




MESSRS.

SPECIFICATION FOR APPROVAL

承 認 書

Product	ELECTRO MAGNETIC BUZZER(SMD)
Part No.	AD-1305S-GU (RoHS)
Customer Approval	
Customer Part No.	

Approved By	Checked By	Made By
		



Advanced Acoustic Technology Corporation
苙翔科技 // 常州苙翔电子有限公司



ISO 9001 Certified

ISO 14001 Certified

QS9000 Certified

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

Tel: +886-2-8866-5255

Fax: +886-2-8866-5250

大陸總公司 / 中國江蘇省常州市新北區龍虎塘工業園新苑四路 89 號

Tel: +86-519-8511-2382

Fax: +86-519-8510-0908

<http://www.aatc.tw>

EDITION:1.1

1. SPECIFICATION

AD-1305S-GU (RoHS)

ITEM		UNITS	SPECIFICATIONS	CONDITIONS
01	Rated Voltage	V	5	VDC
02	Operating Voltage	V	4 ~ 7	
03	Rated Current	mA (Max)	30	
04	Sound Output (Distance at 10cm)	dBA (Min)	88	
05	Resonant Frequency	Hz	2400~2600	
06	Operating Temp.	°C	-20 ~ +70	
07	Storage Temp.	°C	-30 ~ +80	
08	Weight	g	2	

2. MEASURING METHOD

2-1. Test Condition

STANDARD

Temperature : 15 ~ 35°C

Relative humidity : 25% ~ 85%,

Atmospheric pressure: 860mbar to 1060mbar.

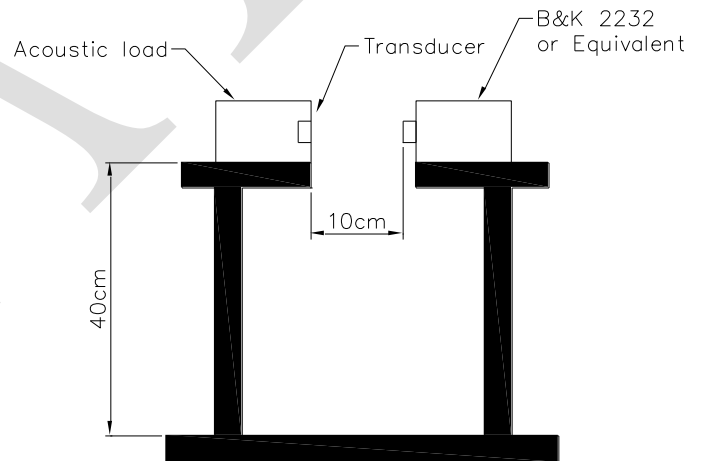
JUDGEMENT

Temperature : 20±3°C

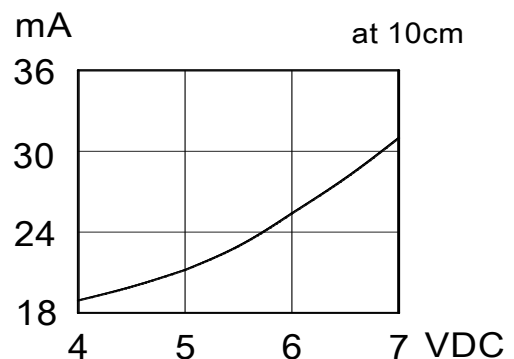
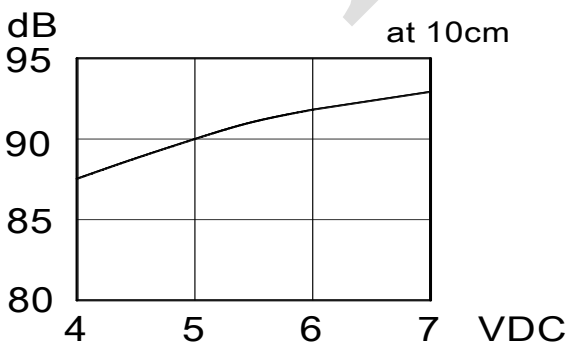
Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

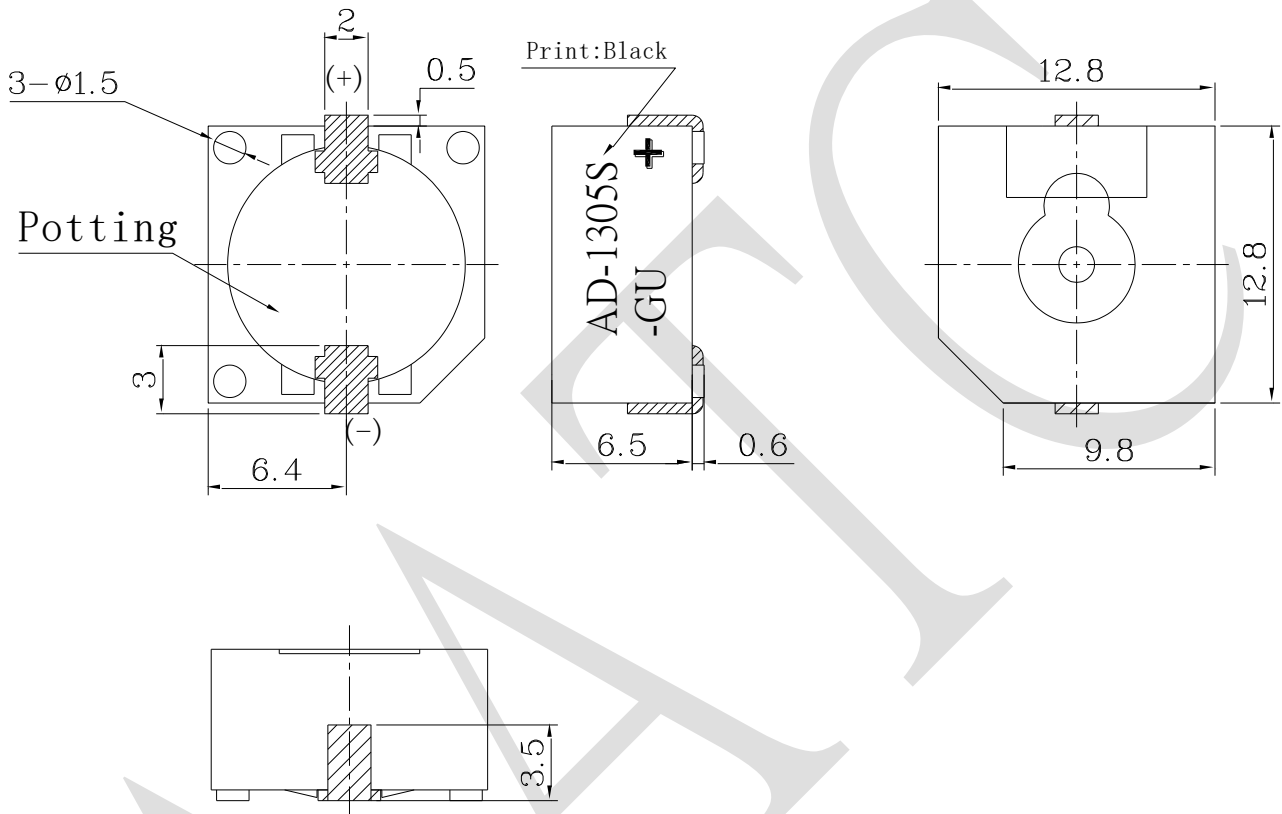
2-2. Standard Test Fixture



2-3. Frequency Response Curve



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



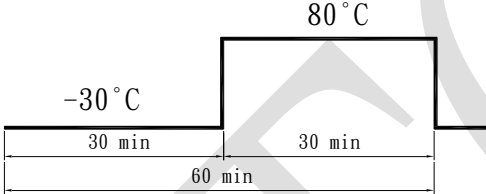
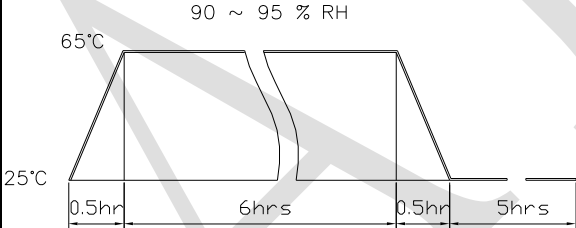
RoHS

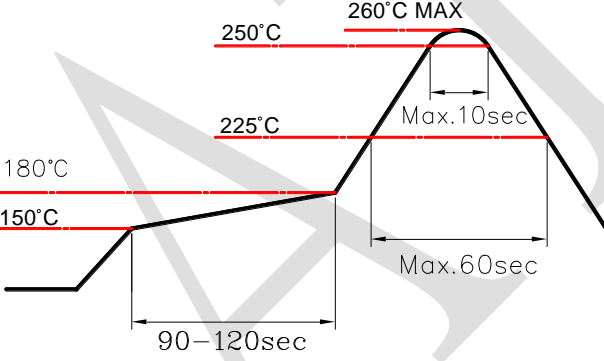
TITLE: SOUND TRANSDUCER (SMD)		DRAWN: Zack	2012/03/08	SCALE: 1:1	SHEET: 1 : 1
PART NO. AD-1305S-GU	1	DESIGNED: R & D OF AAT	UNITS: mm		
DWG NO. FD-12030801		CHECKED:	TOLERANCE ± 0.5		
	REV	APPROVAL:	UNLESS OTHERWISE SPECIFIED:		
		MATERIAL: PPS	ONE PLACE DECIMAL \pm ***		
			TWO PLACE DECIMAL \pm ***		
			THREE PLACE DECIMAL \pm ***		



苙翔科技股份有限公司
ADVANCED ACOUSTIC TECHNOLOGY CORPORATION

4. RELIABILITY TESTS

Item	Test conditions	Evaluation standard
01 High temp. Storage life	The part shall be capable of withstanding a storage Temperature of +80°C for 96 hours.	
02 Low temp. Storage life	The part shall be capable of withstanding a storage Temperature of -30°C for 96 hours.	
03 Temp. cycle	<p>The part shall be subjected 10 cycles. One cycle shall of ;</p>  <p>The diagram shows a temperature cycle with two horizontal segments. The first segment is at -30°C and is labeled '30 min'. The second segment is at 80°C and is also labeled '30 min'. A bracket below the entire cycle is labeled '60 min'.</p>	
04 Temp./Humidity cycle	<p>The part shall be subjected 10 cycles. One cycle shall be 12 hours and consist of;</p>  <p>The diagram shows a temperature and humidity cycle. It starts with a ramp up from 25°C to 65°C over 0.5hr. It then stays at 65°C for 6hrs, with a note '90 ~ 95 % RH' above it. It then ramps down from 65°C to 25°C over 0.5hr, and finally stays at 25°C for 5hrs.</p>	<p>1. After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L</p> <p>2. S.P.L shall be ± 7 dB.</p>
05 Operating life	<p>Rated Voltage, Frequency applied.</p> <ol style="list-style-type: none"> 1. Ordinary temperature The part shall be subjected to 1000 hours at room temperature ($25 \pm 10^\circ\text{C}$) 1. High temperature The part shall be subjected to 500 hours at 70°C 2. Low temperature The part shall be subjected to 500 hours at -20°C 	
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)	
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 ability	Hand Soldering : $360\pm 5^{\circ}\text{C}$ / ≤ 3 Sec. Recommend using constant searing-iron	1. After the test the part shall meet specifications without
11 Soldering profile	Soldering into solder bath: 	Any degradation in appearance and performance except S.P.L 2. S.P.L shall be ± 7 dB.
12 Wash ability	Solvent : deionizer water Solvent temp. : $55\pm 5^{\circ}\text{C}$ Soaking time : 5 ± 0.5 min.	

Note:

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