

MESSRS. *Ivent Solutions Limited*

SPECIFICATION FOR APPROVAL

承 認 書

Product	ELECTRO MAGNETIC BUZZER SELF(SMD)
Part No.	AD-1005S-BM1
Customer Approval	
Customer Part No.	

Approved By	Checked By	Made By
		



Advanced Acoustic Technology Corporation
昊宸股份有限公司 // 常州笠翔电子有限公司



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.com.tw>

www.aatc.com.cn

EDITION:1.1

RoHS

1. SPECIFICATION

AD-1005S-BM1

ITEM		UNITS	SPECIFICATIONS	CONDITIONS
01	Rated Voltage	V	5	
02	Operating Voltage	V	3 ~ 8	
03	Rated Current	mA (Max)	30	Rated Voltage
04	Sound pressure level	dBA (Min)	80	Distance at 10cm
05	Resonant Frequency	Hz	2700± 200	
06	Operating Temp.	°C	-20 ~ +70	
07	Storage Temp.	°C	-30 ~ +85	
08	Weight	g	1.0	

2. MEASURING METHOD

2-1. Test Condition

STANDARD

Temperature : 15 ~ 35°C

Relative humidity : 25% ~ 85%,

Atmospheric pressure: 860mbar to 1060mbar.

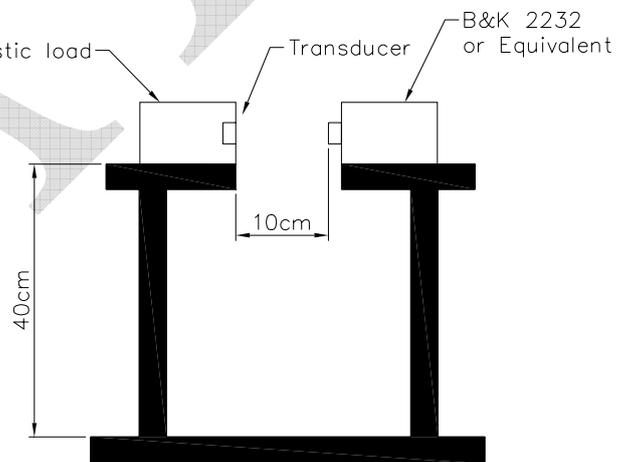
JUDGEMENT

Temperature : 20±3°C

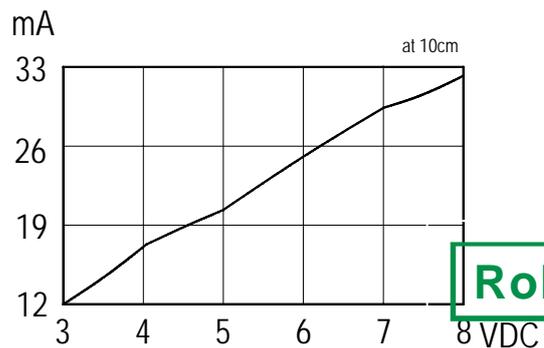
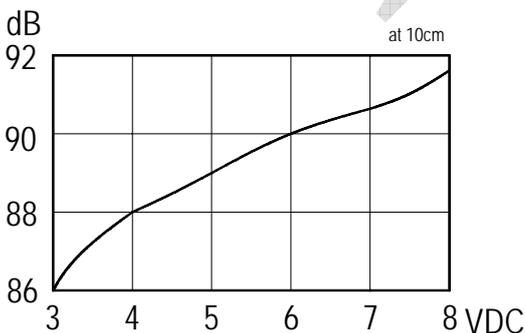
Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

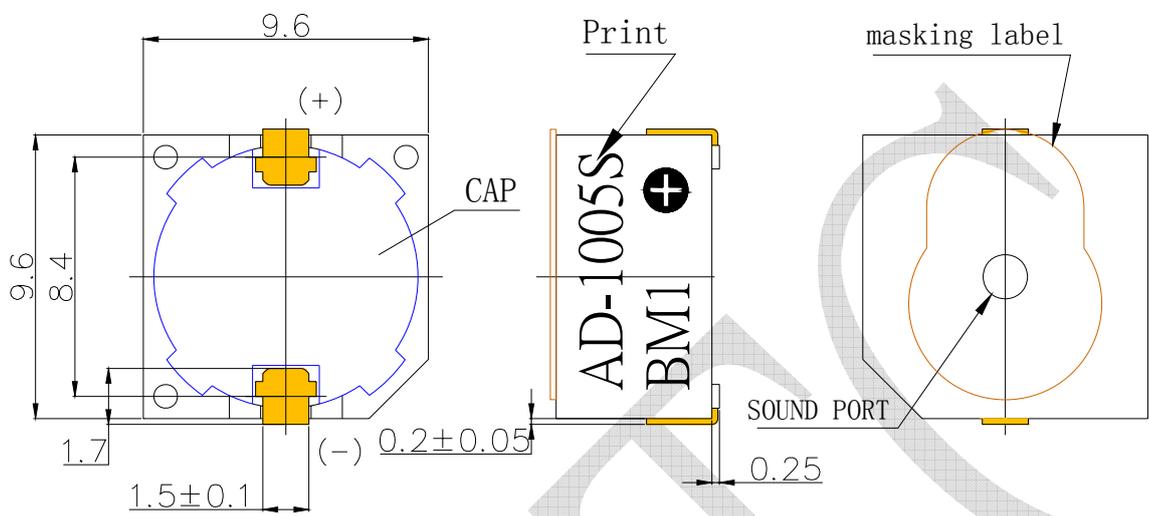
2-2. Standard Test Fixture



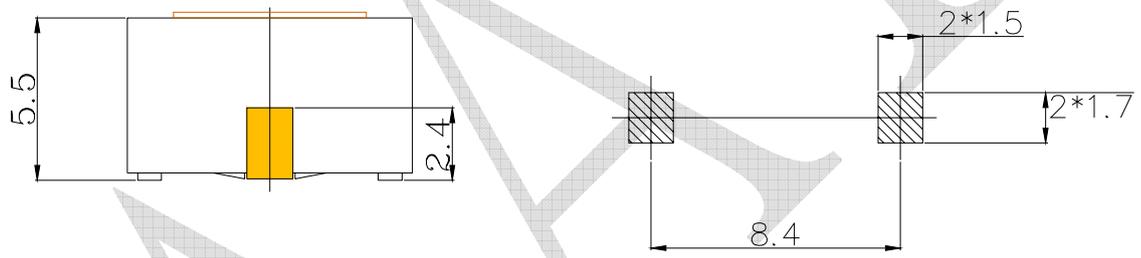
2-3. Frequency Response Curve



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



RECOMMENDED P.C.B LAYOUT



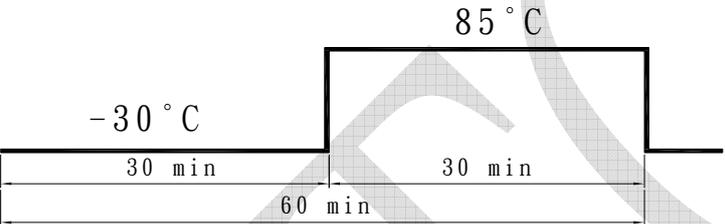
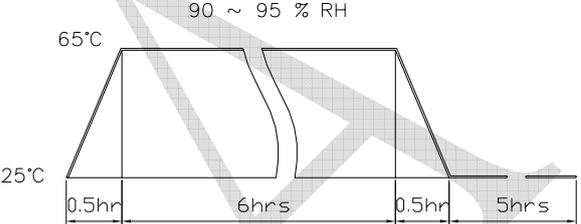
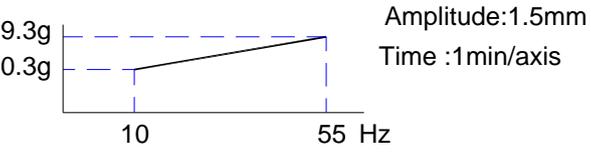
RoHS

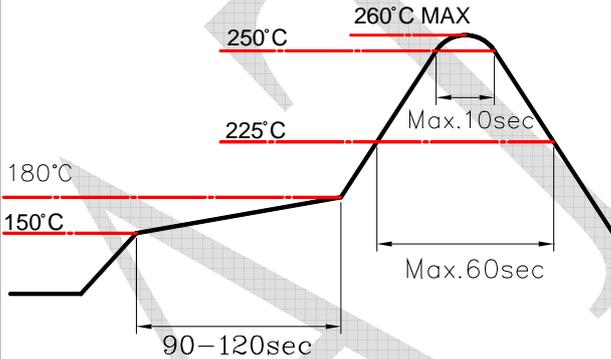
TITLE: SOUND TRANSDUCER (SMD)		DRAWN: <i>Jerry</i> 2012/09/13	SCALE: 1:1	SHEET: 1 : 1
PART NO. AD-1005S-BM1		DESIGNED: R & D OF AAT	UNITS: mm	
DWG NO. FDM-2865 SMD-096055F-05027DJ-1	1 REV	CHECKED:	TOLERANCE ± 0.5	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
		MATERIAL: PPS		



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 +85°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> 	
04 Temp./Humidity cycle	<p>The part shall be subjected 10 cycles. One cycle shall be 12 hours and consist of;</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"> Ordinary temperature The part shall be subjected to 1000 hours at room temperature ($25 \pm 10^\circ\text{C}$) High temperature The part shall be subjected to 500 hours at 70°C Low temperature The part shall be subjected to 500 hours at -20°C 	
06 Vibration	 <p>Make this test for the directions of X, Y, Z for 2 hours each (total 6 hours).</p>	

Item	Test conditions	Evaluation standard	
07	Free drop	The part only shall be dropped from a height of 75cm onto a 40mm thick wooden board 1 times in 3 Direction each (X.Y.Z). (a total of 3 times).	
08	Free drop (Packing)	The part only shall be dropped from a height of 100cm onto a 10mm thick wooden board 1 times in 3 axes (X.Y.Z). (a total of 3 times).	
09	Solder ability	Hand Soldering : $360\pm 5^{\circ}\text{C}$ / ≤ 2 Sec. Recommend using constant searing-iron	
10	Soldering profile	Soldering into solder bath: 	1. After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L 2. S.P.L shall be ± 7 dB.
11	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.