SCALE 2/1
品名 NAME
APPEARANCE DRWG.
产品名称 TMB12A03 ROHS
日期 DATE
变更号码 CHANGE NO.
变更内容 CHANGE CONTENTS
江苏华能电子有限公司
JIANGSU HUANENG ELECTRONICS CO.,LTD

产品特征图


100dB
95
85
75
65
P
I
≤ 30mA
15
1
2
3
4 VDC