

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		

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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

变更记录 Change History list				
版本 Version	变更描述 Change Description	核对 Checked	审核 Approved	日期 Date
1.0	首次发行	MING	YAO	2023.09.05



B. SCOPE 范畴

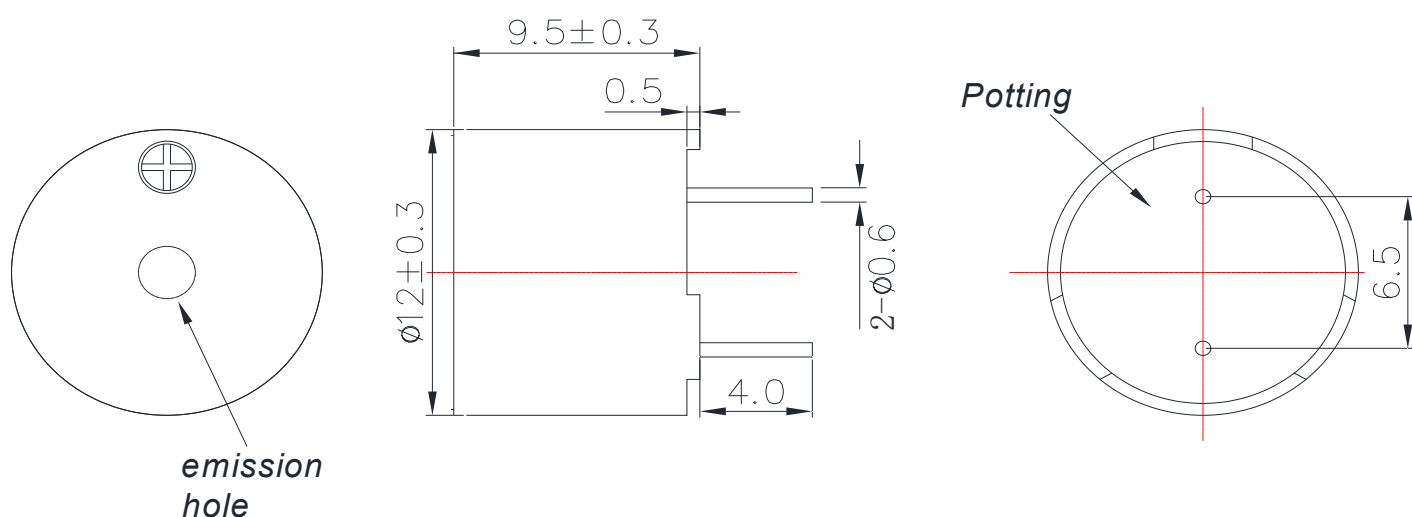
This specification applies magnetic buzzer, **BM1295-0527-42**

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	Vo-p=1/2duty , square wave
2	Operating Voltage 工作电压	Vo-p	3.0 ~ 7.0	
3	Rated Voltage 额定电压	Vo-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	Ω	42 \pm 5	
7	Operating Temperature 运行温度	$^{\circ}\text{C}$	-20 ~ +70	
8	Storage Temperature 储存温度	$^{\circ}\text{C}$	-30 ~ +85	
9	Dimension 尺寸	mm	$\Phi 12 \times \text{H}9.5$	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



E. TESTING METHOD 测试方法

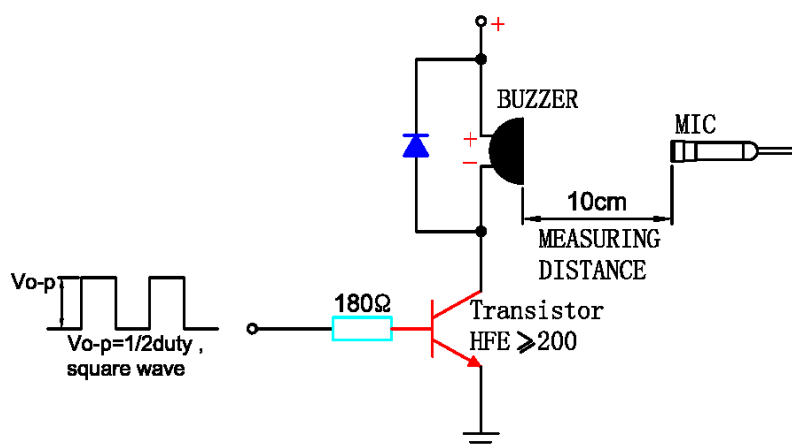
Standard Measurement conditions 标准测量条件

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

Acoustic Characteristics: 声学特征

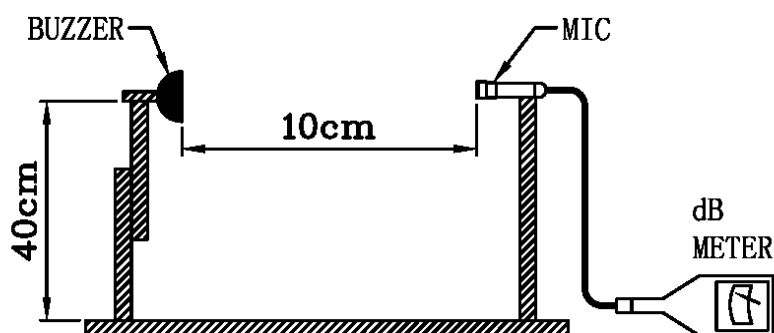
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below

振荡频率、电流消耗和声压是由测量仪器如下图所示

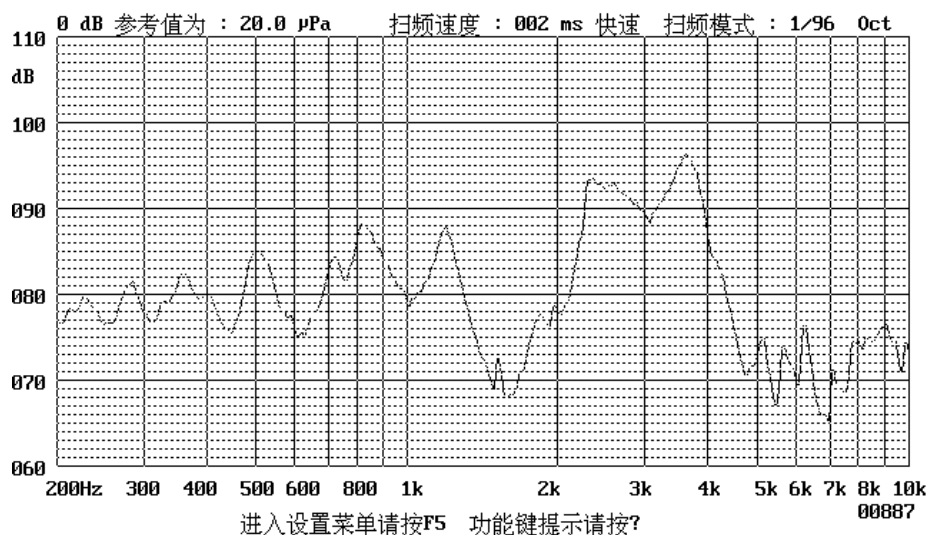


In the measuring test, buzzer is placed as follows:

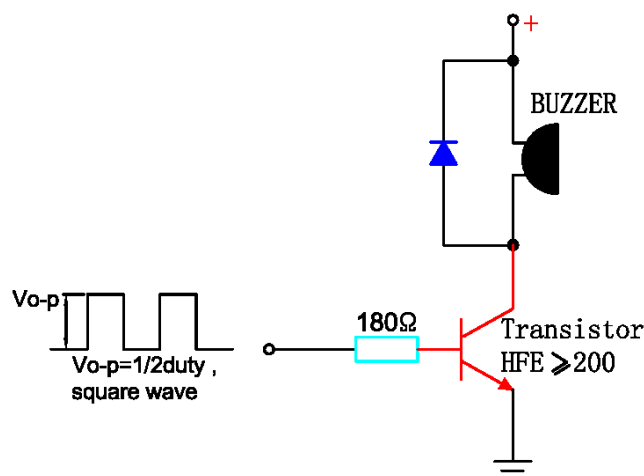
在测量测试中，蜂鸣器放置如下



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。

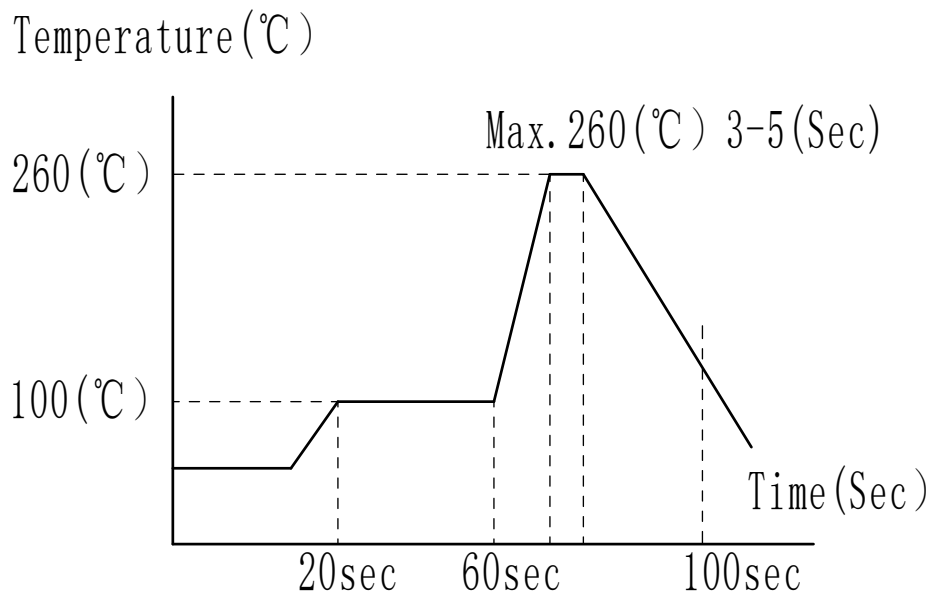
H. Soldering Condition 焊接条件

(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。



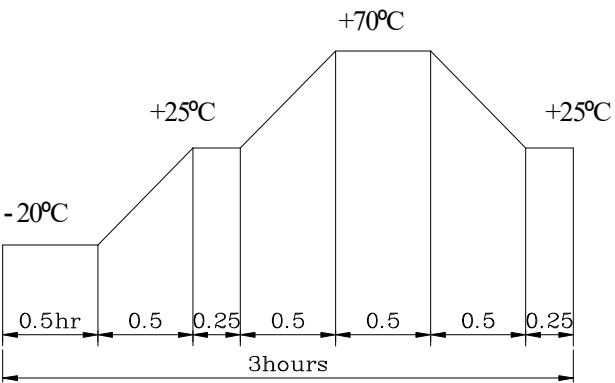
Heat resistant line 耐热线路

(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

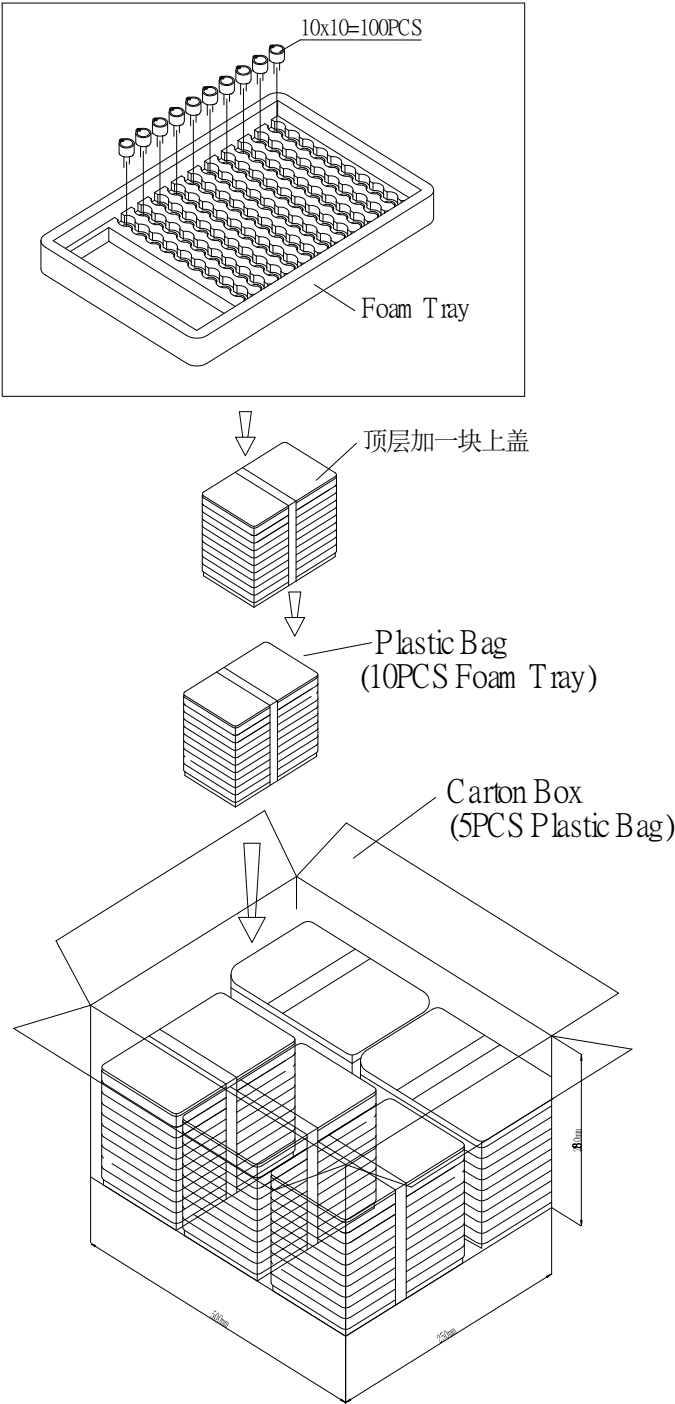
NO.	ITEM	TEST CONDITION AND REQUIREMENT
1	High Temperature Test (Storage) 高温测试 (存储)	After being placed in a chamber with $85 \pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$.
2	Low Temperature Test (Storage) 低温测试 (存储)	After being Placed in a chamber with $-30 \pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$.
3	Humidity Test 耐湿试验	After being Placed in a chamber with 90-95% R.H. at $40 \pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$.
4	Temperature Cycle Test 温度循环试验	<p>The part shall be subjected to 5 cycles. One cycle shall be consist of:</p>  <p>The diagram shows a temperature profile over 3 hours. It starts at -20°C for 0.5 hr, then ramps up to $+25^{\circ}\text{C}$ in 0.5 hr, holds at $+25^{\circ}\text{C}$ for 0.25 hr, ramps up to $+70^{\circ}\text{C}$ in 0.5 hr, holds at $+70^{\circ}\text{C}$ for 0.5 hr, ramps down to $+25^{\circ}\text{C}$ in 0.5 hr, holds at $+25^{\circ}\text{C}$ for 0.25 hr, and finally ramps down to -20°C in 0.5 hr. The total cycle time is 3 hours.</p> <p>Allowable variation of SPL after test: $\pm 10\text{dB}$.</p>
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: $\pm 10\text{dB}$.
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: $\pm 10\text{dB}$.
7	Solderability Test 可焊性试验	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $+300 \pm 5^{\circ}\text{C}$ for 3 ± 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	:	a) Temperature : $+5 \sim +35^{\circ}\text{C}$	b) Humidity : 45-85%	c) Pressure : 860-1060mbar
一般测试条件	:	a) 温度 : $+5 \sim +35^{\circ}\text{C}$	b) 湿度 : 45-85%	c) 气压 : 860-1060mbar
Judgment Test Condition	:	a) Temperature : $+25 \pm 2^{\circ}\text{C}$	b) Humidity : 60-70%	c) Pressure : 860-1060mbar
争议时测试条件	:	a) 温度 : $+25 \pm 2^{\circ}\text{C}$	b) 湿度 : 60-70%	c) 气压 : 860-1060mbar



J. PACKING STANDARD 包装示意



Foam Tray	240mm x 160mm x 30mm	1x100PCS=100PCS
Plastic Bag		10x100PCS=1000PCS
Carton Box	515mm x 420mm x 260mm	5x1000PCS=5,000PCS