MESSRS.

SPECIFICATION FOR APPROVAL

承 認 書

Product	ELECTRO MAGNETIC BUZZER
Part No.	AP-1205G-LF
Customer Approval	
Customer Part No.	

Approved By	Checked By	Made By
工程部 JASON CHEN NOV-13-2012	工程部 JERRY CHEN NOV-13-2012	工程部 ZACK GUO NOV-13-2012

Advanced Acoustic Technology Corporation

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EDITION:1.1

ISO 9001 Certified

ISO 14001 Certified

QS9000 Certified

RoHS

ADVANCED ACOUSTIC TECHNOLOGY CORP.
昊 宬 股 份 有 限 公 司

REVISIONS			
PRODUCT			ELECTRO MAGNETIC BUZZER
PART NO.			AP-1205G-LF
REV.	REVISER	DATE	DESCRIPTION
1	TOM	2009-01-06	Creating new drawing SPEC.(RoHS)
2	Jason_C	2010/08/17	Upgrade SPEC.
3	ZACK	2012-11-13	更新公司名稱"昊宬股份有限公司"

1. SPECIFICATION

AP-1205G-LF

ITEM		UNITS	SPECIFICATIONS	CONDITIONS
01	Rated Voltage	V	5.0	
02	Operating Voltage	V	3.0 ~ 8.0	
03	Consumption Current	mA (Max)	Mean： 55 Peak： 165	Applying rated voltage, rated frequency Square wave, 1/2 duty subject to standard state.
04	Direct Current Resistance	Ω	40±6.0	
05	Sound pressure level (Distance at 10cm)	dBA (Min)	85	Applying rated voltage, rated frequency Square wave, 1/2 duty subject to standard state.
06	Rated Frequency	Hz	2048	
07	Operating Temp.	℃	-30 ~ +75	
08	Storage Temp.	℃	-40 ~ +85	
09	Weight	g	2	

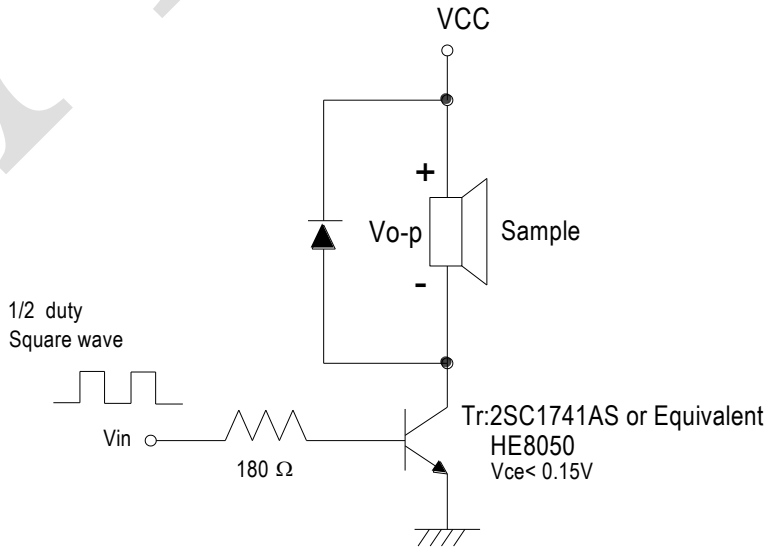
2. MEASURING METHOD

2-1. Test Condition

STANDARD
Temperature : 15 ~ 35℃
Relative humidity : 45% ~ 85%,
Atmospheric pressure: 860mbar to 1060mbar.

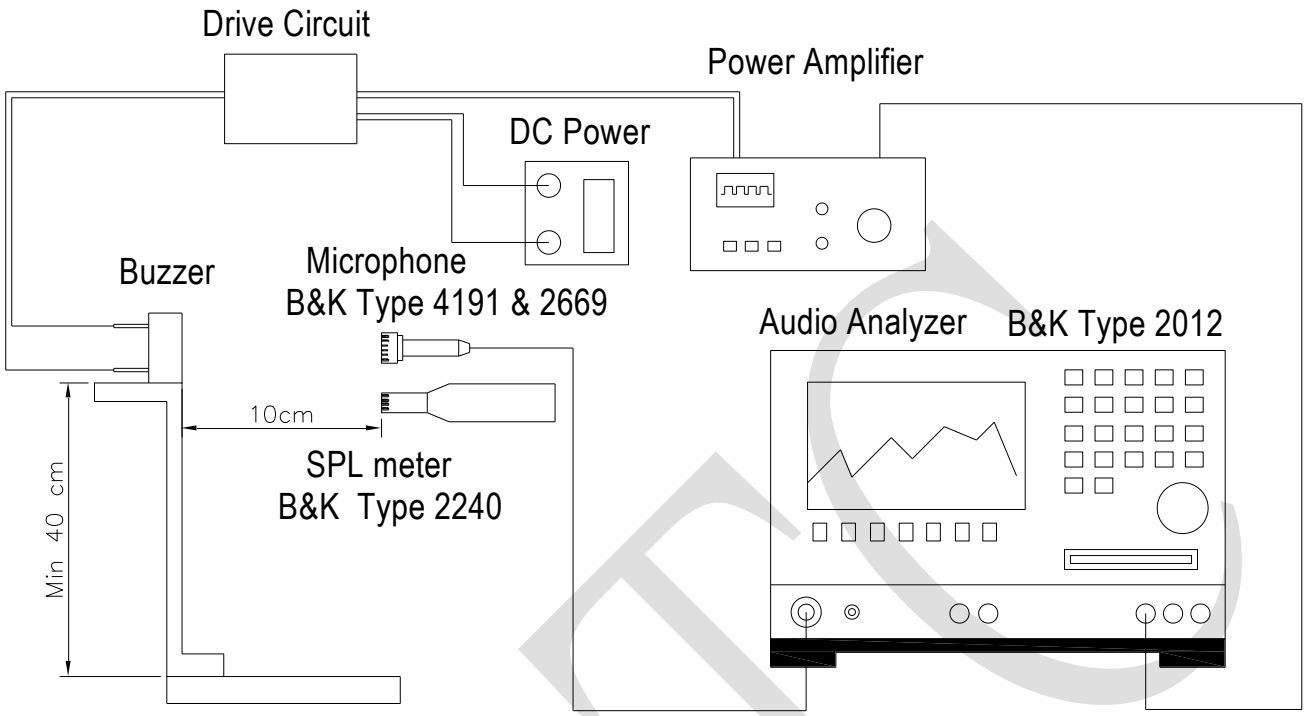
JUDGEMENT
Temperature : 20±3℃
Relative humidity : 60% ~ 70%,
Atmospheric pressure : 860mbar to 1060mbar

2-2. Standard drive circuit

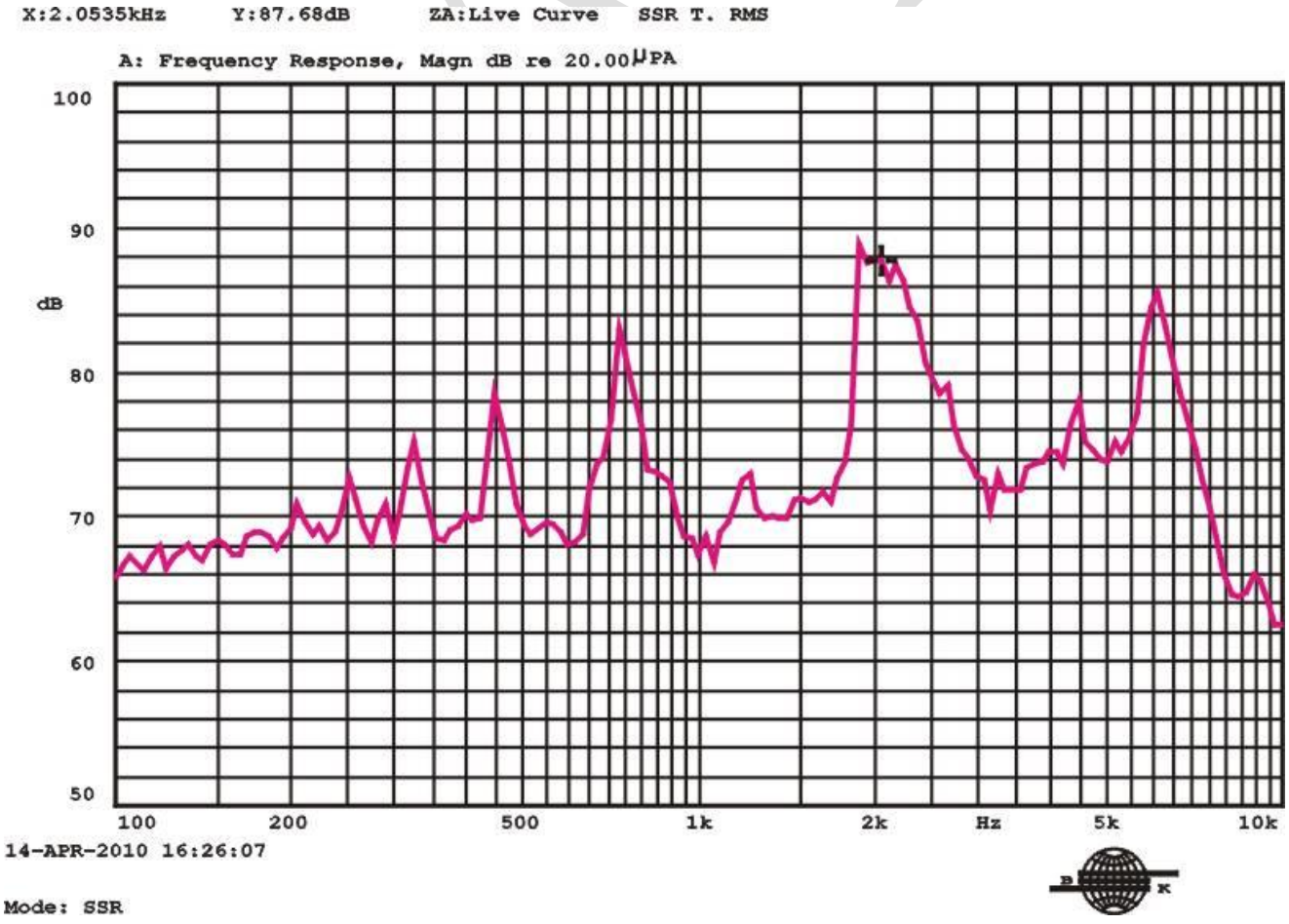


RoHS

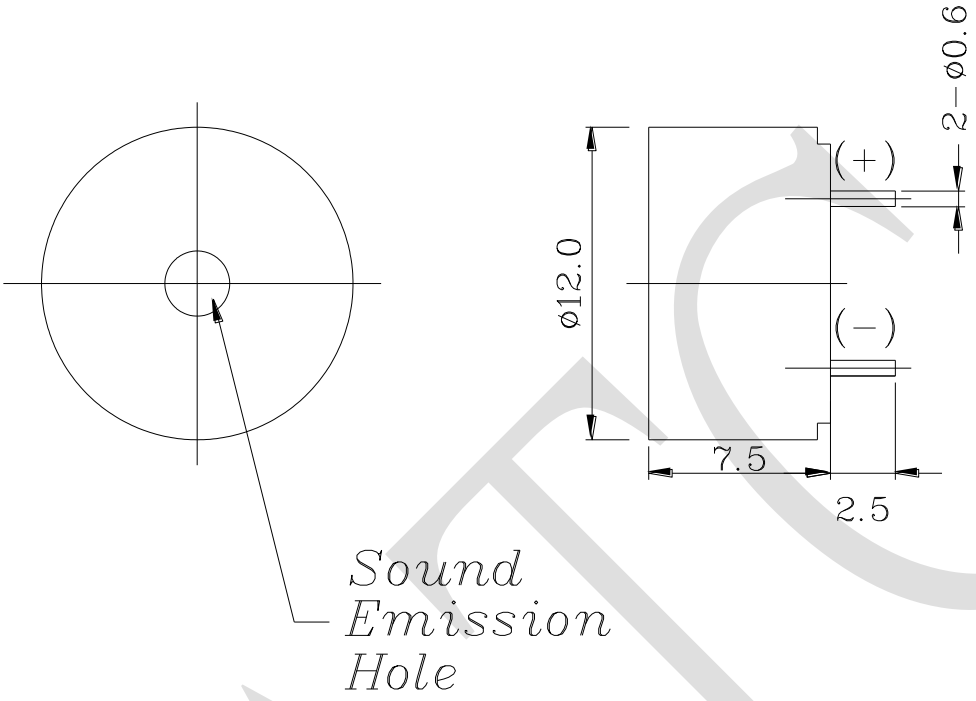
2-3. Standard Test Fixture

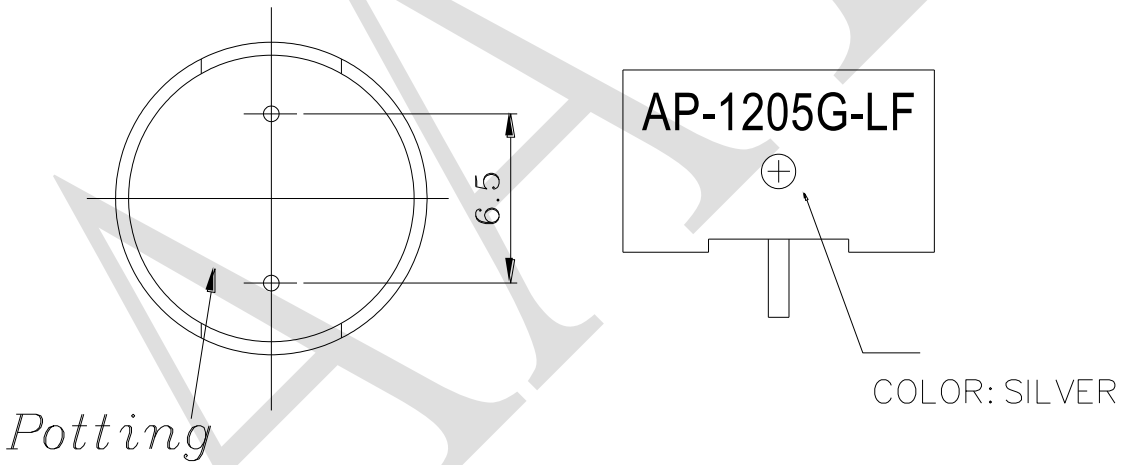


2-4. Frequency Response Curve



REV NO.	REVISION NOTE	APPROVAL	DATE





RoHS

TITLE: ELECTRO MAGNETIC BUZZER		DRAWN: Zack 2012/11/13	SCALE: 4:1	SHEET: 1 of 1
PART NO. AP-1205G-LF	3	DESIGNED: R&D OF AAT	UNITS: mm	
DWG NO. GS-100817		CHECKED:	TOLERANCE ± 0.5	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
	REV	MATERIAL: PBT		

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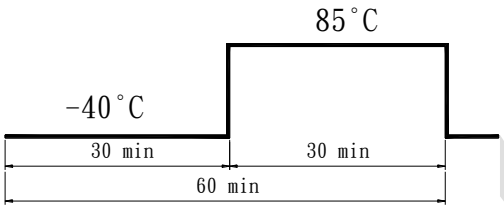
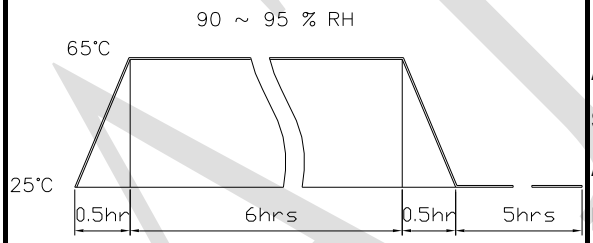
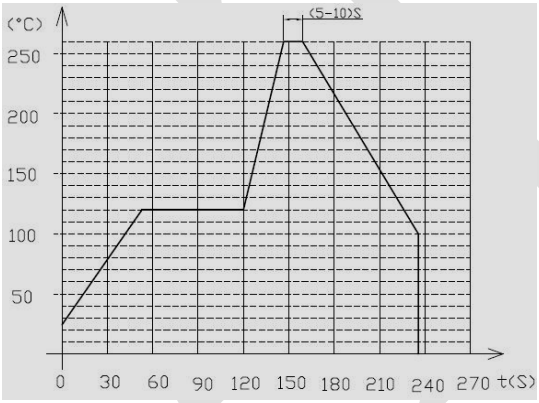
4. RELIABLITY TESTS

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 77dB 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 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.	

Item		Test conditions	Evaluation standard
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)	After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L S.P.L shall be 77dB or more.
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).	
09	**Lead strength**	Pull lead with a force of 10N,on the direction of the lead axis for 10 :10±1 sec	
10	**Solder heat resistance**	Soldering into solder bath : 350±5℃ Soaking time : 3.5±0.5 sec	
11	**Solder ability**	Hand Soldering : **360±5℃ / ≦2 Sec.** Recommend using constant searing-iron	
12	**Soldering profile**	 Soldering into solder bath : 260±5℃/ **≦5 Sec.**	

Note:

1. **After solder bath, the cooling time must be longer than 2hours before function test.**
2. **If you need more information, please contact our technology department, thank you.**