
SPECIFICATION FOR APPROVAL

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

Approved By	Checked By	Made By



A & B Components

<http://www.speaker-tw.com>

1. Specifications

APD-1405-S1

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.	℃	-30 ~ +75	
08	Storage Temp.	℃	-40 ~ +85	
09	Weight	g	2.5	

2. Measuring Method

2-1. Test Condition

STANDARD

Temperature : 15 ~ 35℃

Relative humidity : 25% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

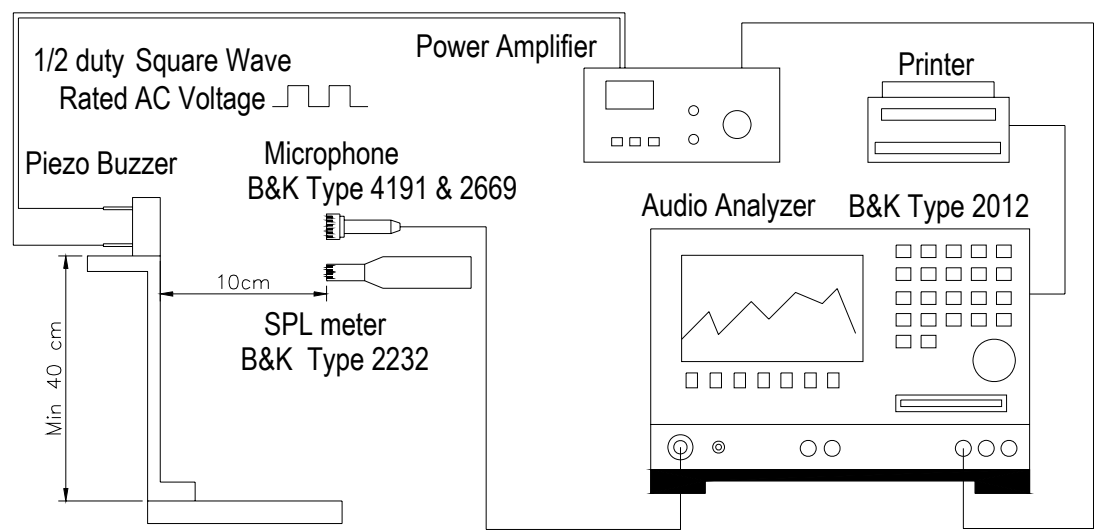
JUDGEMENT

Temperature : 20±3℃

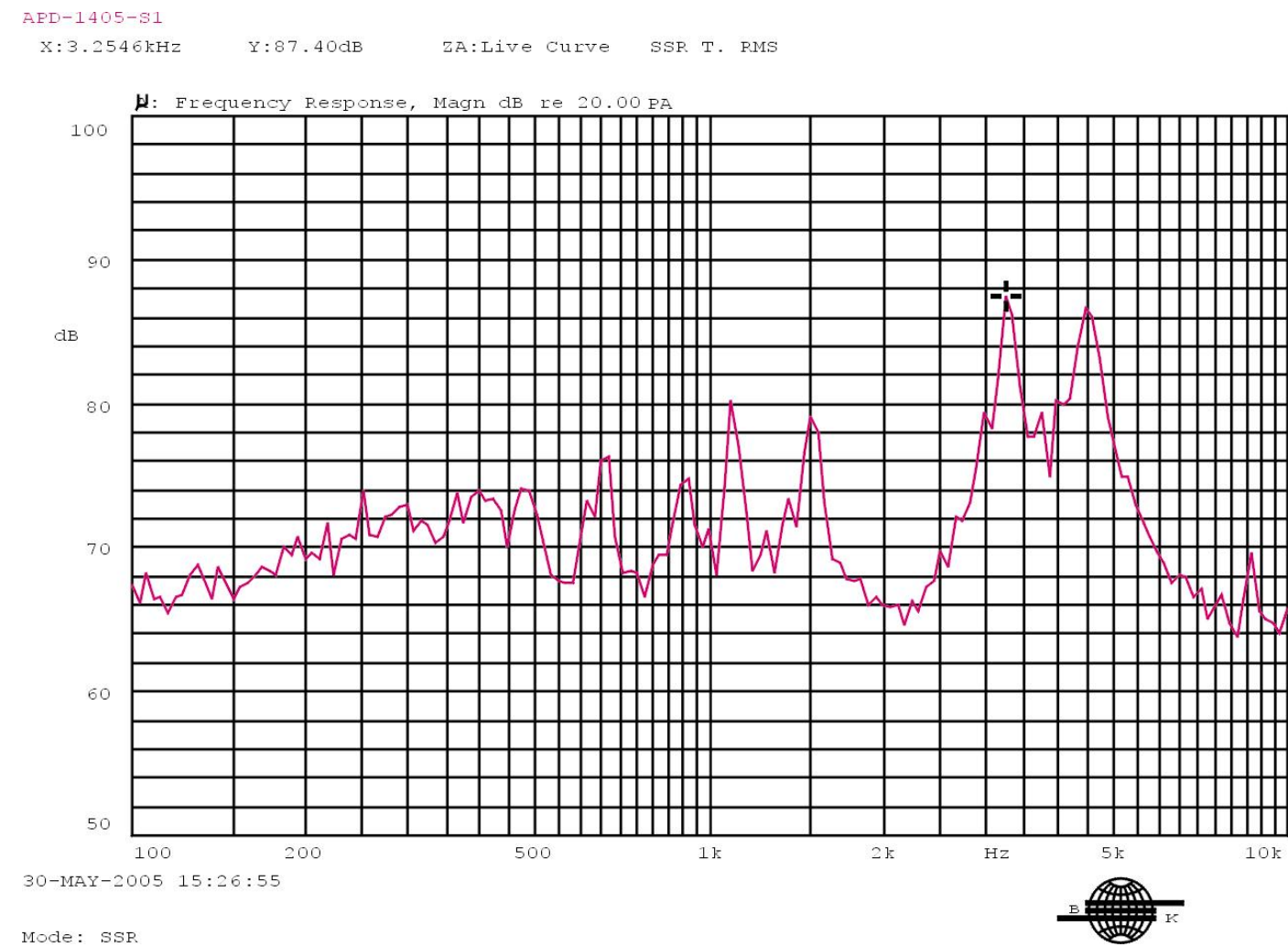
Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

2-2. Standard Test Fixture



2-3. Frequency Response Curve



4. Reliability Test

Item		Conditions	Evaluation standard
01	Low Temp. Storage Test	$-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$,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	$85^{\circ}\text{C} \pm 2^{\circ}\text{C}$,240Hr	
03	Temp./Humidity Storage Test	$40^{\circ}\text{C} \pm 2^{\circ}\text{C}$, RH90-95% 240Hr	
04	Thermal Shock Test	$-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (0.5Hr) $\rightarrow$, $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (0.25Hr) $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (0.5Hr) $\rightarrow$, $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (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

Temperature profile for reflowable Buzzer .

