

# ***MESSRS.***

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## **SPECIFICATION FOR APPROVAL**

### **承 認 書**

Product	SMD PIEZO BUZZER
Part No.	APD-1305A (RoHS)
Customer Approval	

Approved By	Checked By	Made By



**ADVANCED ACOUSTIC TECHNOLOGY CORP.**

**苙 翔 科 技 股 份 有 限 公 司**



ISO 9001 Certified

2F, No.207, Sec. 6, Chung Shan N. Rd., Taipei, Taiwan

Tel: +886-2-88665255

Fax: +886-2-88665250

<http://www.aatc.com.tw>

# 1. Specifications

APD-1305A (RoHS)

Items		Units	Specifications	Conditions
01	Rated Voltage	Vp-p	5	(square wave)
02	Operating Voltage	Vp-p	3~25	
03	Rated Current	mA(Max)	8	
04	Sound Output	dBA(Min)	75	At 5Vp-p ,4.1KHz / 10cm
05	Resonant Frequency	Hz	4100	
06	Capacitance	pF	16000±30%	At 120Hz
07	Operating Temp.	°C	-30 ~ +75	
08	Storage Temp.	°C	-40 ~ +85	
09	Weight	g	0.5	

## 2. Measuring Method

### 2-1. Test Condition

#### STANDARD

Temperature : 15 ~ 35°C

Relative humidity : 25% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

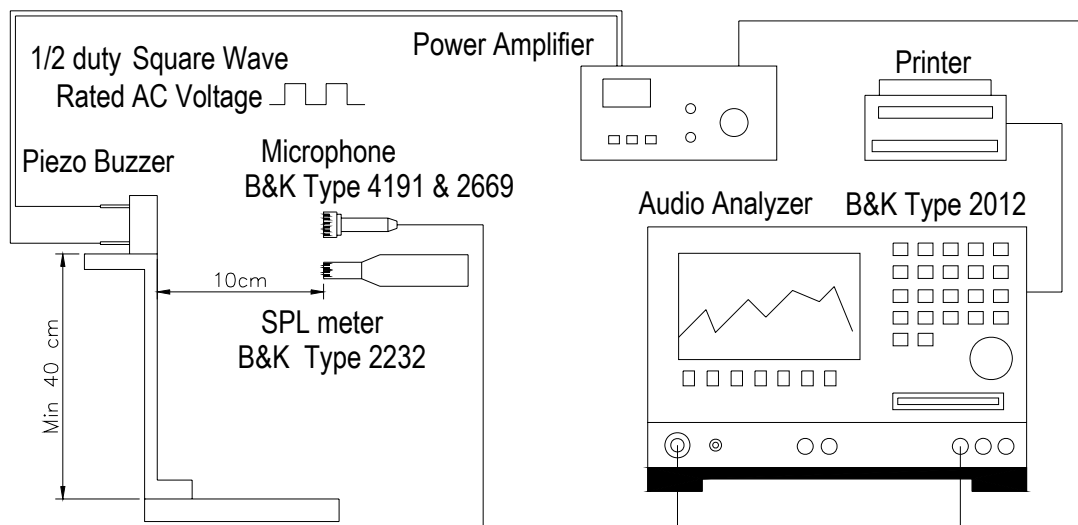
#### BASIC

Temperature : 20±3°C

Relative humidity : 60% ~ 70%,

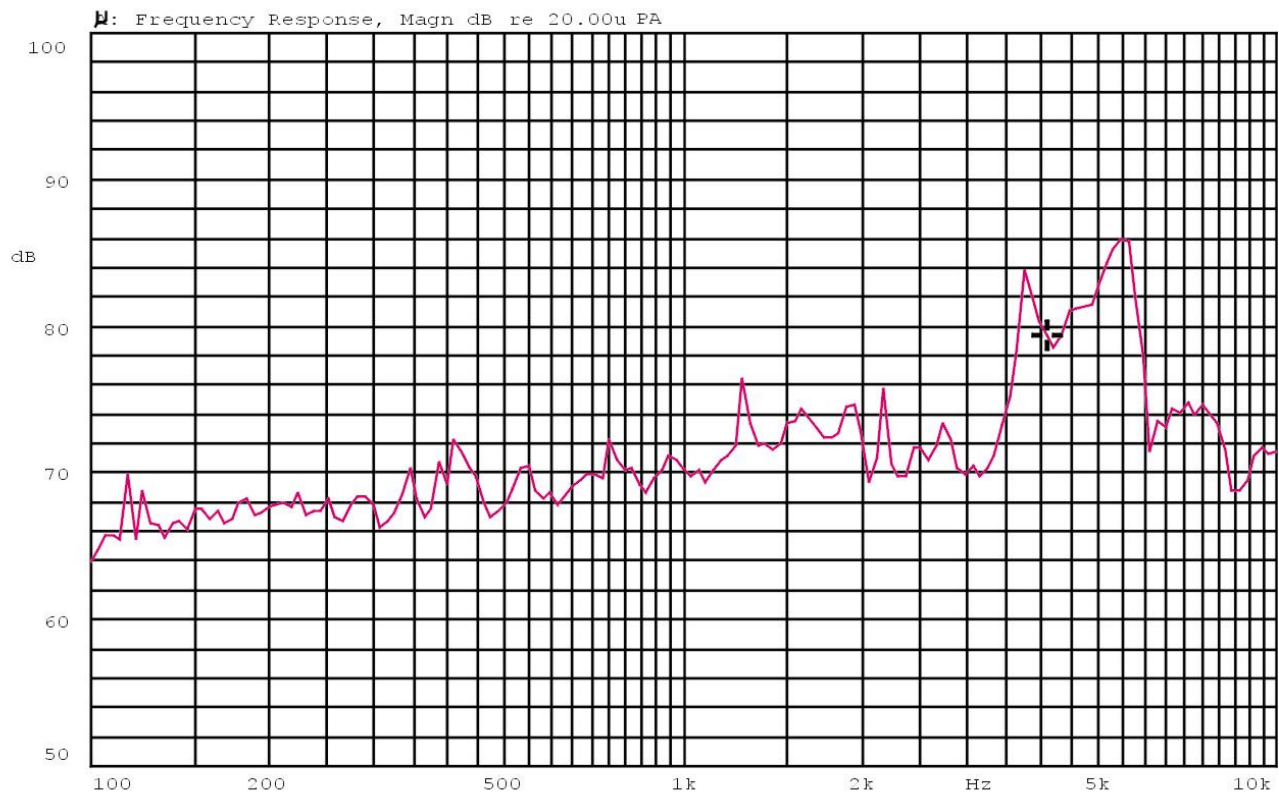
Atmospheric pressure : 860mbar to 1060mbar

## 2-2. Standard Test Fixture



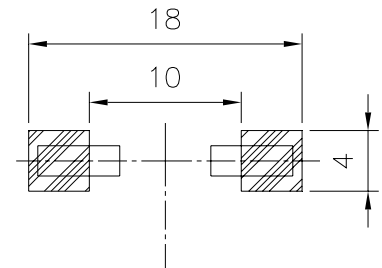
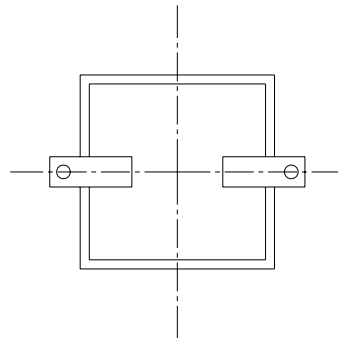
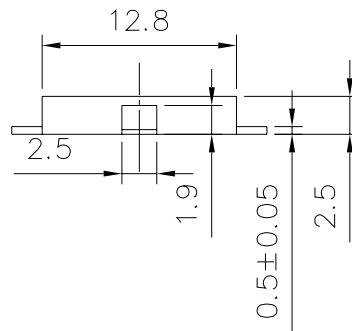
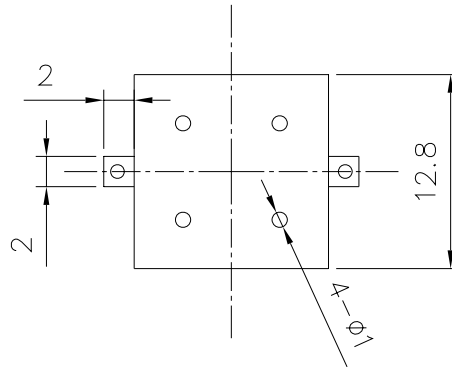
## 2-3. Frequency Response Curve

X:4.0973kHz Y:79.38dB ZA:Live Curve SSR T. RMS



Mode: SSR





PCB LAYOUT

REFLOW SOLDER AND WASH NOT ALLOWED .

TITLE: SMD PIEZO BUZZER		DRAWN: <i>JOHN</i> 01/22/2007	SCALE: 2:1	SHEET: 1 of 1
PART NO. APD-1305A		DESIGNED: R&D OF AAT	UNITS: mm	
DWG NO. DTS-1385		CHECKED:	TOLERANCE ± 0.2	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
REV 1		MATERIAL: LCP		



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## 4. Reliability Test

Item	Conditions	Evaluation standard
01 Low Temp. Storage Test	-40°C ±2°C ,240Hr	After the test the part shall meet specifications without Any degradation and performance except S.P.L S.P.L shall be 73dB or more.
02 High Temp.Storage Test	85°C ±2°C ,240Hr	
03 Temp./Humidity Storage Test	40°C ±2°C , RH90-95% 240Hr	
04 Thermal Shock Test	-40°C ±2°C (0.5Hr)→ ,20°C ±2°C (0.25Hr) 85°C ±2°C (0.5Hr)→ ,20°C ±2°C (0.5Hr) 5 cycles	
05 Vibration Test	10-55Hz/2 Hr amplitude1.5mm X,Y, Z,3 directions	
06 Mechanical Shock Test	+100G,Half Sine wave, XYZ , 3 impacts per axis ,3 times.	
07 Free Drop Test	The part shall be dropped freely from a height of 75 cm X,Y, Z,3 directions 3times (total 9 times )	
08 Life Burning Test	The part shall be subjected to 500 hrs in the room temp with rated voltage applied	
09 Lead Strength Test	Pull Lead with a force of 10N,on the direction of the lead axis for 10±1 sec.	

## 5.Solder ability

360±5°C / 2 Sec

不可用於錫爐及水洗製程!