

SPECIFICATION FOR APPROVAL

Customer:

Description: ELECTRO MAGNETIC BUZZER
SOBERTON Part No. : GT-111PS-1

Date: 2015-04-27

Customer Model No. :

Date of Approval	
Authorization Signature	



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Approved	Checked	Design
Jasmine 2015/4/27	Frank 2015/4/27	Jim 2015/4/27

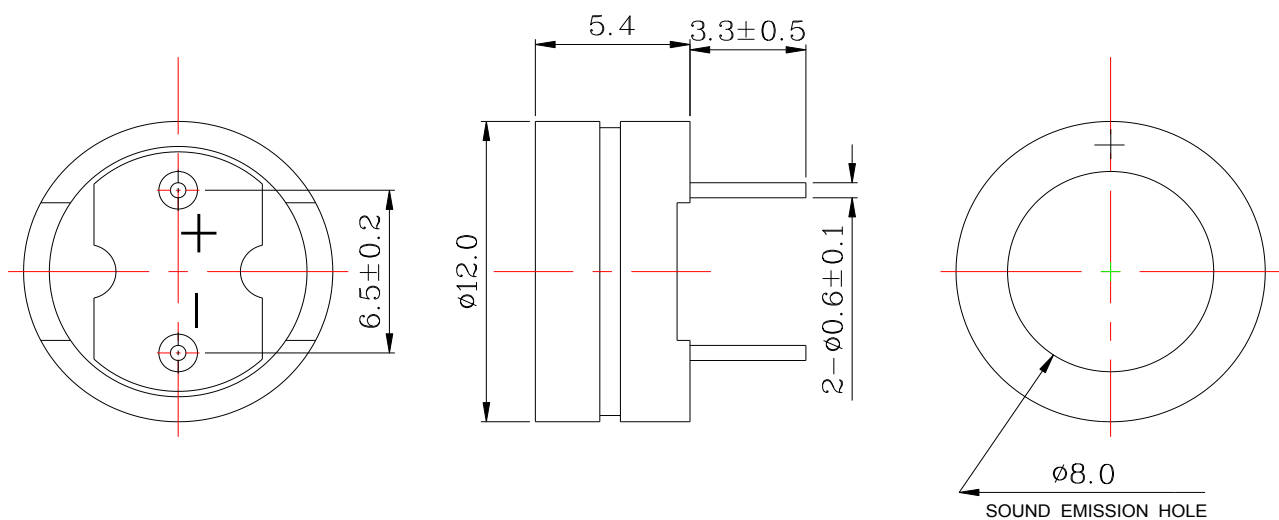
A. SCOPE

This specification applies magnetic buzzer, GT-111PS-1

B. SPECIFICATION

No.	Item	Unit	Specification	Condition
1	Oscillation Frequency	Hz	2048	Vo-p=1/2duty , square wave
2	Operating Voltage	Vo-p	1~ 3	
3	Rated Voltage	Vo-p	1.5	
4	Current Consumption	mA	MAX.15	at Rated Voltage
5	Sound Pressure Level	dB	MIN. 70	at 10cm at Rated Voltage
6	Coil Resistance	Ω	50 \pm 7.5	
7	Operating Temperature	\square	-20 ~ +70	
8	Storage Temperature	\square	-30 ~ +80	
9	Dimension	mm	Φ 12.0 x H5.4	See appearance drawing
10	Weight (MAX)	gram	1.6	
11	Housing Material		PPO	
12	Leading Pin		Tin Plated Brass(Sn)	See appearance drawing
13	Environmental Protection Regulation		RoHS	

C. APPEARANCE DRAWING



Tol : \pm 0.5

Unit: mm

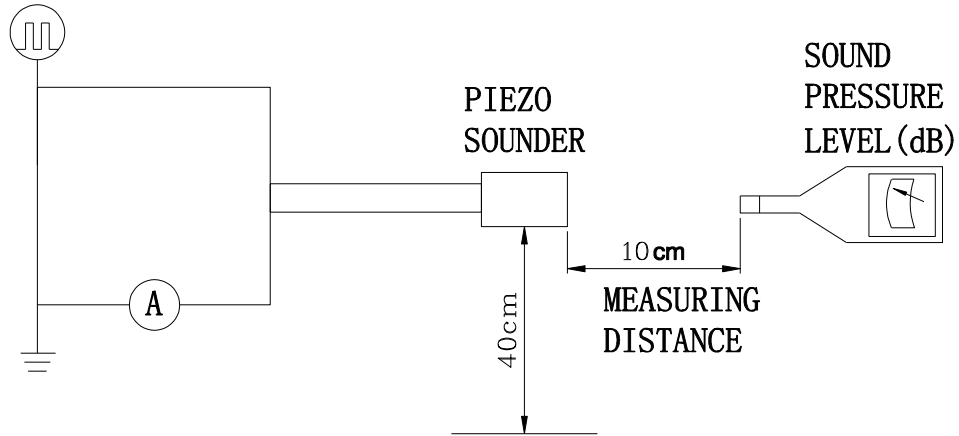
D. TESTING METHOD

Standard Measurement conditions

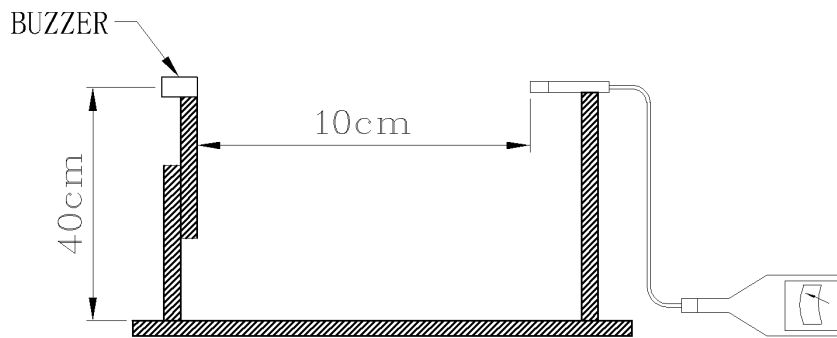
Temperature: $25 \pm 2^\circ\text{C}$ Humidity: 45-65%

Acoustic Characteristics:

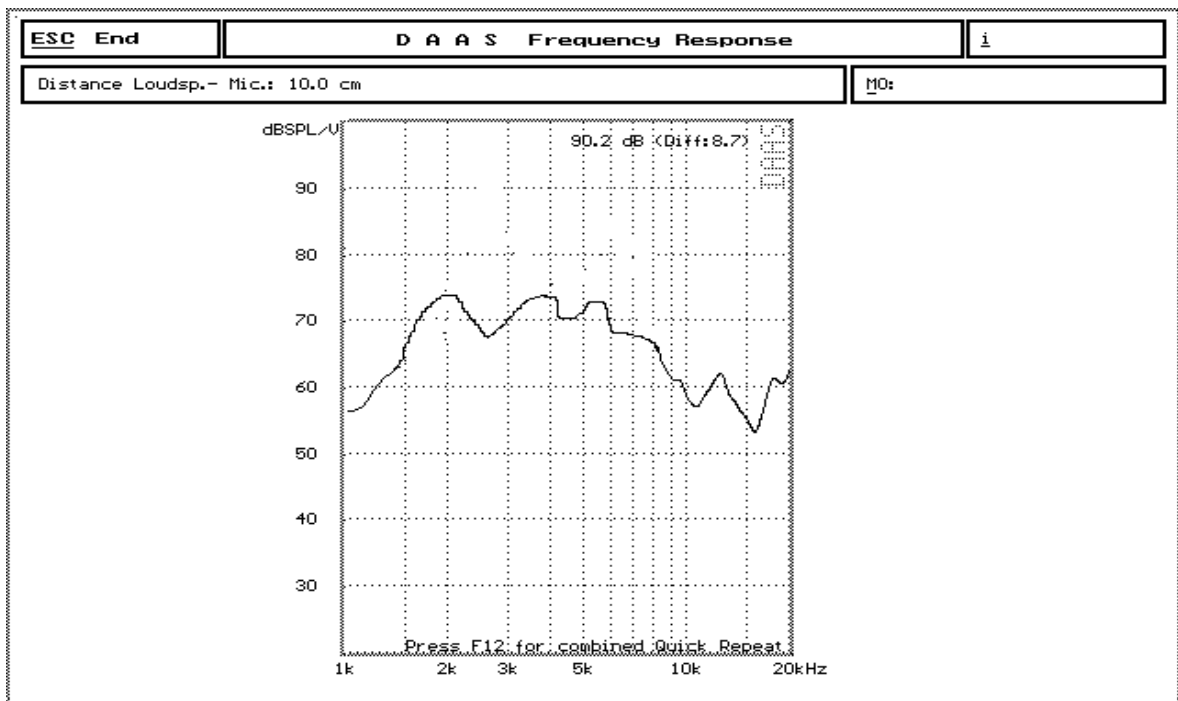
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below



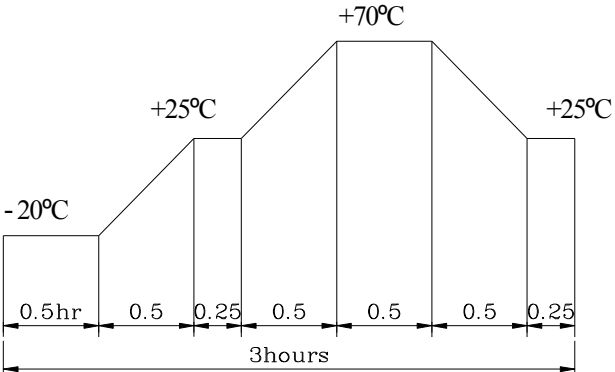
In the measuring test, buzzer is placed as follows:



E. Typical Frequency Response Curve



F. RELIABILITY TEST

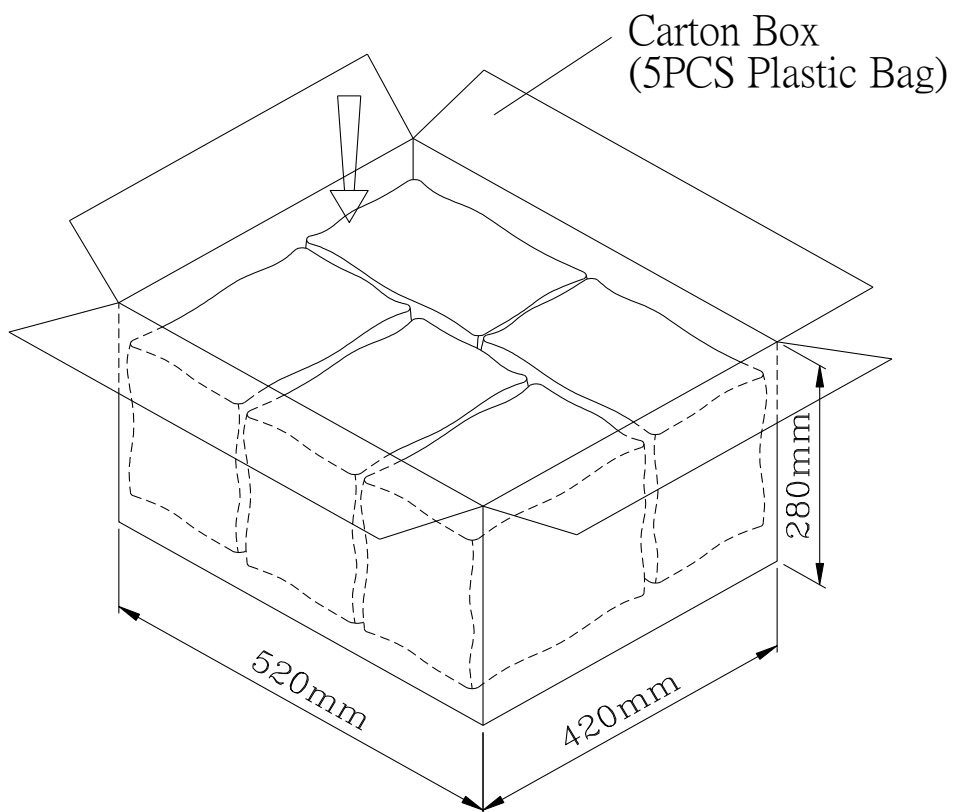
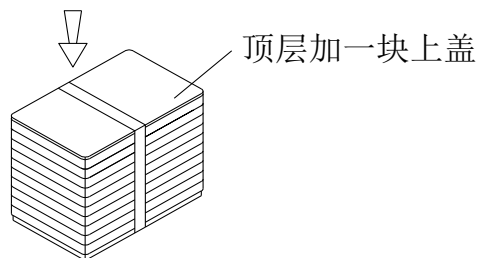
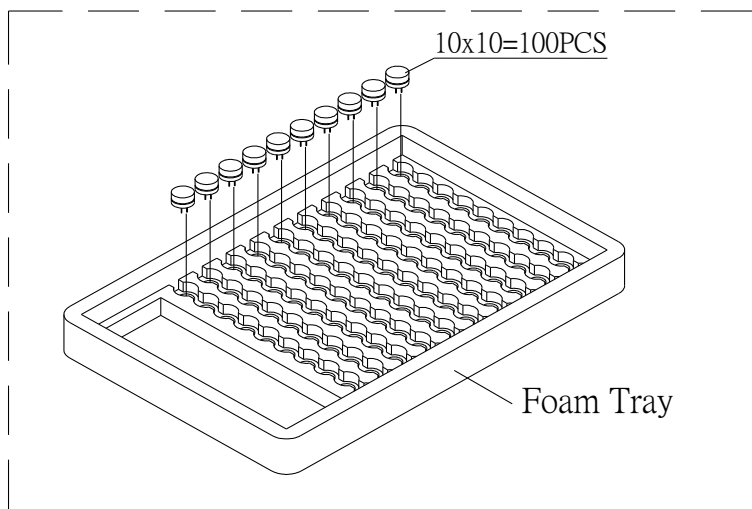
NO.	ITEM	TEST CONDITION AND REQUIREMENT
1	High Temperature Test (Storage)	After being placed in a chamber with $80\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$.
2	Low Temperature Test (Storage)	After 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	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	<p>The part shall be subjected to 5 cycles. One cycle shall be consist of :</p>  <p>Allowable variation of SPL after test: $\pm 10\text{dB}$.</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	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	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	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

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

G. PACKING STANDARD



Foam Tray	240mmx160mmx30mm	1x100PCS=100PCS
Plastic Bag		10x100PCS=1000PCS
Carton Box	520mmx420mmx280mm	5x1000PCS=5,000PCS