

MESSRS.

SPECIFICATION FOR APPROVAL

承 認 書

Product	SMD PIEZO BUZZER
Part No.	APD-1405-S1 (RoHS)
Customer Approval	

Approved By	Checked By	Made By
工程部 王台平 MAY-30-2005	工程部 劉民祥 MAY-30-2005	工程部 許俊程 MAY-30-2005



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

Tel: +886-2-88665255

Fax: +886-2-88665250

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

1. Specifications

APD-1405-S1 (RoHS)

Items		Units	Specifications	Conditions
01	Rated Voltage	Vp-p	5	(square wave)
02	Operating Voltage	Vp-p	3 ~ 20	
03	Rated Current	mA(Max)	8	
04	Sound Output Level	dBA(Min)	80	At 5Vp-p ,3.3KHz / 10cm
05	Resonant Frequency	Hz	3300	
06	Capacitance	pF	15000±30%	At 120Hz
07	Operating Temp.	°C	-30 ~ +75	
08	Storage Temp.	°C	-40 ~ +85	
09	Weight	g	2.5	

2. Measuring Method

2-1. Test Condition

STANDARD

Temperature : 15 ~ 35°C

Relative humidity : 25% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

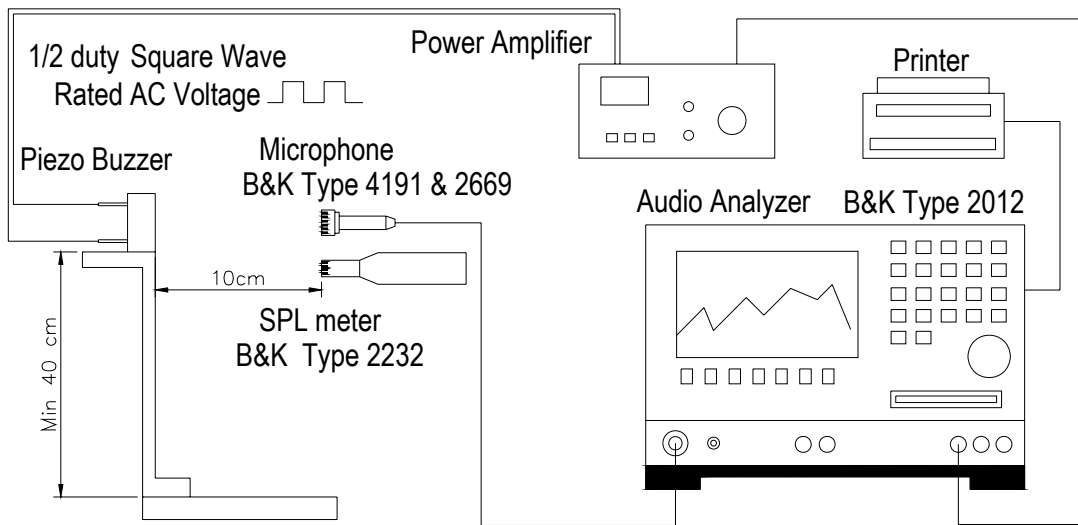
JUDGEMENT

Temperature : 20±3°C

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

2-2. Standard Test Fixture



2-3. Frequency Response Curve

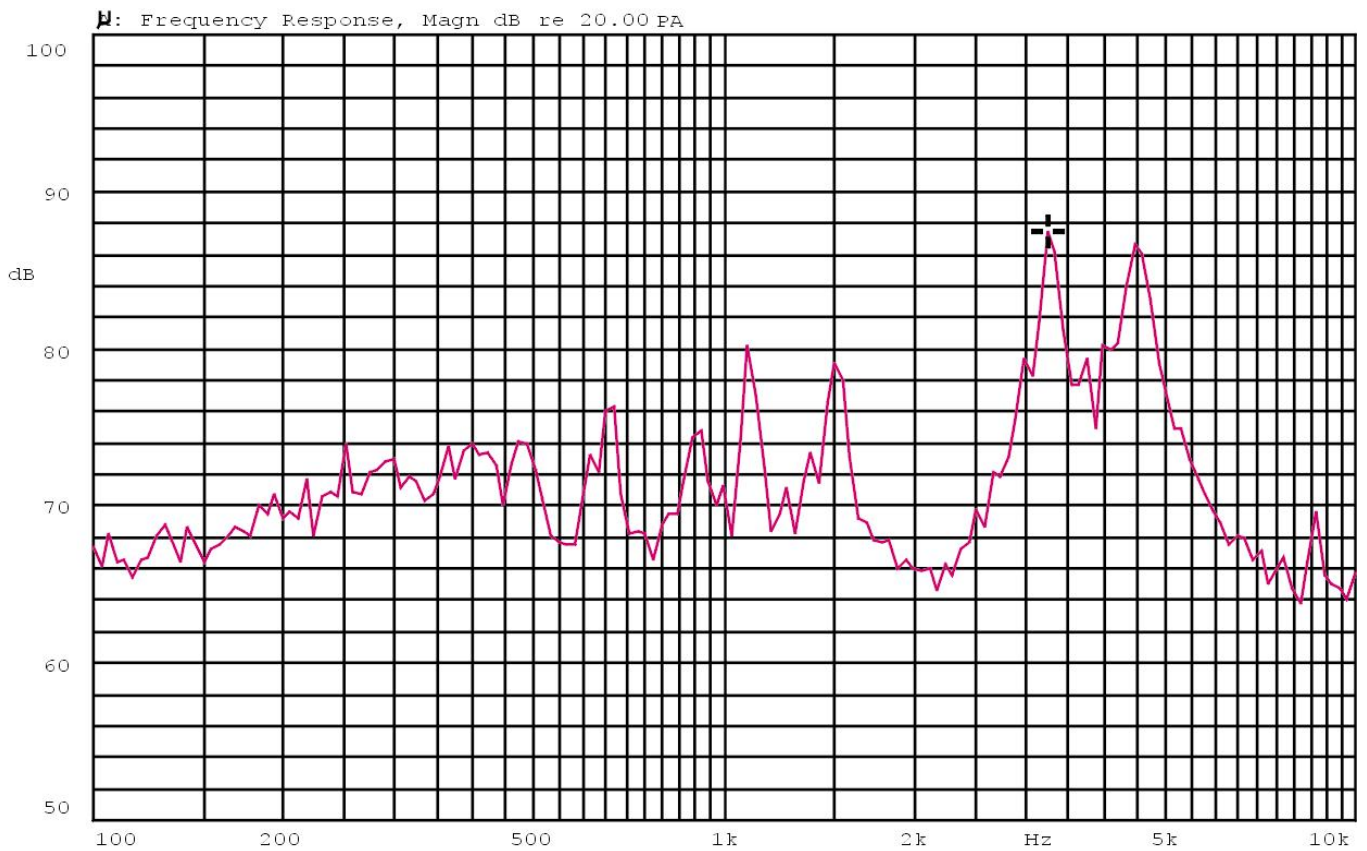
APD-1405-S1

X:3.2546kHz

Y:87.40dB

ZA:Live Curve

SSR T. RMS

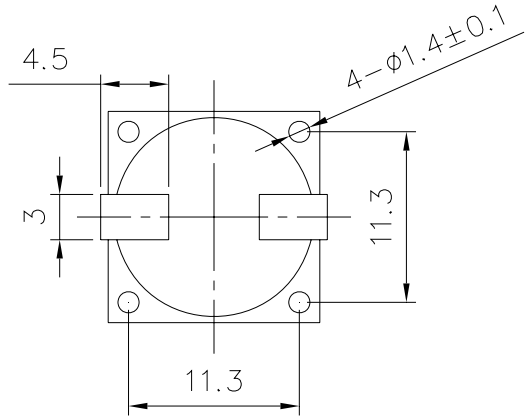
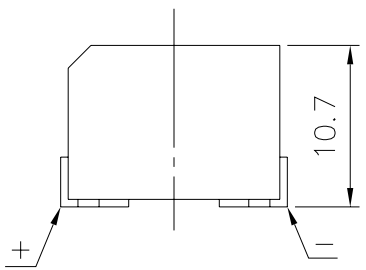
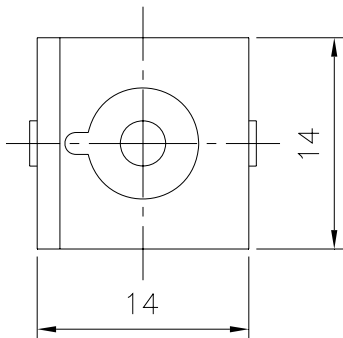


30-MAY-2005 15:26:55

Mode: SSR



REV NO.	REVISION NOTE	APPROVAL	DATE
---------	---------------	----------	------



TITLE: PIEZO BUZZER EXTERNAL		DRAWN: JOYEN	05/30/2005	SCALE: 2:1	SHEET: 1 : 1
PART NO.	APD-1405-S1	DESIGNED:	R & D OF AAT	UNITS:	mm
DWG NO.	DTP-1003	CHECKED:		TOLERANCE ± 0.2	
		APPROVAL:		UNLESS OTHERWISE SPECIFIED:	
		MATERIAL:		ONE PLACE DECIMAL ± ***	
				TWO PLACE DECIMAL ± ***	
				THREE PLACE DECIMAL ± ***	



苙翔科技股份有限公司

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 77dB 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 amplitude 1.5mm 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

Temperature profile for reflowable Buzzer .

