

样 品 承 认 书

Specification For Approval

客户名称 Customer Name	
品 名 Variety	贴片无源电磁式蜂鸣器 Surface Mount Active Electromagnetic Buzzer
型 号 Part No	SMD-9650-16-27-S
客户型号 The customer Part No	
版本号 version number	V3
样品日期 Model Date	

客户承认签署

Client acknowledgment

签定结果: Signing result:		
核准/ <i>Approved:</i>	审核/ <i>Checked:</i>	经办/ <i>Designed:</i>

海旭确认签署

Hai Xu confirms signing

核准/ <i>Approved:</i>	审核/ <i>Checked:</i>	经办/ <i>Designed:</i>
丁爱勇	黄锡梅	梁嘉敏

承认后请签回一份! *Thank you very much!*

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TEL: 0757-22907220

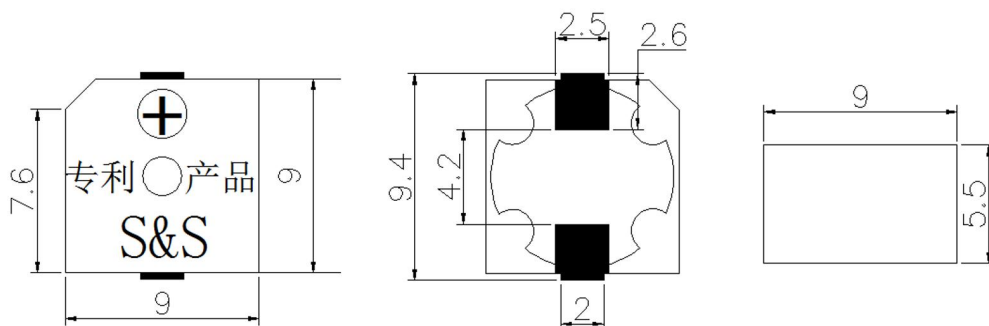
Email: ZShaixu@163.com Web: <http://www.haixucn.com/>

型号 part No: SMD-9650-16-27-S

性能参数 Electrical Characteristics

1	额定电压 Rated Voltage (V0-p)		3.0
2	工作电压 Operating Voltage (V0-p)		2~4
3	*在 10cm 处测试声压值 *Sound Output at 10cm (dB)	≥85(取最小值)	
4	*消耗电流 Current Consumption (mA)	≤60	
5	共振频率 Resonant Frequency (Hz)	2731	
6	线圈电阻 Coil Resistance (Ω)	16±10	
7	工作温度 Operating Temperature (°C)	-20~+80	
8	储存温度 Storage Temperature (°C)	-30~+80	
9	单品重量 Weight (g)	0.6	
10	外壳材料 Housing Material	绿色-LCP 材料 Green-LCP material	
11	环保要求 Environmental Protection Regulation	RoHS	
12	封装形式 Package potting(SOP)	贴片	Patch(SMD)
13	产品尺寸 product size	9.0×9.0×5.5mm (参见附图)	
14	焊接方式 Welding method	回流焊接	Reflow soldering

外形图 DIMENSIONS (UNIT: mm) 未标注公差按±0.5mm 计算 Tolerance: ±0.5mm Except Specified



型号 part No: SMD-9650-16-27-S		
可靠性测试 RELIABLY TEST		
项目 ITEM	测试条件 TESTING CONDITION	试验后要求 VARIANCE AFTER TEST
高温试验 High Temperature Test	放置 $85\pm 2^{\circ}\text{C}$ 96 小时，再室温放置 2 小时。 After being placed in a chamber with $85\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 2 hours.	声压变化 $\pm 10\text{dB}$ 。 Allowable variation of SPL after test: $\pm 10\text{dB}$.
低温试验 Low Temperature Test	放置 $-30\pm 2^{\circ}\text{C}$ 96 小时，再室温放置 2 小时。 After being Placed in a chamber with $-30\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 2 hours.	声压变化 $\pm 10\text{dB}$ 。 Allowable variation of SPL after test: $\pm 10\text{dB}$.
恒湿试验 Humidity Test	存放在温度: $60\pm 5^{\circ}\text{C}$ 湿度: 90%--95%的环境里 96 小时，然后放置到室温下放置 2 小时后测试。 Stored in the temperature humidity: $60\pm 5^{\circ}\text{C}$ 90%--95% environment for 96 hours, and then placed into storage at room temperature for 2 hours after the test.	声压变化 $\pm 10\text{dB}$ 。 Allowable variation of SPL after test: $\pm 10\text{dB}$.
Temperature Cycle Test 温度循环试验	放置 $-30\pm 2^{\circ}\text{C}$ 30 分钟、 $25^{\circ}\text{C}\pm 10^{\circ}\text{C}$ 放置 15 分钟，15 分钟后再将产品放入 $+85\pm 2^{\circ}\text{C}$ 30 分钟、常温 $25^{\circ}\text{C}\pm 10^{\circ}\text{C}$ 放置 15 分钟，20 个循环后放置常温下 2 小时。 After being placed in a chamber with $-30\pm 2^{\circ}\text{C}$ for 30 minutes, products shall be placed at room temperature($25^{\circ}\text{C}\pm 10^{\circ}\text{C}$).After 15 minutes at this temperature, products shall be placed in a chamber at $+85\pm 2^{\circ}\text{C}$.After 30 minutes at this temperature, products shall be return to room temperature ($25^{\circ}\text{C}\pm 10^{\circ}\text{C}$) for 15 minutes. After 20 above cycles, products shall be measured after being placed in natural condition for 2 hours.	声压变化 $\pm 10\text{dB}$ 。 Allowable variation of SPL after test: $\pm 10\text{dB}$.
Drop Test 跌落试验	正面和侧面从 100mm 高度只有跌落在 4cm 厚度的木板上 3 次。 The front and side from a height of 100mm only drop in the 4cm thickness of the board 3 times each.	声压变化 $\pm 10\text{dB}$ 。 Allowable variation of SPL after test: $\pm 10\text{dB}$.
Vibration Test 振动试验	After being applied vibration of amplitude of 1.5mm with 10 to 55 Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours. 频率 10~55Hz，振幅 1.5mm，3 个方向，振动 2 小时。	声压变化 $\pm 10\text{dB}$ 。 Allowable variation of SPL after test: $\pm 10\text{dB}$.
Solderability Test 可焊性试验	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $250\pm 5^{\circ}\text{C}$ for 3 ± 0.5 seconds (Except the edge of terminals). 端子在松香中浸入 5 秒并在 $250\pm 5^{\circ}\text{C}$ 锡中浸 3 ± 0.5 秒	95% min. lead terminals shall be wet with solder 有 95%吃锡效果。

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交流状态下可靠性测试 RELIABLY TEST

项目 ITEM	测试条件 TESTING CONDITION	试验后要求 VARIANCE AFTER TEST
Continuous electricity test 连续通电试验	Temperature: room temperature 25 °C Voltage: rated voltage 3.0V _{0-p} Frequency: the rated frequency for 2.7 KHZ Time: 500 hours 温度: 室温 25℃ 电压: 额定电压 3.0V _{0-p} , 频率: 额定频率 2.7KHz 时间: 500 小时	声压变化±10dB。 Allowable variation of SPL after test: ±10dB.

Typical Frequency Response Curve (音频曲线图)



CRY6125 电声器件测试仪

型号 part No: SMD-9650-16-27-S

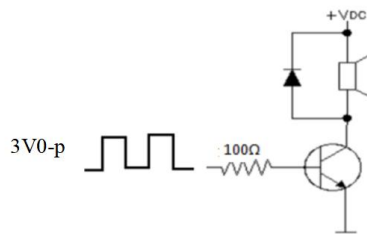
测试方法 Test Method

标准测试条件

温度: $25 \pm 2^\circ\text{C}$ 湿度: 45-65%

Standard test conditions

Temperature: $25 \pm 2^\circ\text{C}$ Humidity: 45-65%



应用电路
application circuit

声学特性:

振荡频率、电流消耗和声压通过下图所示的测量仪器进行测量

Acoustic Characteristics:

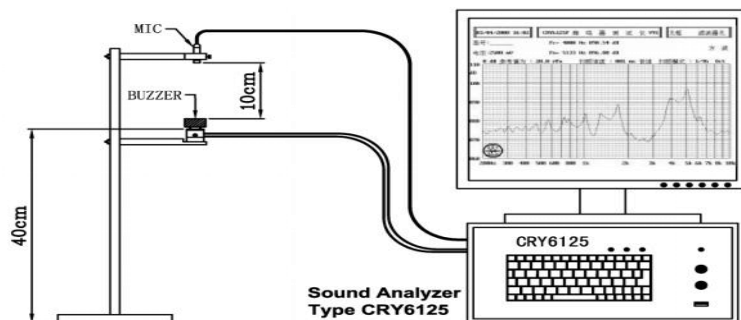
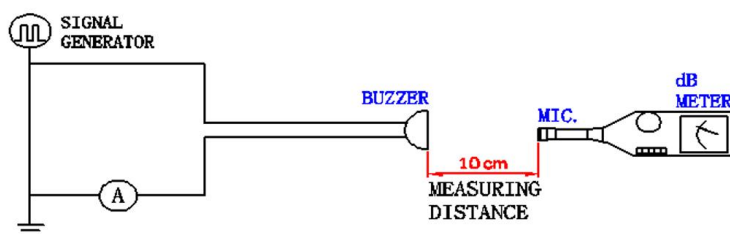
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below:

在测量测试中，蜂鸣器的放置方式如下:

In the measuring test, buzzer is placed as follows:

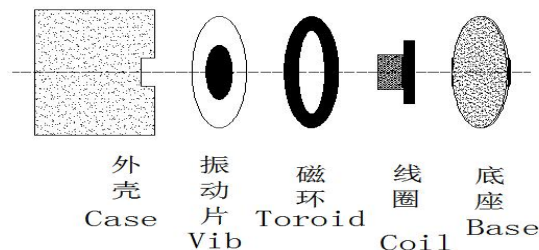
在测试中，蜂鸣器的放置方式如下:

In the test, the placement of the buzzer is as follows:



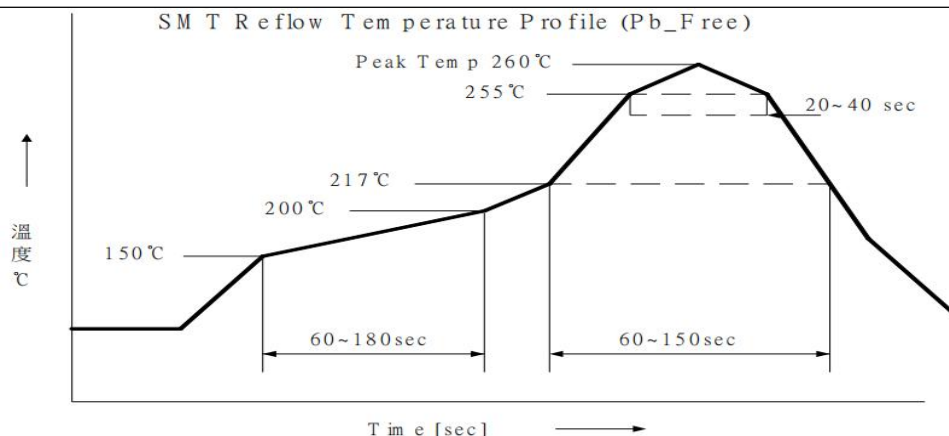
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结 构 structure



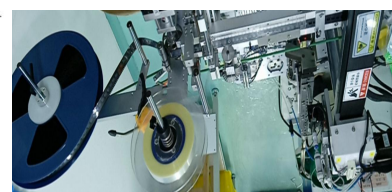
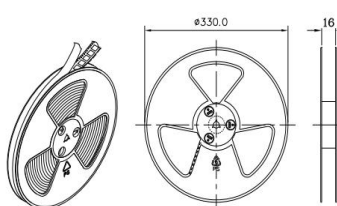
建议回焊炉温度

Recommended reflow temperature



包装规格

packing specifications



1 盘 1 plate 600Pcs

编带包装设备
belt packaging equipment

包装要求:

- 1、产品装袋前干燥处理后,再用防潮防静电真空包装袋(MBB)(真空包装)
- 2、包装数量:每箱10盒,每盒1盘,每盘600Pcs
- 3、内盒放检验报告和出货标签
- 4、包装应符合J-STD-033国际标准定义要求

Packaging Requirements:

- 1、The product shall undergo drying treatment prior to bagging, followed by vacuum packaging in moisture-proof and anti-static vacuum packaging bags (MBB).
- 2、Quantity: 10 boxes per carton, 1 tray per box, 600 pieces per tray.
- 3、Inspection reports and shipping labels shall be placed inside the inner boxes.
- 4、The packaging shall comply with the requirements defined in the international standard J-STD-033.