

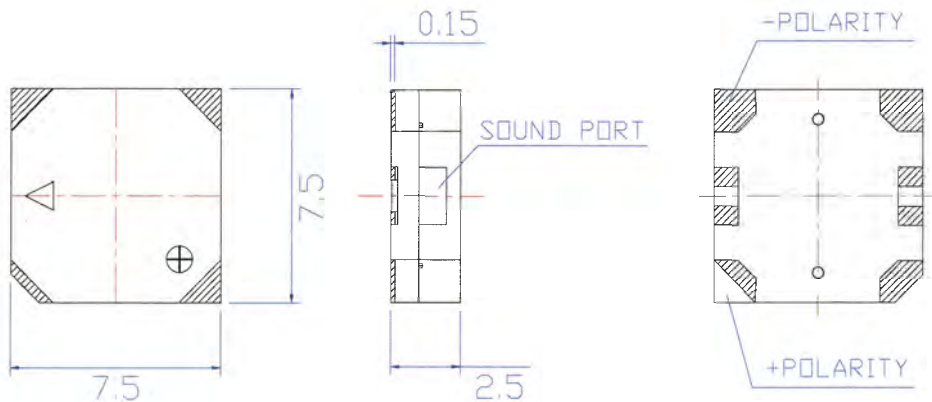
## A. SCOPE

This specification applies passive electromagnetic buzzer, **P/N: BST 7.52.5SM-03**

## B. CHARACTERISTICS

#	Item	Unit	Specification	Remark
1	Oscillation Frequency	Hz	2730	Vp-p=1/2duty , square wave
2	Operating Voltage	V	2.5 ~ 4.5	Vp-p
3	Rated Voltage	V	3.6	Vp-p
4	Current Consumption	mA	Max. 100	@ Rated Voltage
5	Sound Pressure Level	dB	Min. 85	10cm, dB(A)
6	Coil Resistance	$\Omega$	15 $\pm$ 3	
7	Operating Temperature	$^{\circ}$ C	-40 ~ +80	
8	Storage Temperature	$^{\circ}$ C	-40 ~ +85	
9	Dimension	mm	L7.5xW7.5xH2.5	Refer mechanical specification
10	Weight (max)	gram	0.4	
11	Housing Material	/	LCP plastic resin	Black
12	GP Compliance	/	RoHS	

## C. MECHANICAL DIMENSION

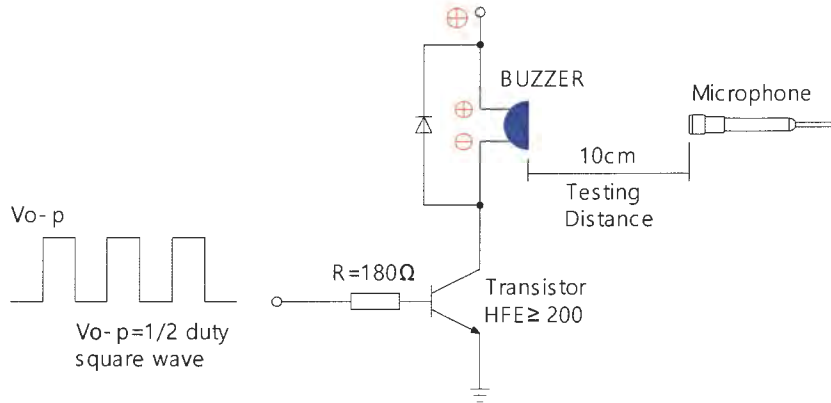


Unit: mm Tol:  $\pm$ 0.3

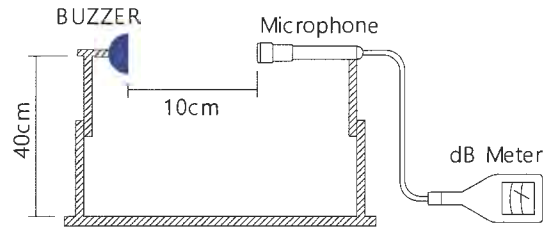
### D. FUNCTION TEST

Environment Conditions: Temperature:  $25 \pm 2^\circ\text{C}$  Humidity: 45-60%

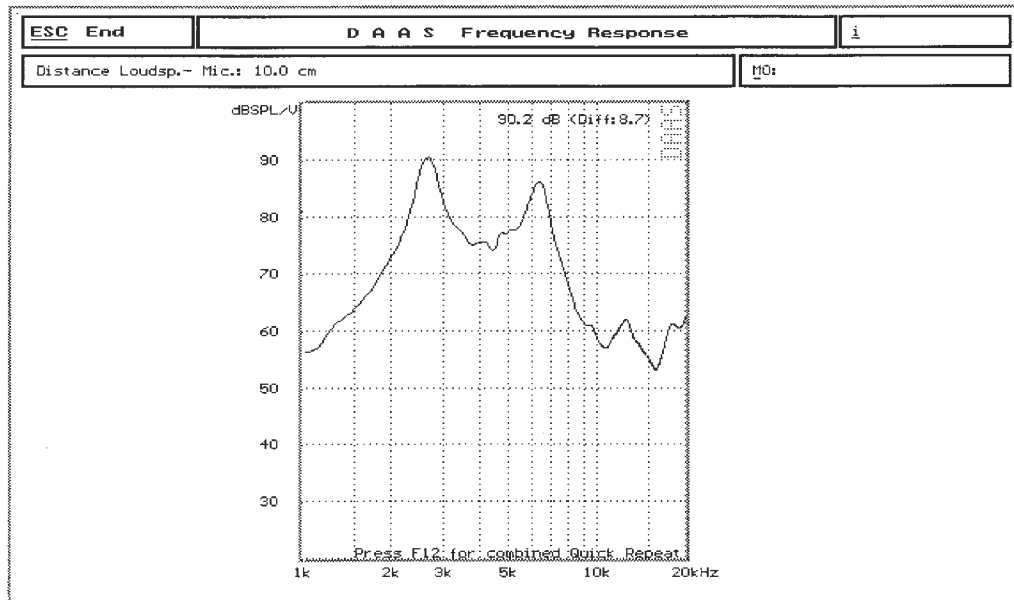
Acoustic Characteristics: The oscillation frequency, current consumption and SPL are tested by the testing instruments shown below (Recommend Driving Circuit)



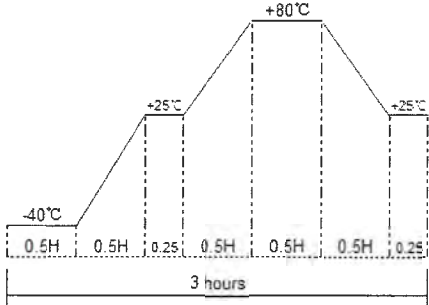
in this test, buzzer is placed as below:



### E. TYPICAL FREQUENCY RESPONSE CURVE



### F. RELIABILITY TEST

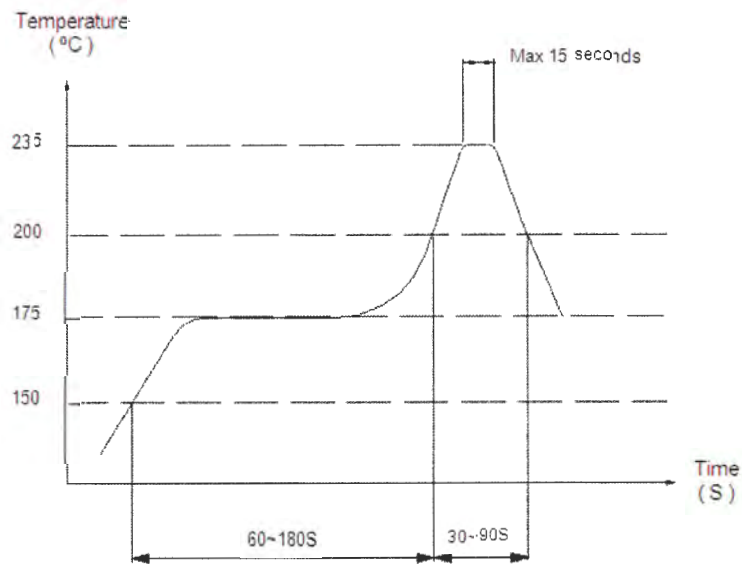
#	ITEM	TEST CONDITION AND REQUIREMENT
1	High Temperature Test (Storage)	Place the test samples in a chamber with $+85\pm 2^{\circ}\text{C}$ for 96 hours and then place the samples in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$ .
2	Low Temperature Test (Storage)	Place the test samples in a chamber with $-40\pm 2^{\circ}\text{C}$ for 96 hours and then place the samples in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$ .
3	Humidity Test	Place the test samples in a chamber with 90-95% R.H. at $+40\pm 2^{\circ}\text{C}$ for 96 hours and then place the samples in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$ .
4	Temperature Cycle Test	<p>The parts shall be subjected to 5 cycles. One cycle should include:</p>  <p>Allowable variation of SPL after test: <math>\pm 10\text{dB}</math>.</p>
5	Drop Test	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	Being applied the amplitude of 1.5mm (peak to peak) with the frequency of 10Hz to 55Hz (linear sweep) to each of 3 perpendicular directions for 1 hour. Allowable variation of SPL after the test: $\pm 10\text{dB}$ .

Standard Mode: a) Temperature:  $+5 \sim +35^{\circ}\text{C}$   
 b) Humidity: 45-85%  
 c) Pressure: 860-1060 mbar

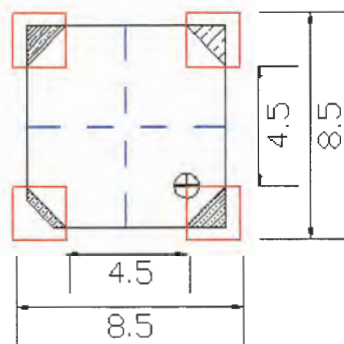
Judgment Mode: a) Temperature:  $+25 \pm 2^{\circ}\text{C}$   
 b) Humidity: 60-70%  
 c) Pressure: 860-1060 mbar

### G. RECOMMENDED TEMP. PROFILE FOR REFLOW

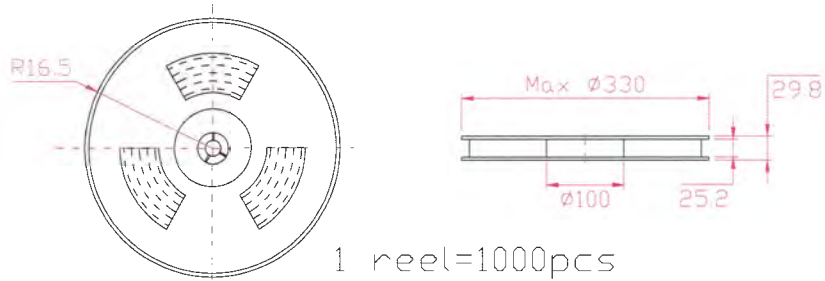
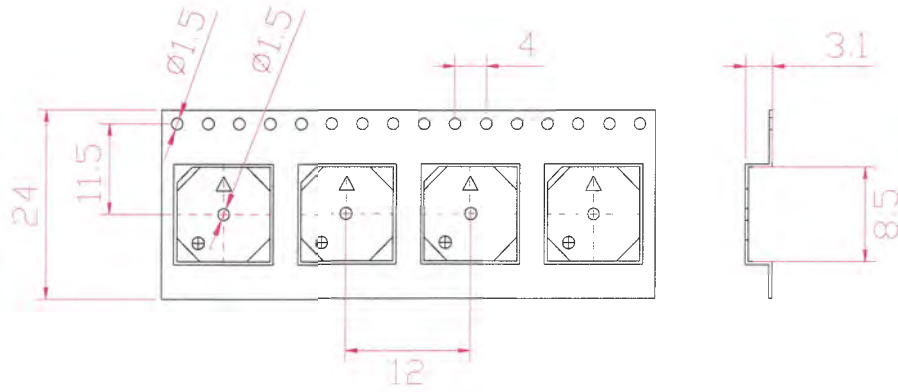
Profile Feature	Pb-Free Solder Paste
Pre-heat	
-Temperature	From 150°C to 200°C
-Time	60~180 seconds
Temperature Ramp-up	Max 3°C per second
Maintain Stage	
-Temperature	217~240°C
-Time	30~90 seconds
Peak Temperature	235+10/-5°C
Ramp Down Rate	Max 6°C per second
From 25°C to Peak Temperature	Max 5 minutes



### PCB PAD DIMENSION: ICC P/N BST 7.52.5SM-03

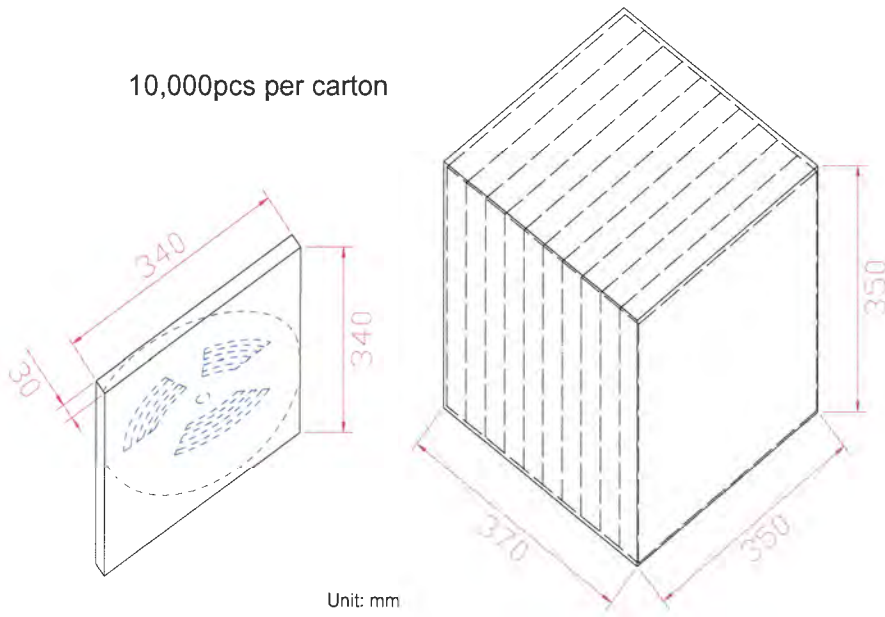


## H. PACKING



1 reel=1000pcs

10,000pcs per carton



Unit: mm