



SPECIFICATIONS FOR APPROVAL

SMD PIEZO-CERAMIC

BUZZER

(with built-in circuit)

	MODEL NO.:	DSTPB-1465S-40-5M
	CUSTOMER PART NO.:	

SIGNATURE AND COMPANY CHOP FOR APPROVAL:	
APPROVAL DATE:	

NO.	DATE	REVISION RECORD		CAUSE OF REVISION	SIGN. REV.
		BEFORE REVISION	AFTER REVISION		
1	28/9/2013		Add label	Customer request	
2					
3					
4					

1. Scope

This Specification is applied to the SMD piezo-ceramic buzzer with built-in circuit assembly which is used as alert in alarm system.

2. ELECTRICAL SPECIFICATIONS

1	Operating Voltage	4 ~ 6 VDC
2	Rated Voltage	5 VDC
3	Rated Current	Max.12mA at 5VDC
4	Sound Output at 10cm	Min. 85 dB at 5VDC
5	Resonant Frequency	4000±500 Hz
6	Tone	Continuous
7	Operating Temperature	-20 - +70°C
8	Storage Temperature	-30 - +80°C
9	RoHS	YES
10	Weight	Approx 2.0 g

3. Standard test conditions

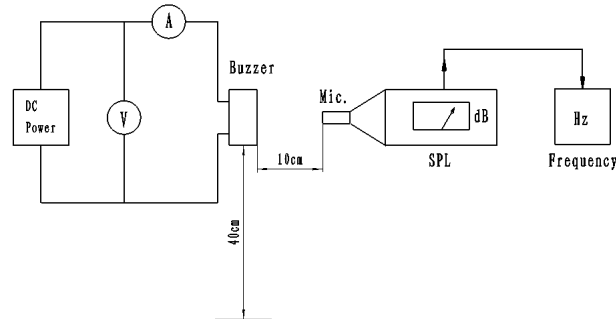
(1) Standard State	Ordinary Temperature	15~35°C
	Ordinary Humidity	25%~85%
	Ordinary air pressure	860~1060hPa

In case of doubtful judgment, the test is re-performed under Basic State.

(2) Basic State	Temperature	20±2°C
	Humidity	60%~70%
	Ordinary air pressure	860~1060hPa

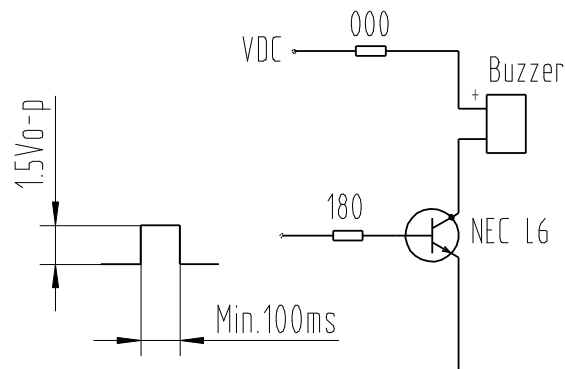
4. Test method

Standard test fixture



The electrical characteristics shall be measured at 20 to 25 & relative humidity 55% max.

Recommended Test Circuit



5. 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

Ordinary Temperature Life Test

The part shall be subjected to 96 hours at $25\pm 10^{\circ}\text{C}$. Input rated voltage

High Temperature Test

The part shall be capable of with standing a storage temperature of $+80^{\circ}\text{C}$ for 96 hours.

Low Temperature Test

The part shall be capable of with standing a storage temperature of -30°C for 96 hours.

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

Temperature Shock Test

Temperature: 60°C /1hour \rightarrow 25°C /3hours \rightarrow -20°C /1hour \rightarrow 25°C /3hours (1cycle)
Total cycle: 10 cycles

Drop Test

Standard Packaging From 1.2m (Drop on hard wood or board of 5cm thick, three sides, six plain.)

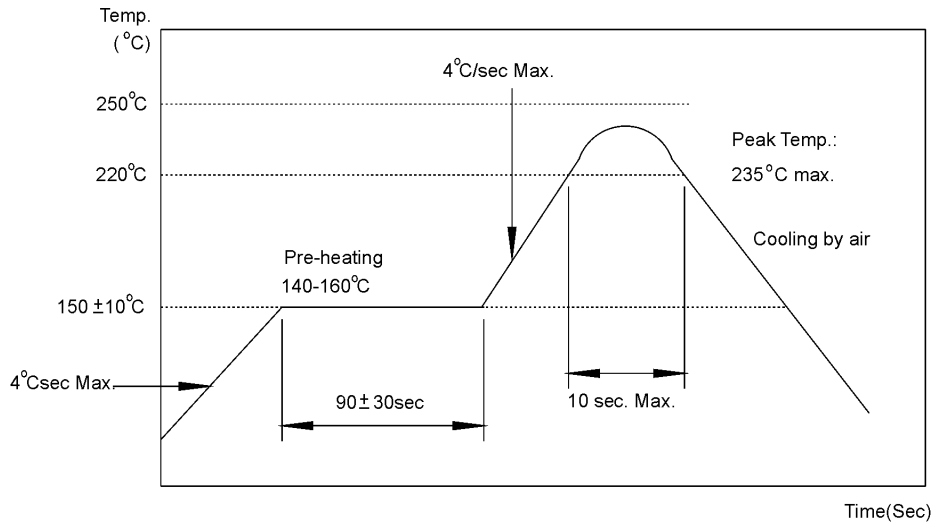
Vibration Test

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

6. Surface mounting condition

Reflow soldering

Recommendable reflow soldering condition is as follows.

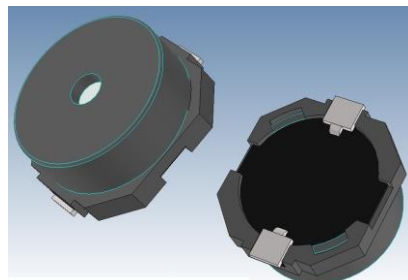
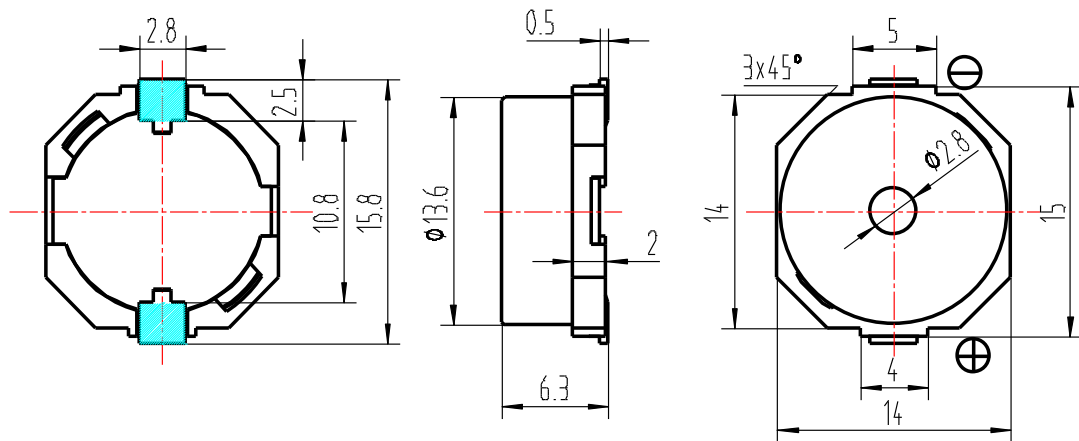


Note:

- (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.

7. Dimension

Tolerance +/- 0.5mm



Solder Pattern

