



**APPROVAL SHEET  
FOR  
PIEZO BUZZER**

**CUSTOMER:**

**MODEL NUMBER:**

**OUR PART NO.:**

**CUSTOMER PART NO.:**

CUSTOMER	APPROVED	CHECKED

<b>Specification for Piezoelectric Ceramic Buzzer SMD Type</b>		Des.	Page 2 of 8
		Jiang wei rong	Update/2012-07-09
<b>Model No.:</b>		Chk.	Apr.
		Jiang Yin	

## 1. Technical Parameter

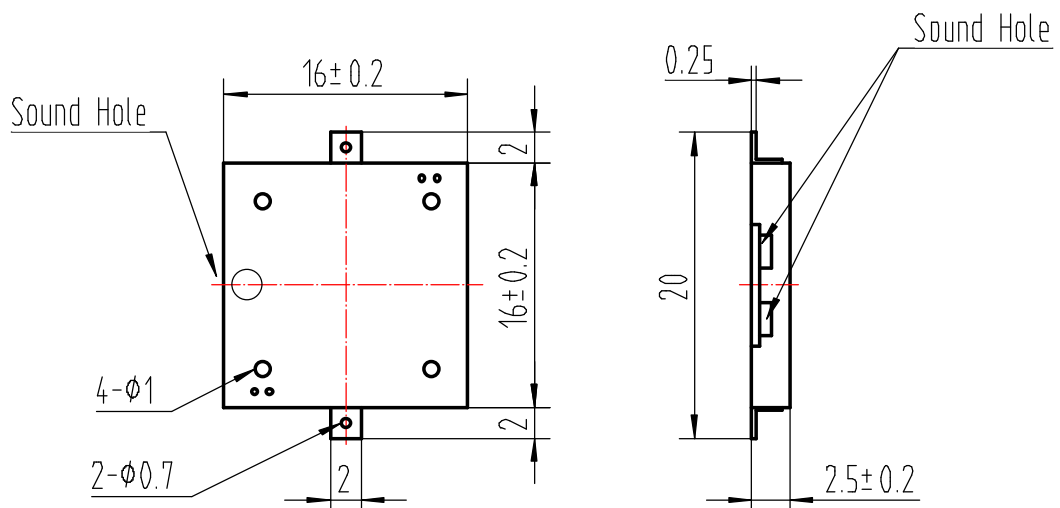
### Measuring condition

Part shall be measured under a condition (Temperature: 5~35°C, Humidity: 45%~85%R.H., Atmospheric pressure: 860 ~1060hPa) unless the standard condition (Temperature: 25±3°C, Humidity: 60±10%R.H. Atmospheric pressure: 860 ~1060hPa) is regulated to measure.

1	Resonant Frequency	4000±500Hz
2	Operating Voltage	1~25 Vp-p
3	Rated Current	Max.3mA , At 4KHz 50% duty Square Wave 3Vp-p
4	Sound Output at 10cm	Min. 70dB, At 4KHz 50% duty Square Wave 3Vp-p
5	Capacitance	14000±30% pF At 1KHz
6	Operating Temperature	-30°C~+70°C
7	Store Temperature	-40°C~+85°C
8	Net Weight	Approx 1g
9	RoHS	Yes

## 2. Dimensions

Unit: mm



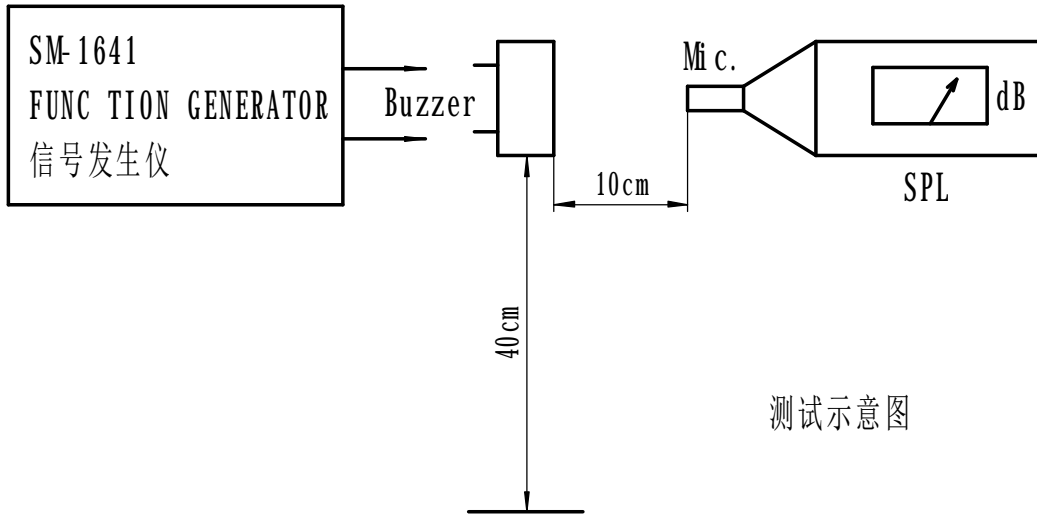
\*Unit: mm; Tolerance:  $\pm 0.5$ mm Except Specified

\*Housing Material: Black LCP

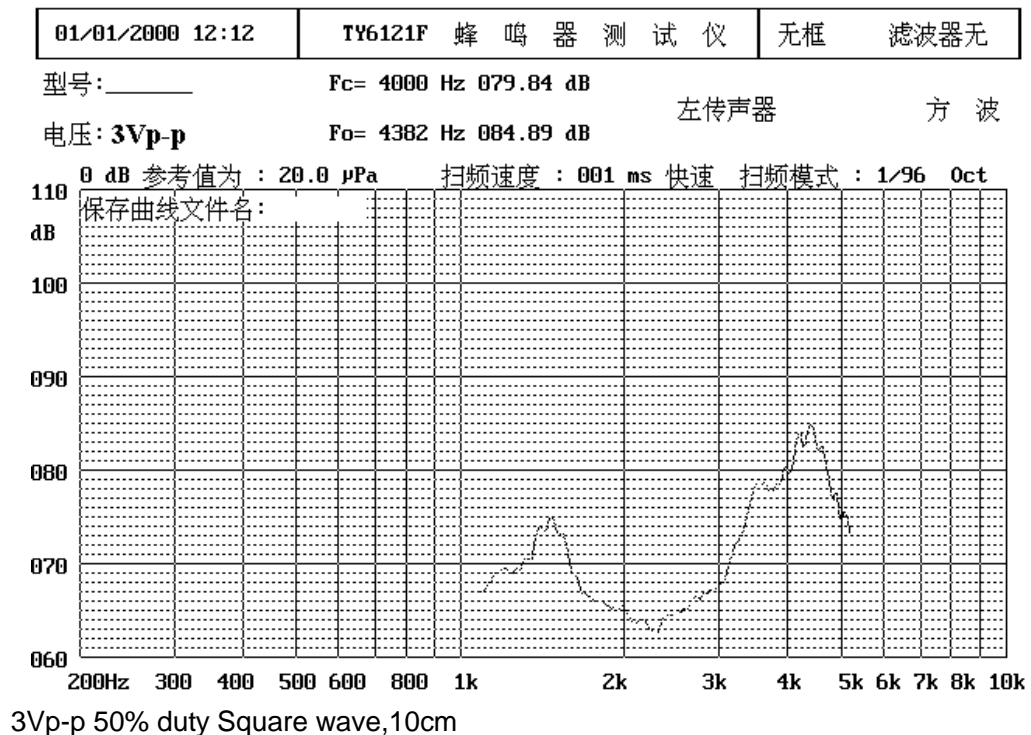
<b>Specification for Piezoelectric Ceramic Buzzer SMD Type</b>	Des.	Page 3 of 8
	Jiang wei rong	Update/2012-07-09
<b>Model No.:</b>	Chk.	Apr.
	Jiang Yin	

### 3. Electrical And Acoustical Measuring Condition

#### Recommended Setting



### 4. Frequency Response

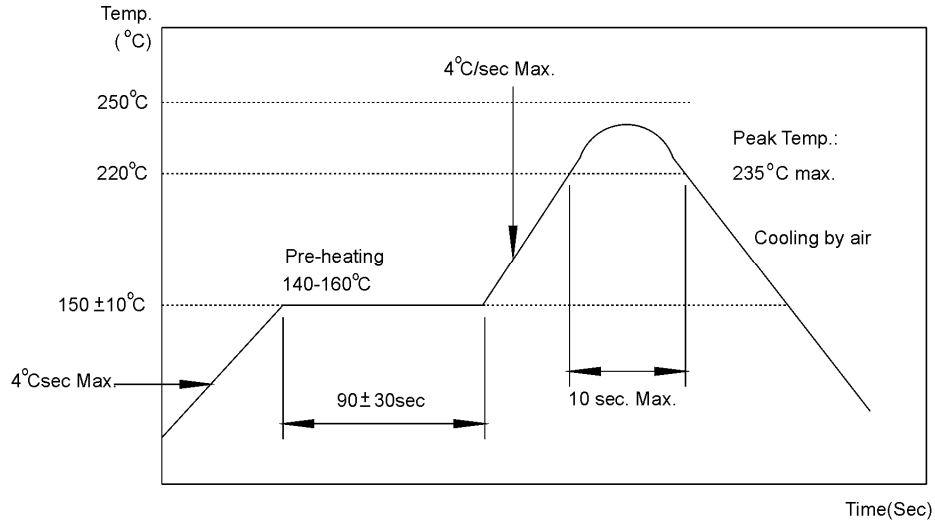


<b>Specification for Piezoelectric Ceramic Buzzer SMD Type</b>	Des.	Page 4 of 8
	Jiang wei rong	Update/2012-07-09
<b>Model No.:</b>	Chk.	Apr.
	Jiang Yin	

## 5、 Surface mounting condition

### 5.1 Reflow soldering

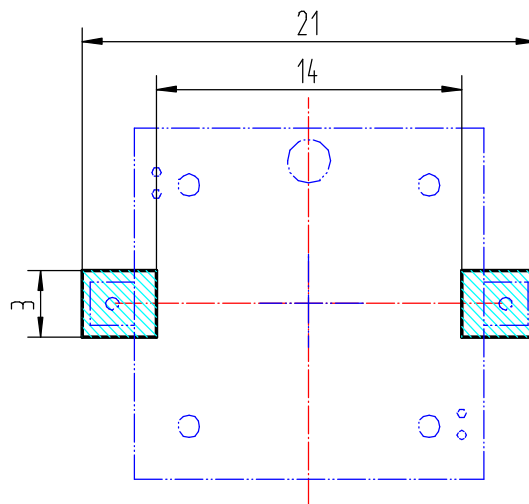
Recommendable reflow soldering condition is as follows.



**Note:** (1) In automated mounting of the SMD sound transducers on PCB, any bending, expanding and pulling forces or shocks against the SMD sound transducers shall be kept minimum to prevent them from electrical failures and mechanical damages of the devices.

(2) In the reflow soldering, too high soldering temperatures and too large temperature Gradient such as rapid heating or cooling may cause electrical failures and mechanical damages of the devices.

### 5.2 Soldering pattern



<b>Specification for Piezoelectric Ceramic Buzzer SMD Type</b>		Des.	Page 5 of 8
		Jiang wei rong	Update/2012-07-09
<b>Model No.:</b>		Chk.	Apr.
		Jiang Yin	

## 6、 Reliability Test

After any following tests the part shall meet specifications without any degradation in appearance and performance except SPL. SPL shall not deviate more than -10 dB from the initial value

### 6.1 Ordinary Temperature Life Test

The part shall be subjected to 96 hours at  $25 \pm 10^{\circ}\text{C}$ . Input rated voltage  
Resonant frequency, 1/2 duty Square wave.

### 6.2 High Temperature Test

The part shall be capable of with standing a storage temperature of  $+85^{\circ}\text{C}$  for 96 hours.

### 6.3 Low Temperature Test

The part shall be capable of with standing a storage temperature of  $-40^{\circ}\text{C}$  for 96 hours.

### 6.4 Humidity Test

Temperature:  $+40^{\circ}\text{C} \pm 3^{\circ}\text{C}$  Relative Humidity: 90%~95% Duration: 48 hours  
and expose to room temperature for 6 hours

### 6.5 Temperature Shock Test

Temperature:  $60^{\circ}\text{C}$  /1hour →  $25^{\circ}\text{C}$ /3hours →  $-20^{\circ}\text{C}$ /1hour →  $25^{\circ}\text{C}$ /3hours (1cycle)  
Total cycle: 10 cycles

### 6.6 Drop Test

Standard Packaging From 120cm (Drop on hard wood or board of 5cm thick,  
three sides, six plain.)

### 6.7 Vibration Test

Vibration: 1000cycles /min. Amplitude: 1.5mm, Duration: 1 hour in each 3 axes

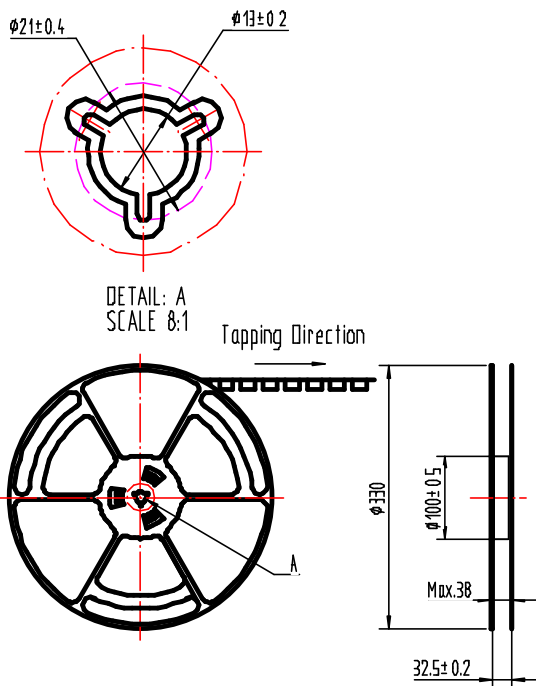
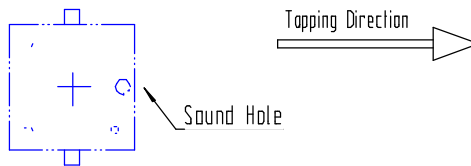
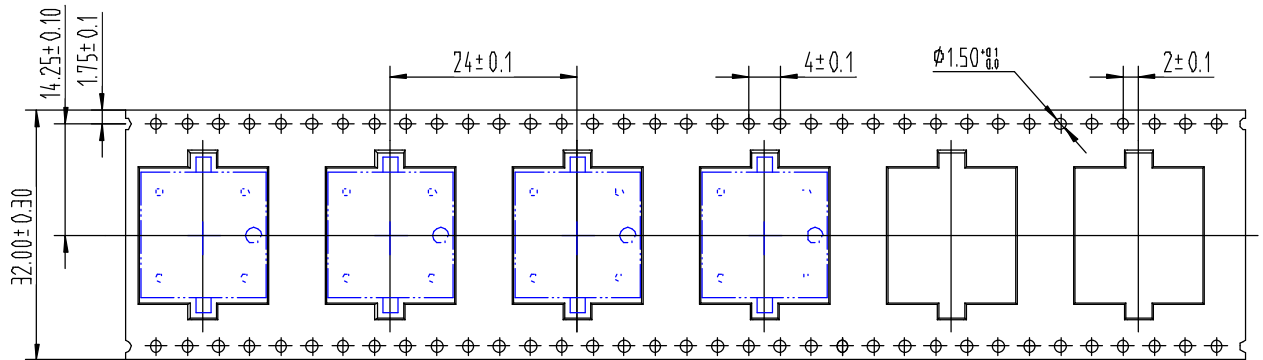
### 6.8 Reflow Test

Use recommendable reflow soldering condition (as shown in 5.1)

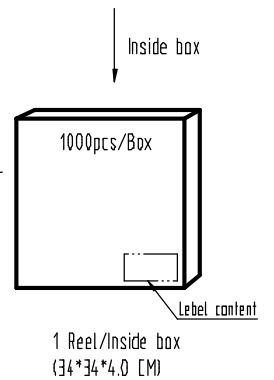
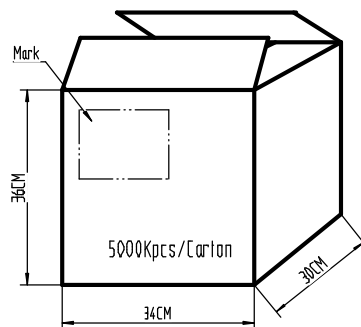
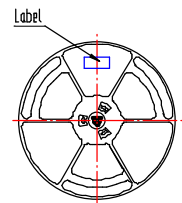
- (1) No abnormality should be found after reflow
- (2) Good soldering to meet soldering requirements

<b>Specification for Piezoelectric Ceramic Buzzer SMD Type</b>	Des. Jiang wei rong	Page 6 of 8 Update/2012-07-09
	Model No.:	Apr.
	Chk. Jiang Yin	

## 7. Packing



Label  
P/N:  
Model No.:BP1625S-4001  
Qty.: 1000pcs  
Lot No.: XXXX





Specification for Piezoelectric Ceramic Buzzer SMD Type		Des.	Page 8 of 8
		Jiang wei rong	Update/2012-07-09
Model No.:		Chk.	Apr.
		Jiang Yin	

### 9.材料清单

序号	物料名称	物料编号	物料说明	可替代 物料	数量
1	壳	8019-162517			1
2	盖	8019-162517G			1
3	蜂鸣片	945-138045-10			1
4	连接线	979-101209-00			1
5	连接线	979-101208-00			1