

SPECIFICATION FOR APPROVAL

承 认 书

Description : **Piezo Buzzer**

Vendor's Part No. : **BP9019S-0540**

Customer's. Part No. :

Serial No. :

Version No. : **1.0**

CUSTOMER'S APPROVED SIGNATURE		

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B.SCOPE 范畴

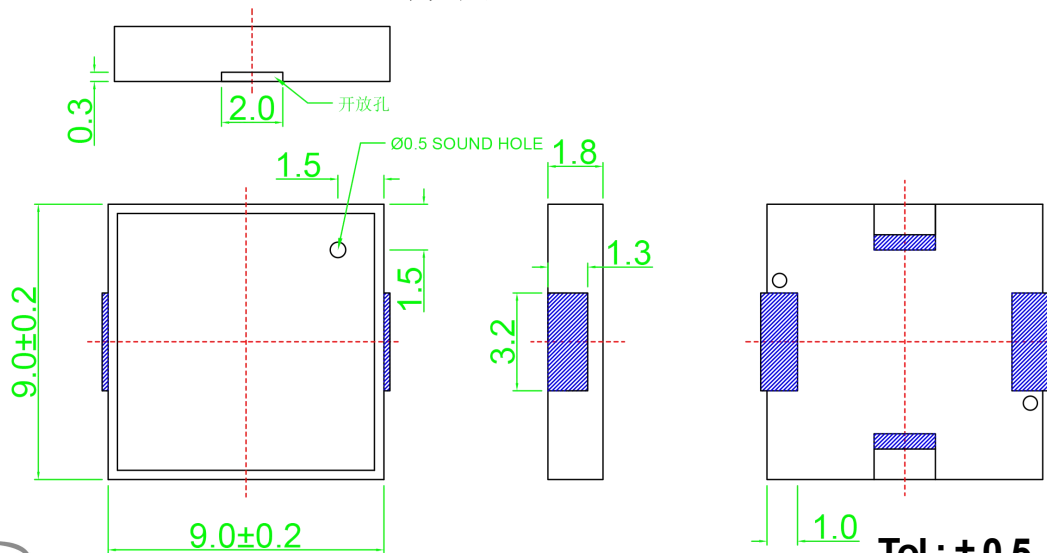
This specification applies piezo buzzer, **BP9019S-0540**

本规范采用压电蜂鸣器, BP9019S-0540

C. SPECIFICATION 规格

No.	Item	Unit	Specification	Condition
1	Oscillation Frequency 振荡频率	Hz	4000±500	Square Wave
2	Operating Voltage 工作电压	Vp-p	1~ 25	
3	Rated Voltage 额定电压	Vp-p	5	
4	Current Consumption 电流消耗	mA	MAX. 4.5	at Rated Voltage
5	Sound Pressure Level 声压级	dB	MIN. 70	at 10cm at Rated Voltage
6	Electrostatic Capacity 静电容量	pF	12000±30%	at 1000Hz
7	Operating Temperature 运行温度	°C	-20 ~ +70	
8	Storage Temperature 储存温度	°C	-30 ~ +80	
9	Dimension 尺寸	mm	9.0 x 9.0 x H1.8	See appearance drawing
10	Weight (MAX) 重量 (最大值)	gram	0.3	
11	Housing Material 外壳材料		Nylon(Black))	
12	Leading Pin 引脚		Tin Plated Brass(Sn)	See appearance drawing
13	Environmental Protection Regulation 环保法规		RoHS	

D. APPEARANCE DRAWING 外观图



Tol : ± 0.5

Unit: mm



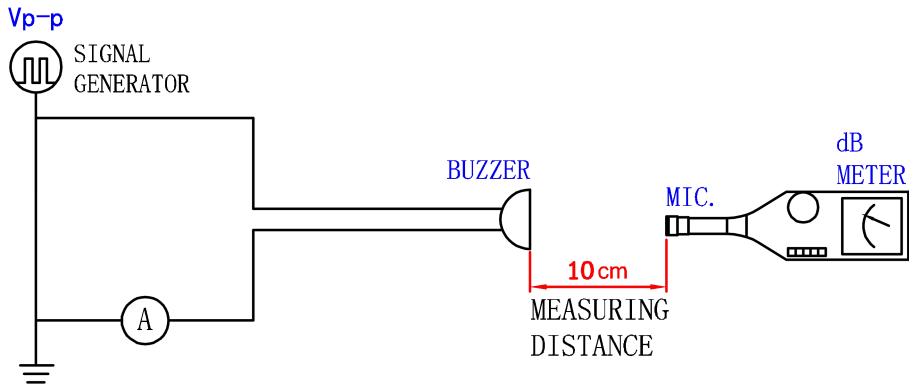
Standard Measurement conditions 标准测量条件

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

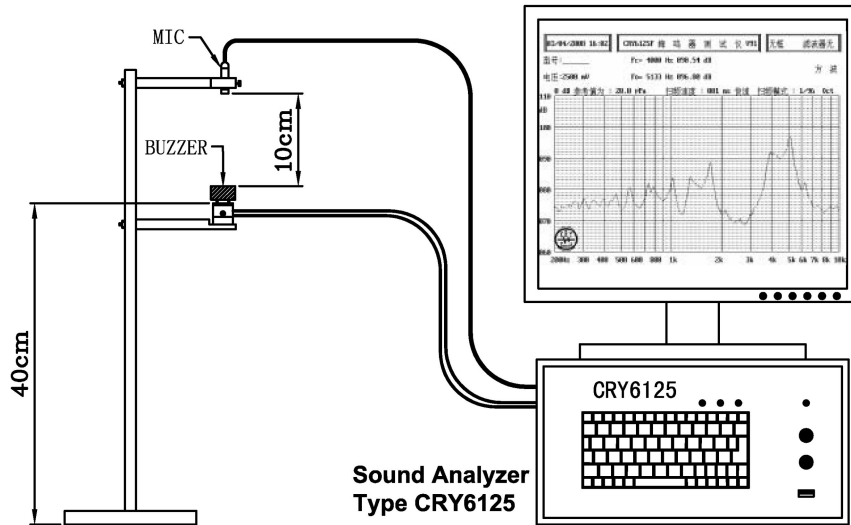
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below

振荡频率、电流消耗和声压是由测量仪器如下图所示

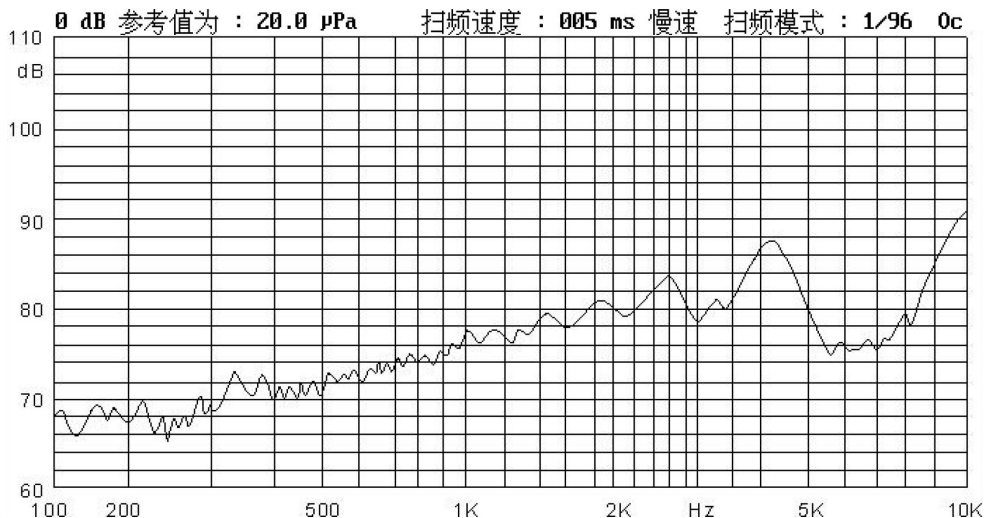


In the measuring test, buzzer is placed as follows:

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



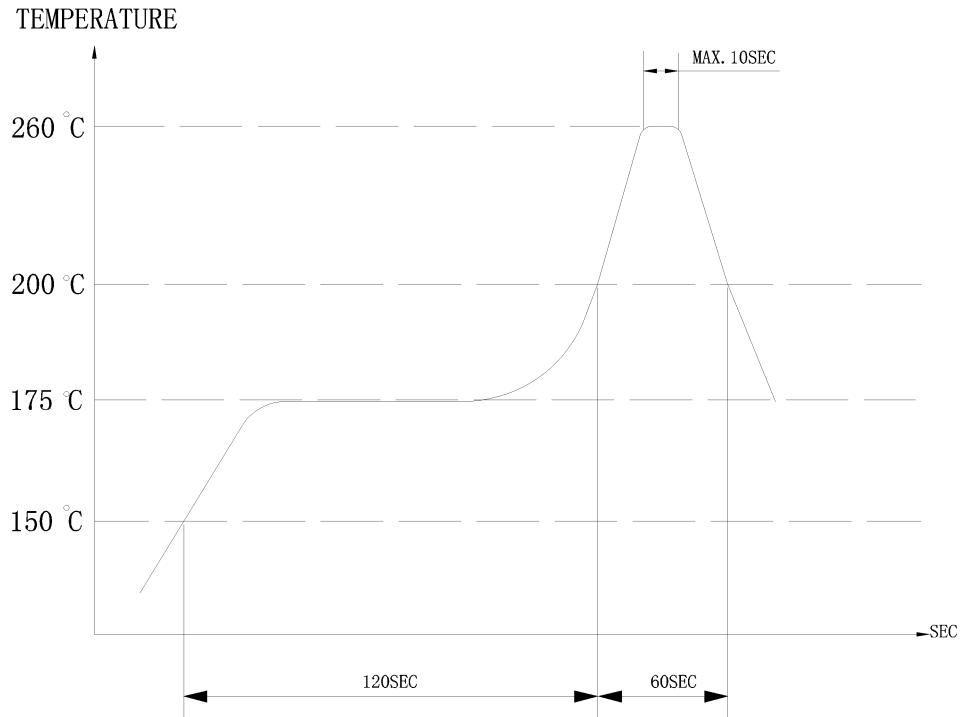
G. Soldering Condition 焊接条件

(1) Recommendable reflow soldering condition is as follows (Reflow soldering is twice)

(1) 推荐的回流焊条件如下 (回流焊接两次)

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。



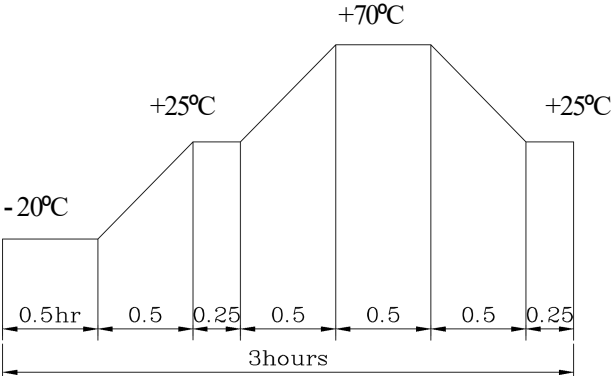
Heat resistant line 耐热线路

(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。

H. RELIABILITY TEST 可靠性试验

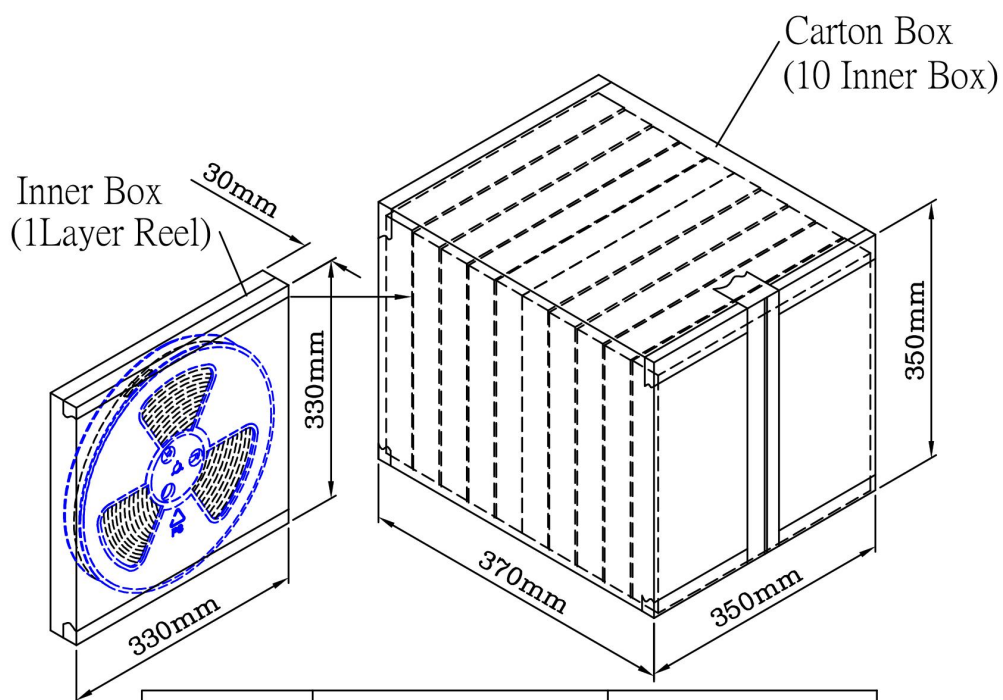
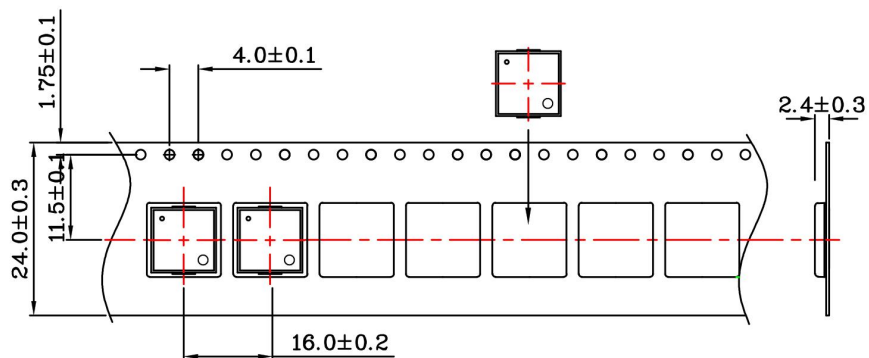
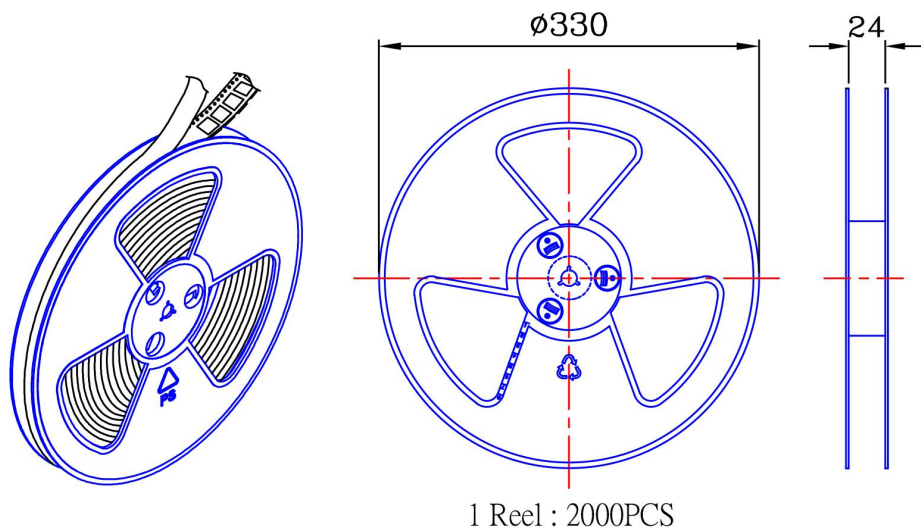
NO.	ITEM	TEST CONDITION AND REQUIREMENT
1	High Temperature Test (Storage) 高温测试 (存储)	After being placed in a chamber with 80 °C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: 10dB.
2	Low Temperature Test (Storage) 低温测试 (存储)	After being Placed in a chamber with -30 °C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: 10dB.
3	Humidity Test 耐湿试验	After being Placed in a chamber with 90-95% R.H. at 40 °C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: 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:  <p>The diagram shows a temperature cycle profile over 3 hours. It starts at -20°C for 0.5 hours, then ramps up to +25°C in 0.5 hours, holds at +25°C for 0.25 hours, ramps up to +70°C in 0.5 hours, holds at +70°C for 0.5 hours, ramps down to +25°C in 0.5 hours, holds at +25°C for 0.25 hours, and finally ramps down to -20°C in 0.25 hours. The total duration is 3 hours.</p> Allowable variation of SPL after test: 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: 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: 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 °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 一般测试条件	:	a) Temperature : +5 ~ +35°C	b) Humidity : 45-85%	c) Pressure : 860-1060mbar
Judgment Test Condition 争议时测试条件	:	a) 温度 : +5 ~ +35°C	b) 湿度 : 45-85%	c) 气压 : 860-1060mbar
	:	a) Temperature : +25 ± 2°C	b) Humidity : 60-70%	c) Pressure : 860-1060mbar
	:	a) 温度 : +25 ± 2°C	b) 湿度 : 60-70%	c) 气压 : 860-1060mbar



I. PACKING STANDARD 包装示意



Inner Box	330mmx330mmx30mm	1x2000PCS=20,000PCS
Carton Box	350mmx350mmx370mm	10x2000PCS=20,000PCS

