

# SPECIFICATION FOR APPROVAL

## 承 认 书

Description : **Magnetic Buzzer**

Vendor's Part No. : **BM1295-0527-42**

Customer's Part No. :

Serial No. :

Version No. : **1.0**

**CUSTOMER'S APPROVED SIGNATURE**

深圳市锐创达电子有限公司  
**TAT ELECTRONICS CO., LTD**

Add: 深圳市福田区八卦一路鹏基商务时空 1610  
Rm 1610, Pengji Wisdom Center, Bagua 1st Rd, Futian Dist, Shenzhen, Guangdong, China  
Tel: 13138887759 (微信同号) / 0755-82370515 / 0755-25913372  
QQ: 2355625358  
Email: tatspeaker@tatelec.com; sales@tatelec.com;  
[Http:// www.tatelec.com](http://www.tatelec.com)

Approved By	Checked By	Made By
YAO 2023.09.05	MING 2023.09.05	LI 2023.09.05

## A. CHANGE RECORD 变更记录

## B. SCOPE 范畴

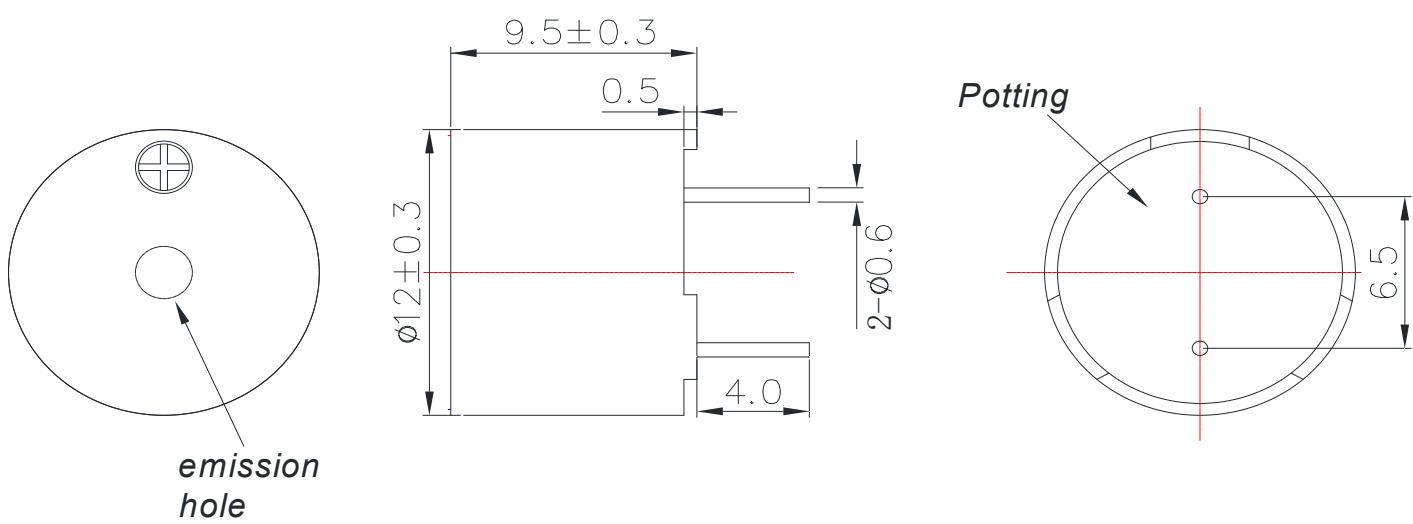
This specification applies magnetic buzzer, **BM1295-0527-42**

本规范采用磁性蜂鸣器, BM1295-0527-42

## C. SPECIFICATION 规格

No.	Item	Unit	Specification	Condition
1	Oscillation Frequency 振荡频率	Hz	2700	$V_o-p=1/2duty$ , square wave
2	Operating Voltage 工作电压	$V_o-p$	3.0 ~ 7.0	
3	Rated Voltage 额定电压	$V_o-p$	5.0	
4	Current Consumption 电流消耗	mA	MAX. 60	at Rated Voltage
5	Sound Pressure Level 声压级	dB	MIN. 85	at 10cm at Rated Voltage
6	Coil Resistance 线圈电阻	$\Omega$	$42\pm 5$	
7	Operating Temperature 运行温度	°C	-20 ~ +70	
8	Storage Temperature 储存温度	°C	-30 ~ +85	
9	Dimension 尺寸	mm	$\Phi 12 \times H9.5$	See appearance drawing 见外观图
10	Weight (MAX) 重量 (最大值)	gram	1.8	
11	Housing Material 外壳材料		PBT( Black )	
12	Leading Pin 引脚		Plated Brass(Sn)	See appearance drawing 见外观图
13	Environmental Protection Regulation 环保法规		RoHS	

## D. APPEARANCE DRAWING 外观图



Tol :  $\pm 0.5$

Unit: mm

## E.TESTING METHOD 测试方法

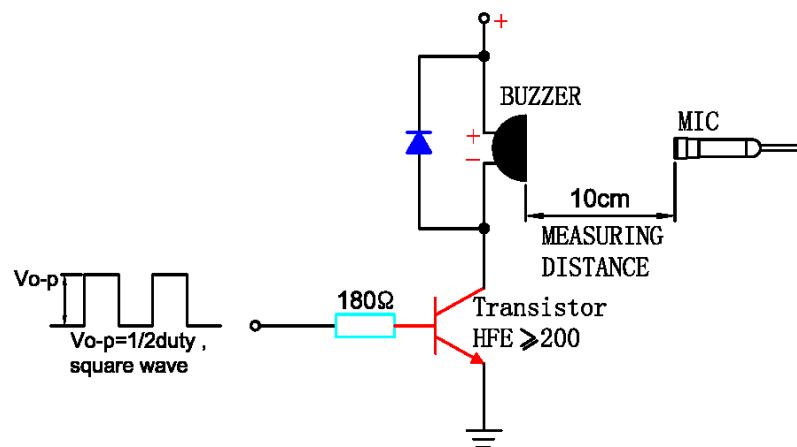
### Standard Measurement conditions 标准测量条件

Temperature:25±2°C Humidity:45-65% 温度:25±2°C 湿度:45-65%

### Acoustic Characteristics: 声学特征

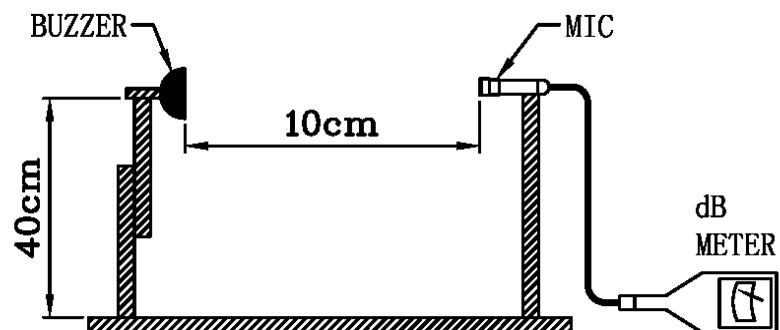
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below

振荡频率、电流消耗和声压是由测量仪器如下图所示

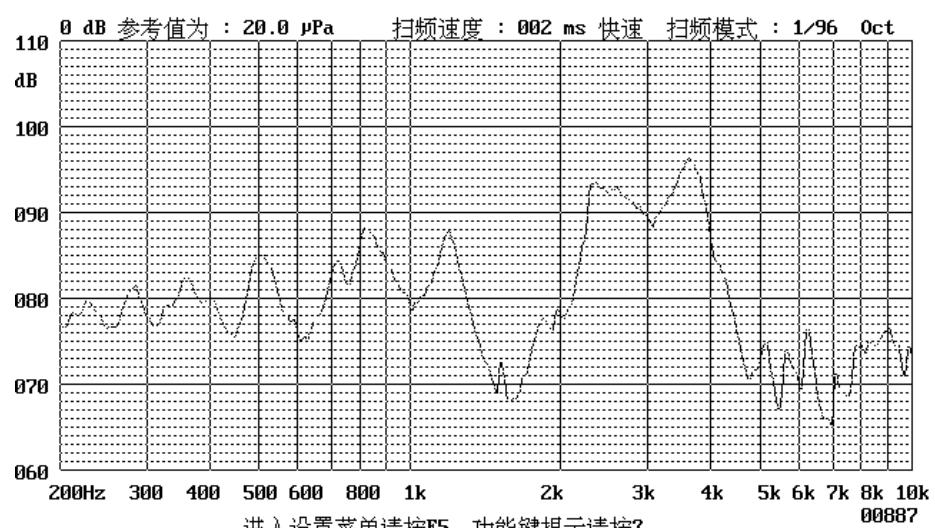


In the measuring test, buzzer is placed as follows:

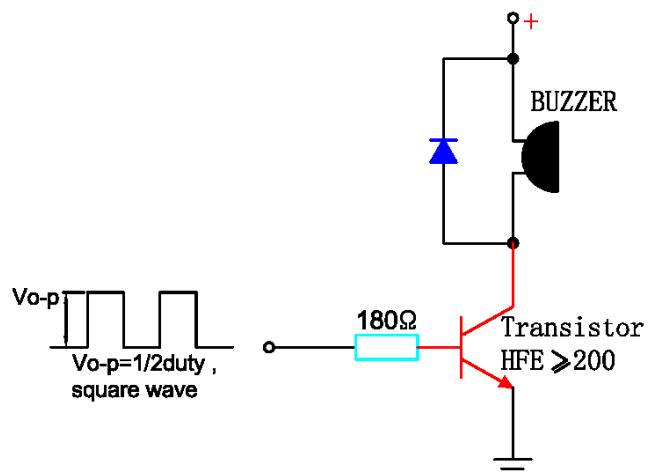
在测量测试中，蜂鸣器放置如下



### F. Typical Frequency Response Curve 典型频率响应曲线



## G. Recommend Driving Circuit 推荐驱动电路



The base current  $I_b$  should be high enough so that it saturates the collector current of the transistor with the CB load.

基底电流  $I_b$  应足够高, 从而使具有 CB 负载的晶体管的集电极电流饱和。

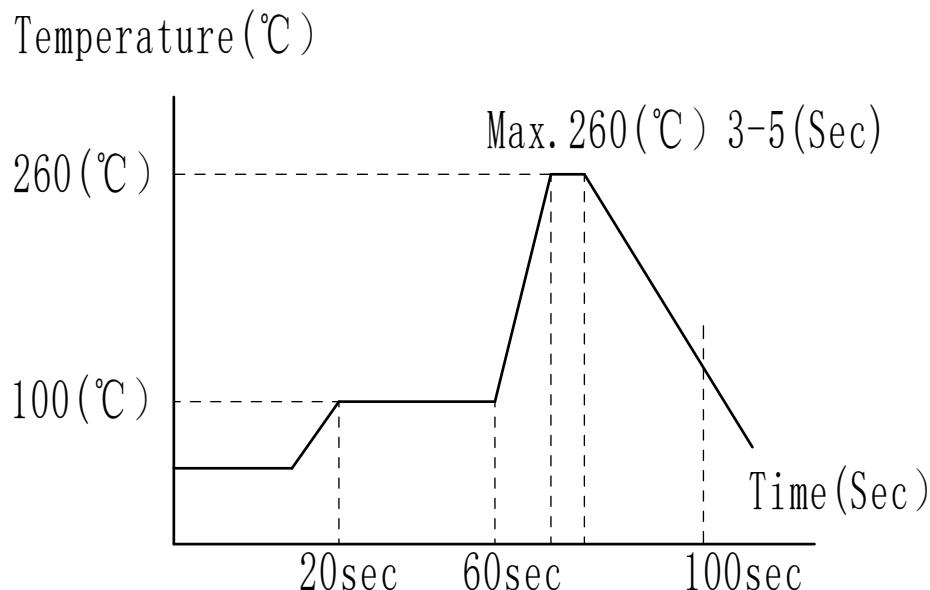
## H. Soldering Condition 焊接条件

(1) Recommended peak welding conditions are as follows (peak welding twice)

(1) 推荐的波峰焊条件如下 (波峰焊接两次)

Note: It is requested that reflow soldering should be executed after heat of product goes down to normal.

注: 要求进行回流焊当产品的热量下降到正常水平后。



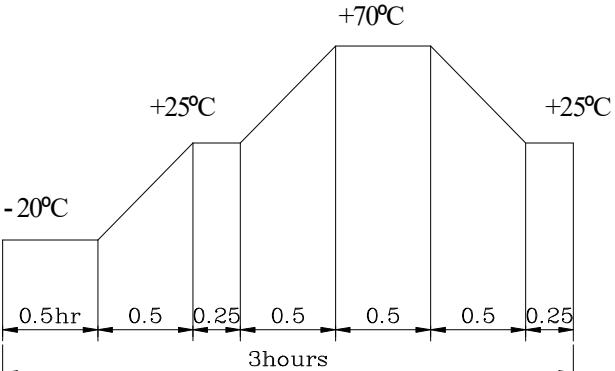
Heat resistant line 耐热线路

(Used when heat resistant reliability test is performed) (在进行耐热可靠性试验时使用)

(2) Manual soldering 手动焊接

Manual soldering temperature 350°C within 5 sec. 手动焊接温度 350°C, 时间在 5 秒内。

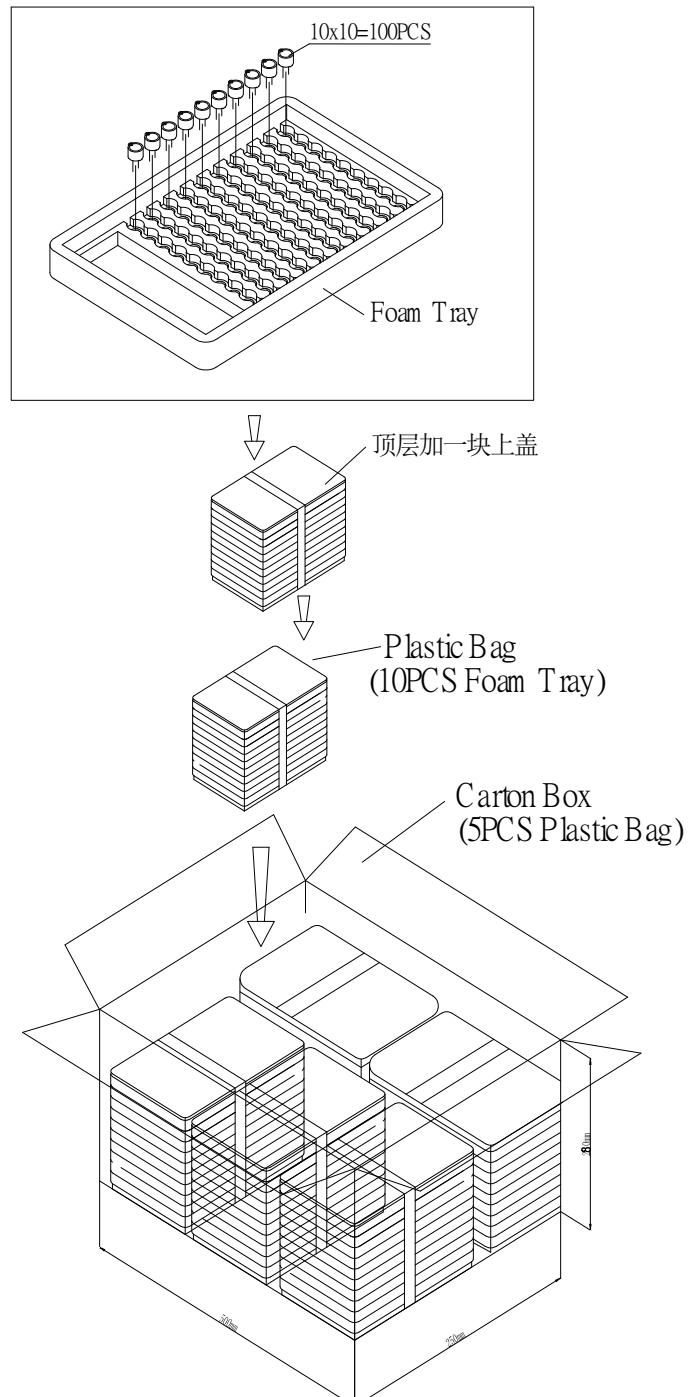
# I. RELIABILITY TEST 可靠性试验

NO.	ITEM	TEST CONDITION AND REQUIREMENT
1	High Temperature Test (Storage) 高温测试 (存储)	After being placed in a chamber with 85 $\square$ 2°C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\square$ 10dB.
2	Low Temperature Test (Storage) 低温测试 (存储)	After being Placed in a chamber with -30 $\square$ 2°C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\square$ 10dB.
3	Humidity Test 耐湿试验	After being Placed in a chamber with 90-95% R.H. at 40 $\square$ 2°C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\square$ 10dB.
4	Temperature Cycle Test 温度循环试验	The part shall be subjected to 5 cycles. One cycle shall be consist of:  Allowable variation of SPL after test: $\square$ 10dB.
5	Drop Test 跌落试验	Drop on a hard wood board of 4cm thick, any directions, 6 times, at the height of 75cm. Allowable variation of SPL after test: $\square$ 10dB.
6	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. Allowable variation of SPL after test: $\square$ 10dB.
7	Solderability Test 可焊性试验	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +300 $\square$ 5°C for 3 $\square$ 1 seconds. 90% min. lead terminals shall be wet with solder (Except the edge of terminals).
8	Terminal Strength Pulling Test 端子拉力试验	The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds. No visible damage and cutting off.

## TEST CONDITION.

Standard Test Condition 一般测试条件	: a) Temperature : +5 ~ +35°C	b) Humidity : 45-85%	c) Pressure : 860-1060mbar
	: a) 温度 : +5 ~ +35°C	b) 湿度 : 45-85%	c) 气压 : 860-1060mbar
Judgment Test Condition 争议时测试条件	: a) Temperature : +25 $\pm$ 2°C	b) Humidity : 60-70%	c) Pressure : 860-1060mbar
	: a) 温度 : +25 $\pm$ 2°C	b) 湿度 : 60-70%	c) 气压 : 860-1060mbar

## J. PACKING STANDARD 包装示意



Foam Tray	240mm x160mm x30mm	1x100PCS=100PCS
Plastic Bag		10x100PCS=1000PCS
Carton Box	515mm x420mm x260mm	5x1000PCS=5,000PCS