

SPECIFICATION FOR APPROVAL

承 认 书

Description : Piezo Buzzer

Vender's Part No. : PMB250A

Customer's. Part No.:

Serial No. :

Version No. :

CUSTOMER'S APPROVED SIGNATURE		

PMB 피엠비일렉텍
상표등록 <제40-0729433호> PMB ELECTECH

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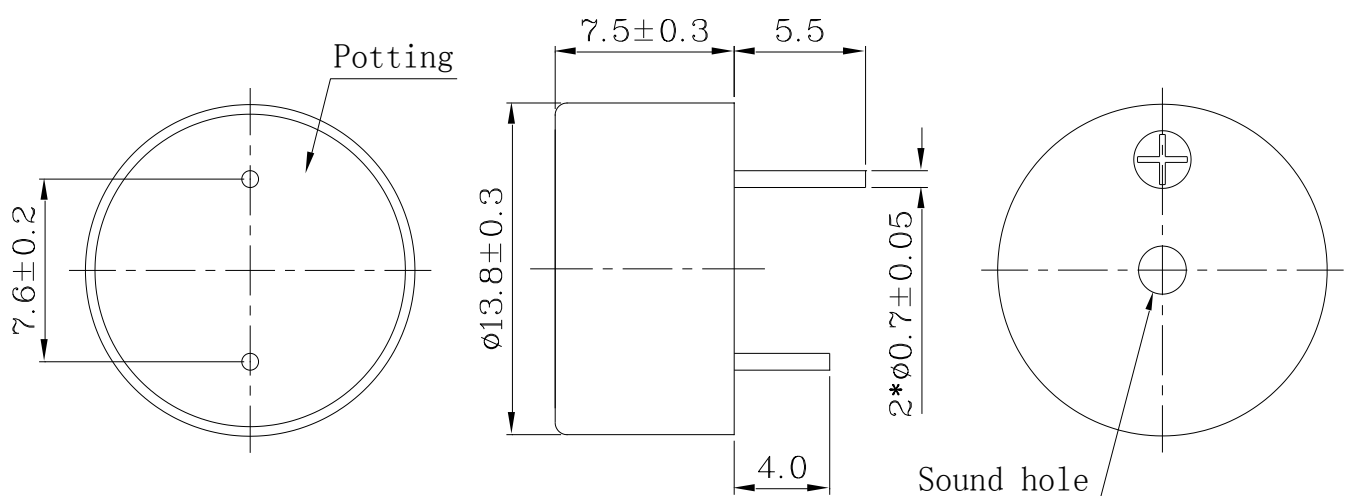
A. SCOPE

This specification applies piezo buzzer, **PMB250A**

B. SPECIFICATION

No.	Item	Unit	Specification	Condition
1	Oscillation Frequency	KHz	4.3±0.5	
2	Operating Voltage	VDC	3 ~16	
3	Rated Voltage	VDC	12	
4	Current Consumption	mA	MAX. 10	at Rated Voltage
5	Sound Pressure Level	dB	MIN. 85	at 10cm at Rated Voltage
6	Tone Nature		Single	
7	Operating Temperature	°C	-20~ +70	
8	Storage Temperature	°C	-30 ~ +80	
9	Dimension	mm	Φ13.8 x H7.5	See appearance drawing
10	Weight (MAX)	gram	2.0	
11	Housing Material		PPO(Black)	
12	Leading Pin		Tin Plated Brass(Sn)	See appearance drawing
13	Environmental Protection Regulation		RoHS	

C. APPEARANCE DRAWING



Tol : ± 0.5

Unit: mm

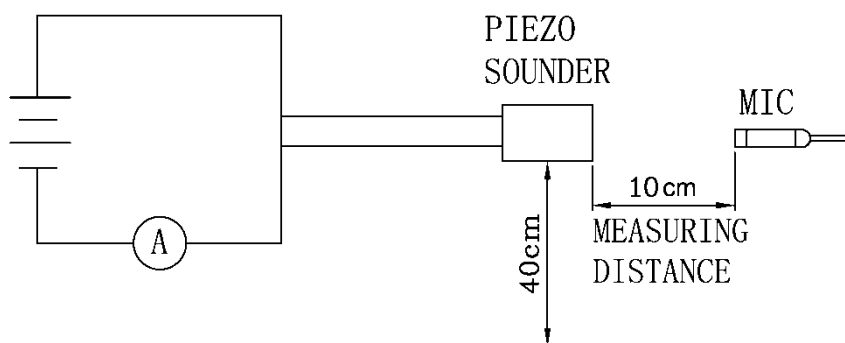
D. TESTING METHOD

Standard Measurement conditions

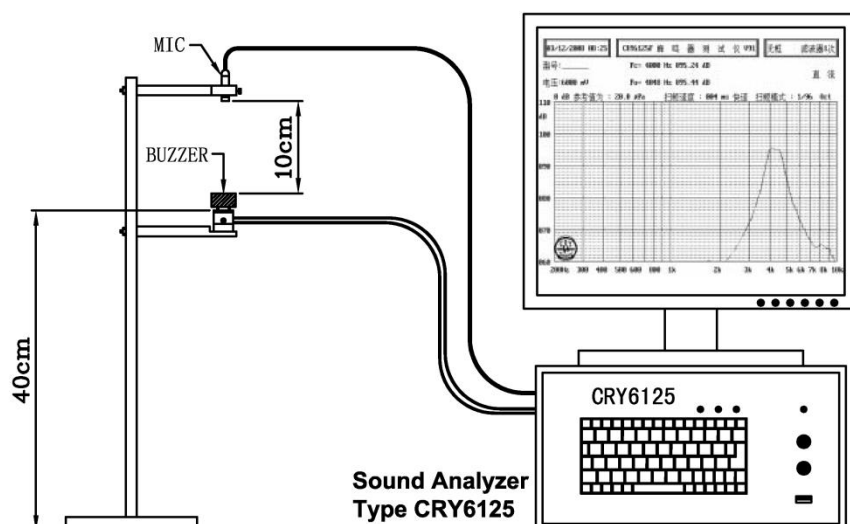
Temperature: $25 \pm 2^\circ\text{C}$ Humidity: 45-65%

Acoustic Characteristics:

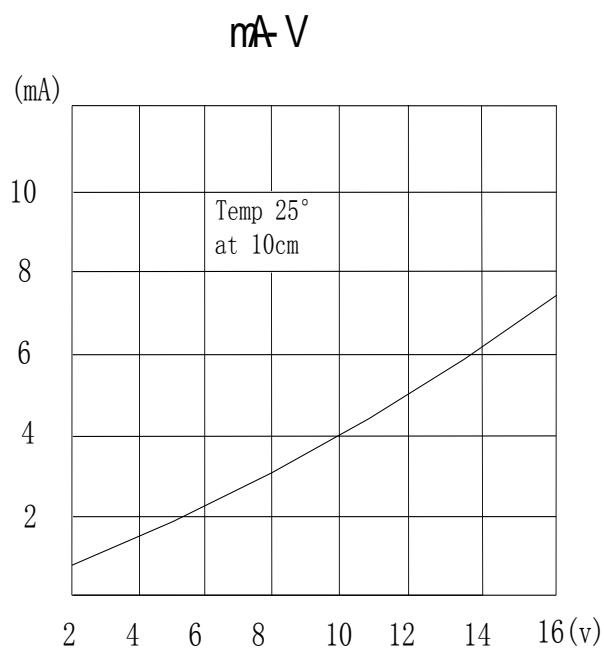
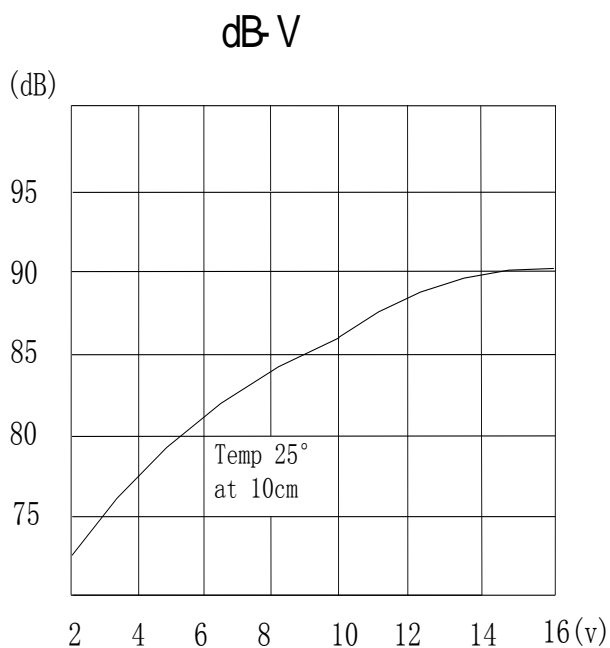
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below



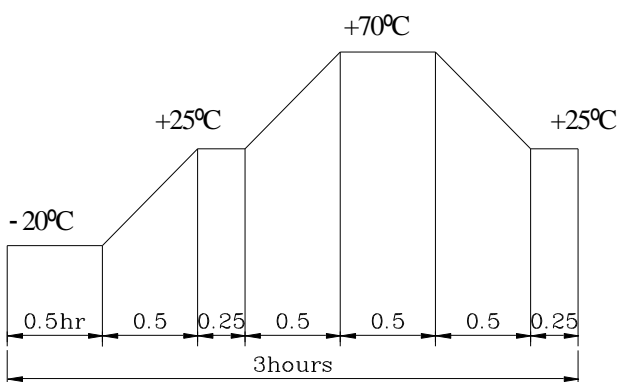
In the measuring test, buzzer is placed as follows:



E. Typical Frequency Response Curve



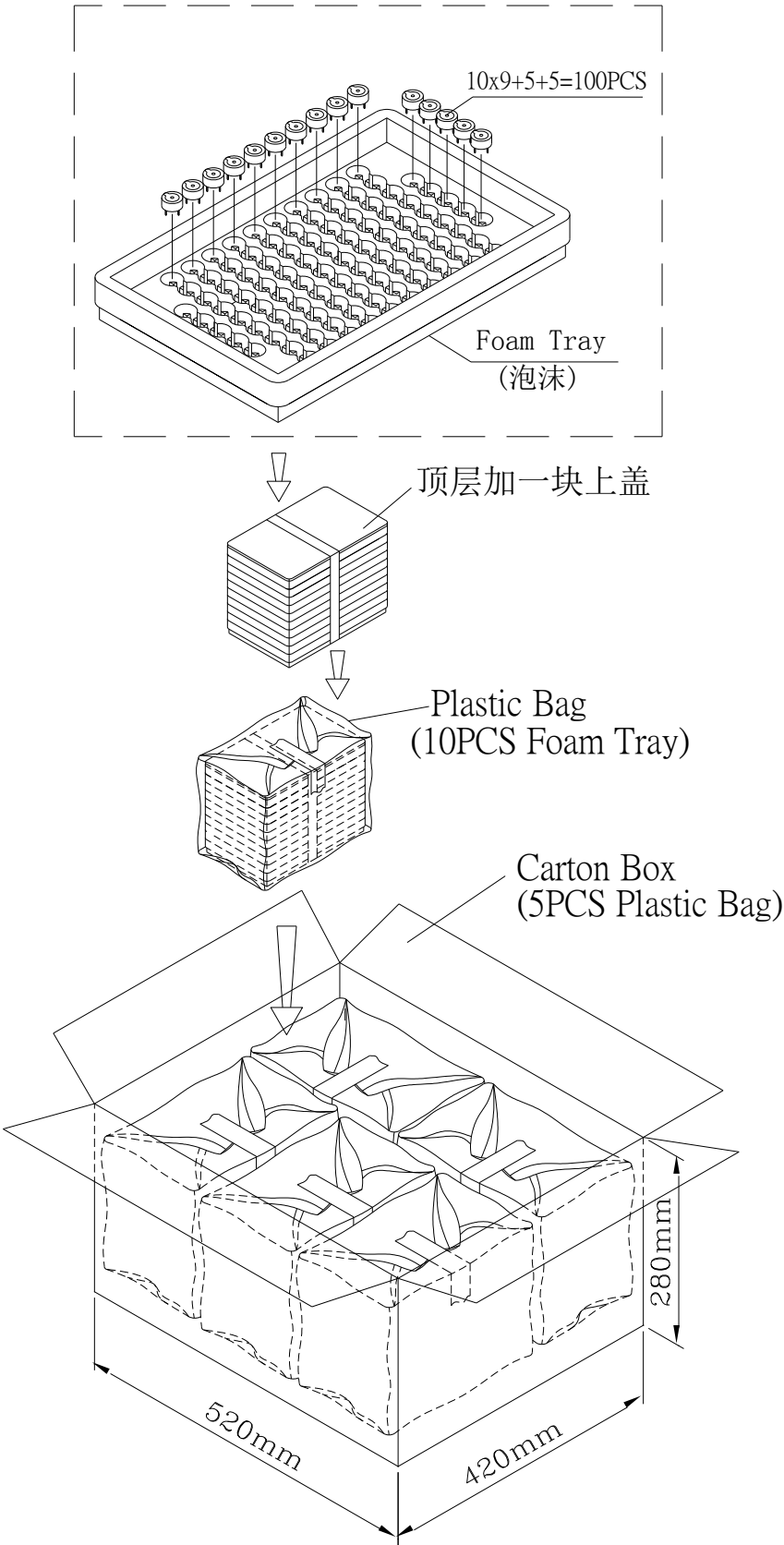
F. RELIABILITY TEST

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
一般测试条件	:	a) 温度 : $+5 \sim +35^\circ\text{C}$	b) 湿度 : 45-85%	c) 气压 : 860-1060mbar
Judgment Test Condition	:	a) Temperature : $+25 \pm 2^\circ\text{C}$	b) Humidity : 60-70%	c) Pressure : 860-1060mbar
争议时测试条件	:	a) 温度 : $+25 \pm 2^\circ\text{C}$	b) 湿度 : 60-70%	c) 气压 : 860-1060mbar

G. PACKING STANDARD



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