SPECIFICATION FOR APPROVAL

Product	MAGNETIC BUZZER
Part No.	AD-5003-PQ1
Customer Approval	

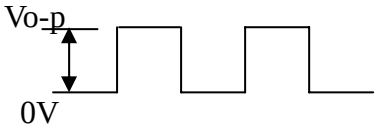
Approved By	Checked By	Made By

A & B Components

http://www.speaker-tw.com

AD-5003-PQ1

1.SPECIFICATION

Items		Units	Specifications	Conditions
01	Rated Voltage	Vo-p	3.0	
02	Operating Voltage	Vo-p	2.0 ~ 5.0	
03	Consumption Current	mA (max)	Mean 100	Standard State, Standard Drive Circuit. Rated Voltage,Rated Frequency ,Distance at 10 cm free air,Square Wave 1 / 2 Duty
			Peak 300	
04	Sound Output	dB (min)	75	
05	Resonant Frequency	Hz	4000	
06	Coil Resistance	Ω	12 ± 2	At Basic State
07	Operating Temp.	℃	-30 ~ +75	
08	Storage Temp.	℃	-40 ~ +85	
09	Weight	Gram	0.3	

2.Test Condition

STANDARD

Temperature : 15 ~ 35℃

Relative humidity : 25% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

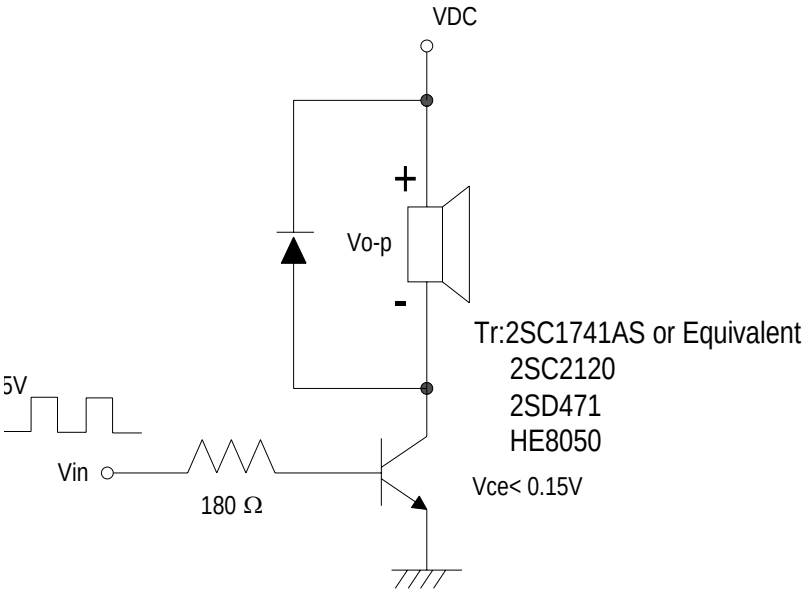
BASIC

Temperature : 20±3℃

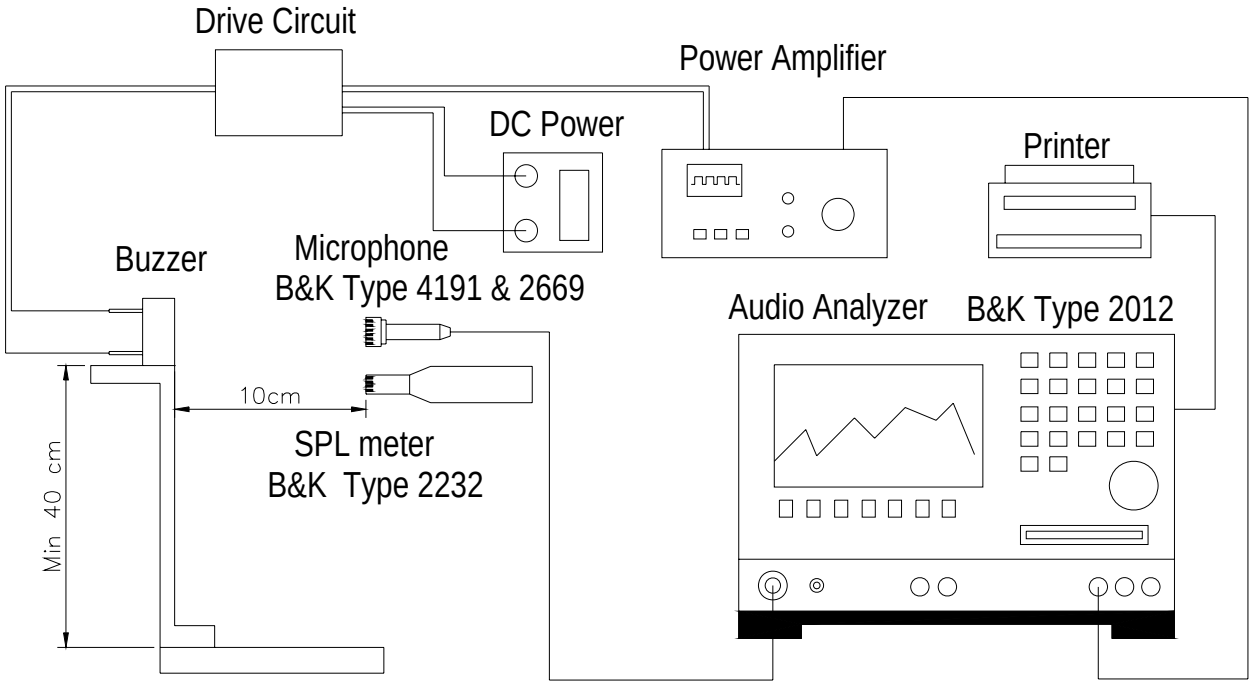
Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

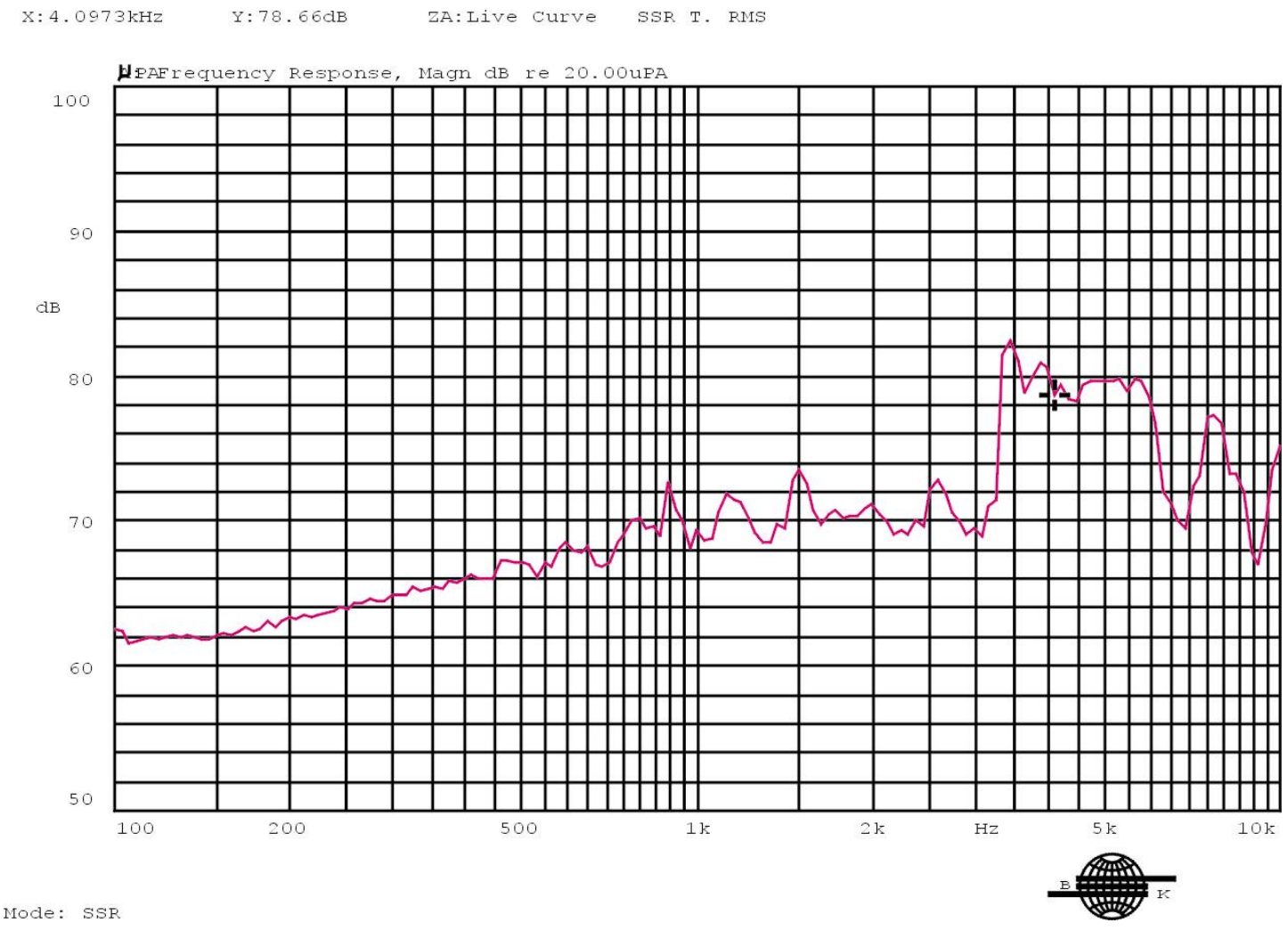
Standard Drive Circuit



Standard Test Fixture

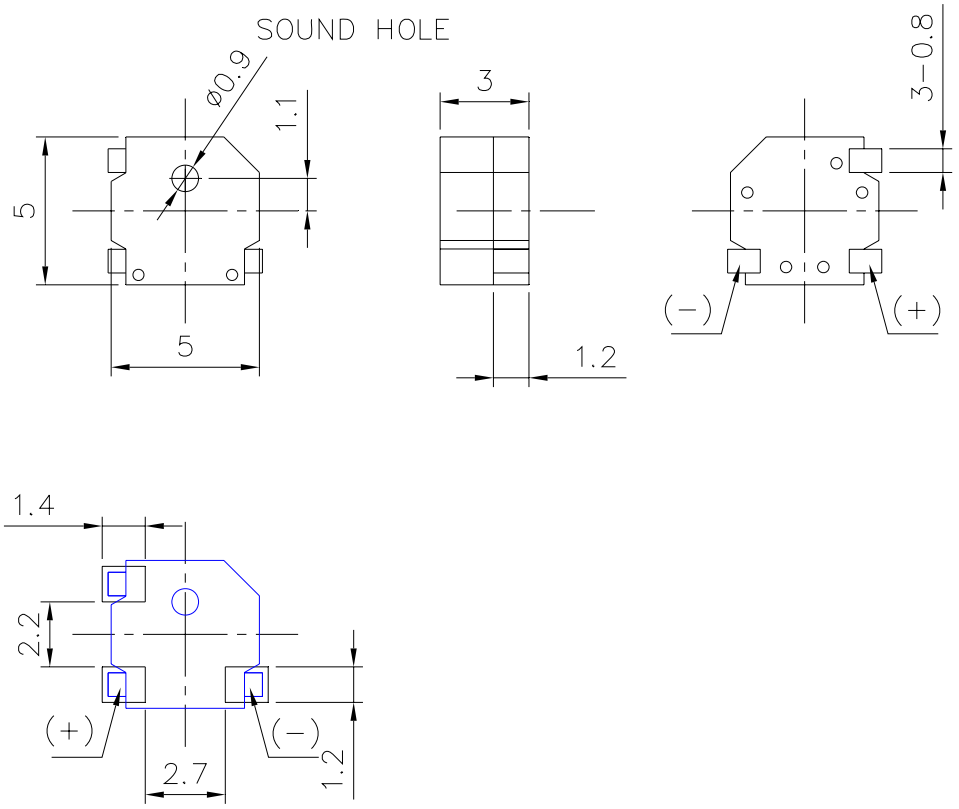


Frequency Response Curve



Mode: SSR

REV NO.	REVISION NOTE	APPROVAL	DATE

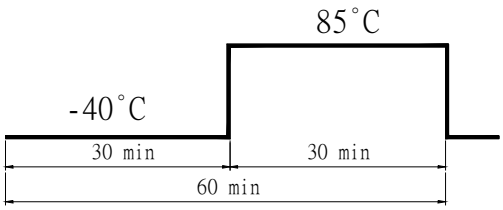
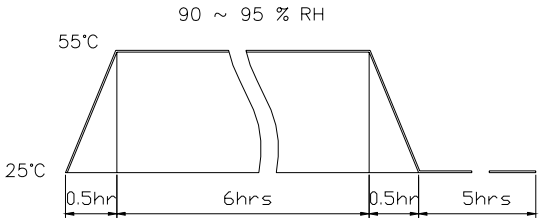


PCB LAYOUT

TITLE: SOUND TRANSDUCER (SMD)		DRAWN: Richard 2007/08/23	SCALE: 4:1	SHEET: 1 OF 1
PART NO. AD-5003-PQ2	1	DESIGNED: R&D DEP.	UNITS: mm	
		CHECKED:	TOLERANCE ± 0.3	
DWG NO. DTE-1070		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
	REV	MATERIAL: LCP		

A & B Components

5.RELIABILITY TEST

Item		Test conditions	Evaluation standard
01	High temp.Storage life	The part shall be capable of withstanding a storage Temperature of 85℃ for 96 hours.	After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L S.P.L shall be 78dB or more.
02	Low temp.Storage life	The part shall be capable of withstanding a storage Temperature of -40℃ for 96 hours.	
03	Temp. cycle	The part shall be subjected 10 cycles. One cycle shall consist of;  	
04	Temp./Humidity cycle	The part shall be subjected 10 cycles. One cycle shall be 12 hours and consist of  	
05	Operating life	Rated Voltage,Frequency applied. 1. Ordinary temperature The part shall be subjected to 1000 hours at room tremperature (25 ±10℃) 1. High temperature The part shall be subjected to 500 hours at 75℃ 2. Low temperature The part shall be subjected to 500 hours at -30℃	
06	Vibration	The part shall be subjected to a vibration cycle of 10Hz to 55Hz to 10Hz in a period of 1 minute. Total peak amplitude shall be 1.52mm (9.3G). The vibration test shall consist of 2 hours per plane in each three mutually perpendicular planes for a total time of 6 hours.	
07	Fixed drop	The part shall be mounted on standard pc board and dropped from a height of 152cm onto a concrete floor 5 times in each 6 planes.(a total of 30 times)	

Item		Test conditions	Evaluation standard
08	Free drop	The part only shall be dropped from a height of 75cm onto a 40mm thick wooden board 3 times in 3 axes (X.Y.Z). (a total of 9 times).	
10	Lead strength	Pull lead with a force of 10N,on the direction of the lead axis for 10 :10±1 sec	
11	Washability	Solvent : deionized water Solvent temp. : 55±5℃ Soaking time : 5±0.5 min.	

SOLDER ABILITY