

MESSRS. 客戶公司行號

SPECIFICATION FOR APPROVAL

承 認 書

Product	ELECTRO MAGNETIC BUZZER(SMD)
Part No.	AD-8504-CQ14
Customer Approval	
Customer Part No.	

Approved By	Checked By	Made By
 <p>工程 部 JASON CHEN MAY-23-2013</p>	 <p>工程 部 ZACK GUO MAY-23-2013</p>	 <p>工程 部 JERRY CHEN MAY-23-2013</p>



Advanced Acoustic Technology Corporation

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1. SPECIFICATION

AD-8504-CQ14

ITEM		UNITS	SPECIFICATIONS	CONDITIONS
01	Rated Voltage	V	3.6	
02	Operating Voltage	V	3 ~ 5	
03	Consumption Current	mA (Max)	Mean : 100	Standard state, standard drive circuit. Rated voltage, rated frequency, Square wave 1/2 duty.
			Peak : 300	
04	Sound pressure level (Distance at 10cm)	dB(A) (Min)	82	
05	Direct Current Resistance	Ω	16 ± 3	
06	Rated Frequency	Hz	2730	
07	Operating Temp.	$^{\circ}\text{C}$	-30 ~ +70	
08	Storage Temp.	$^{\circ}\text{C}$	-40 ~ +85	
09	Weight	g	0.4	

2. MEASURING METHOD

2-1. Test Condition

STANDARD

Temperature : 15 ~ 35 $^{\circ}\text{C}$

Relative humidity : 45% ~ 85%,

Atmospheric pressure: 860mbar to 1060mbar.

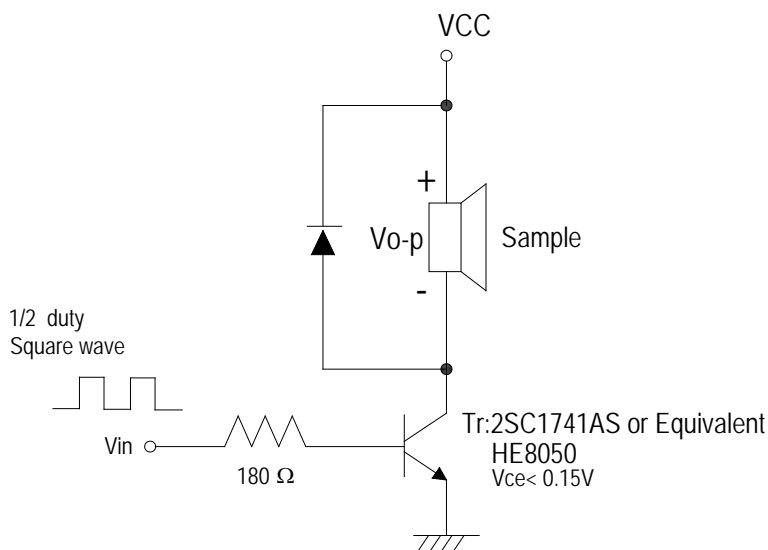
JUDGEMENT

Temperature : 20 \pm 3 $^{\circ}\text{C}$

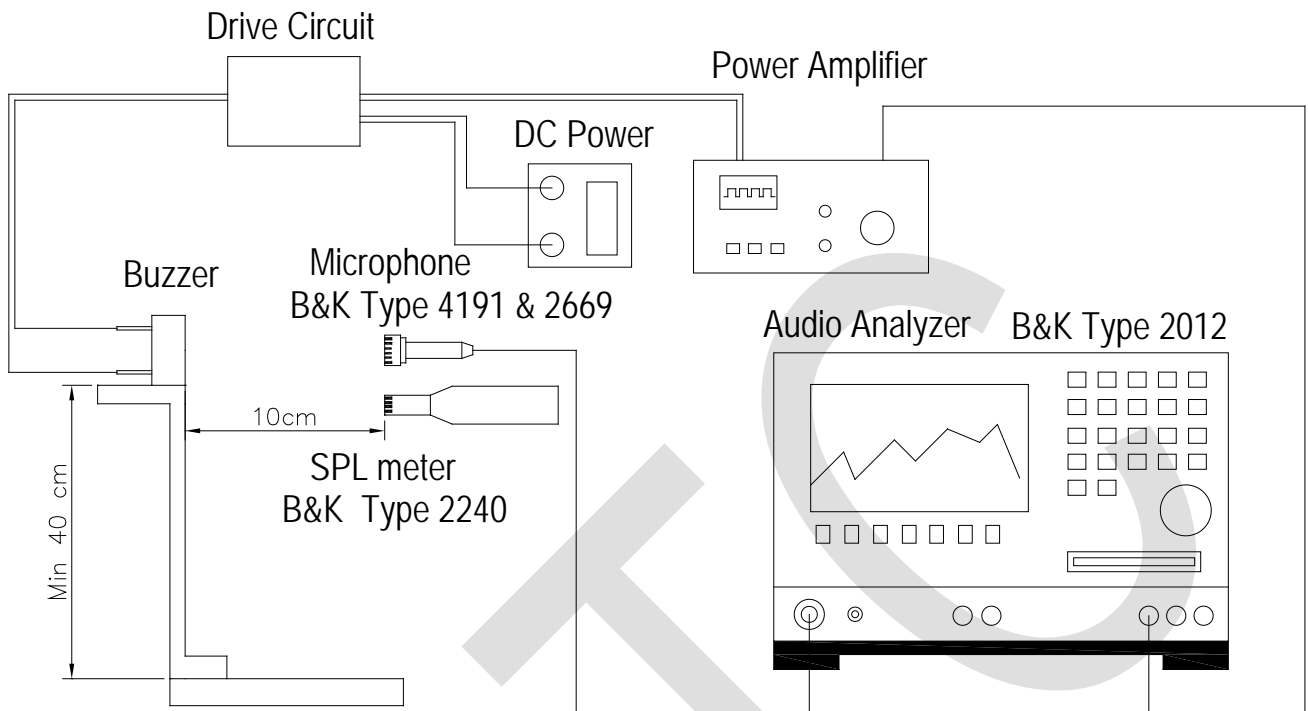
Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

2-2. Standard drive circuit



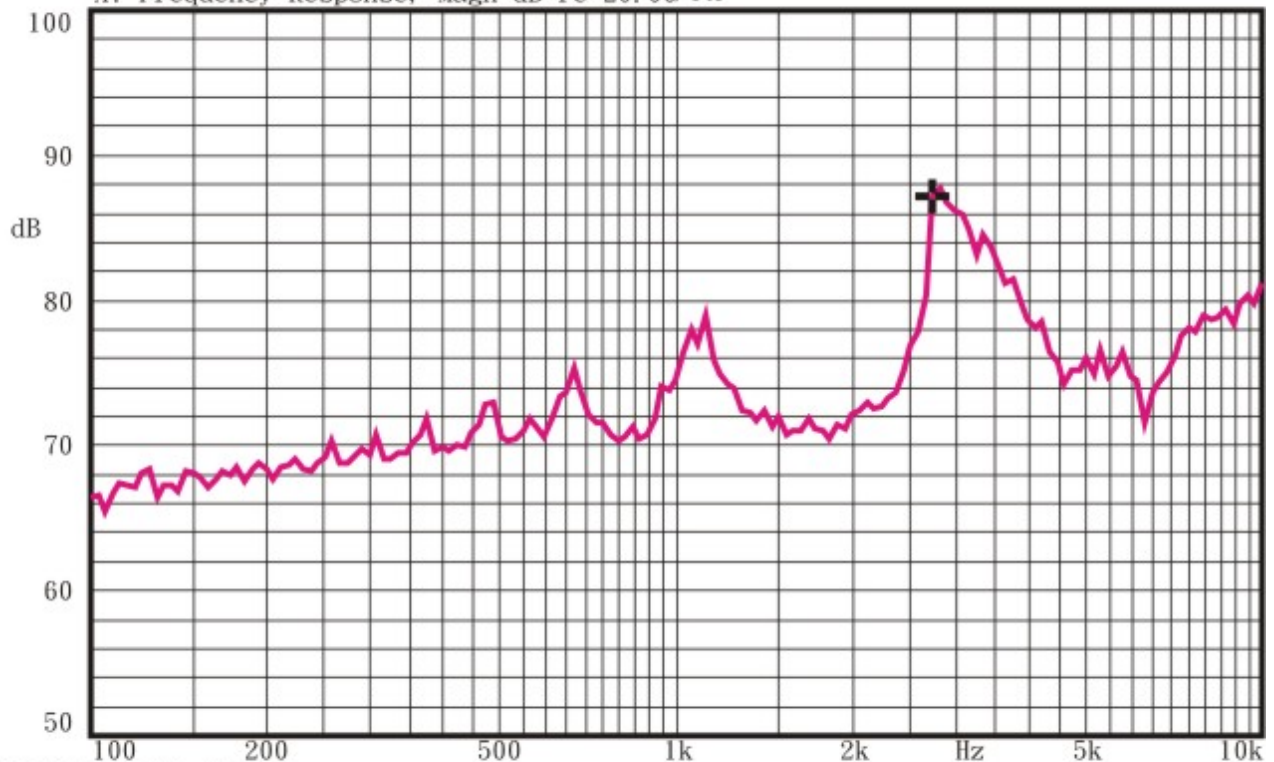
2-3. Standard Test Fixture



2-4. Frequency Response Curve

X:2.7384kHz Y:87.12dB ZA:Live Curve SSR T. RMS

A: Frequency Response, Magn dB re 20.00 μ PA

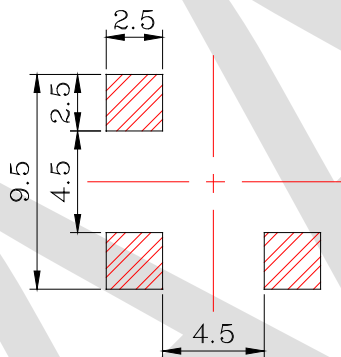
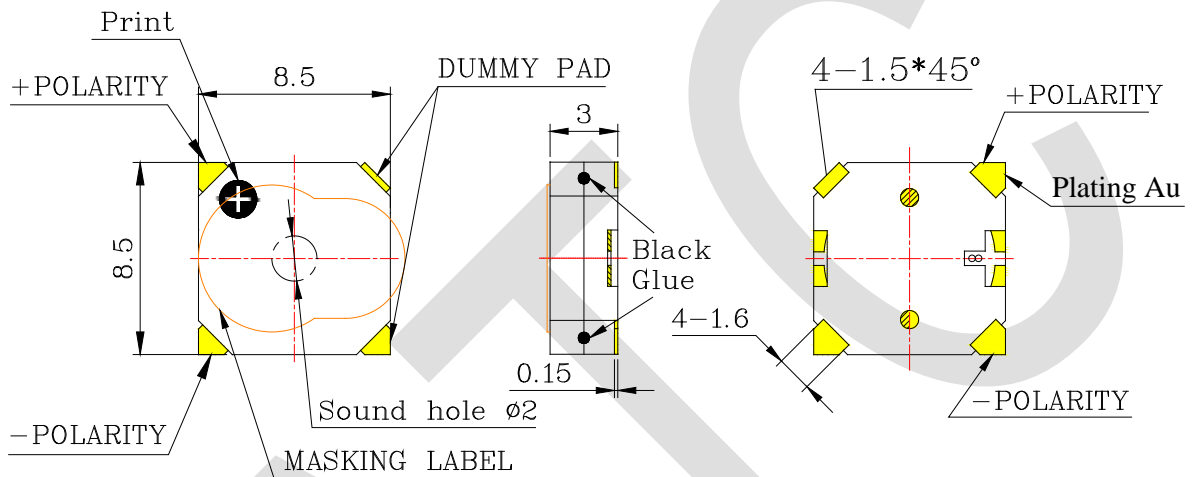


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Mode: SSR



REV NO.	REVISION NOTE	APPROVAL	DATE
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RECOMMEND P.C.B LAYOUT

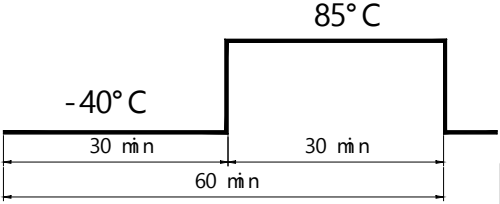
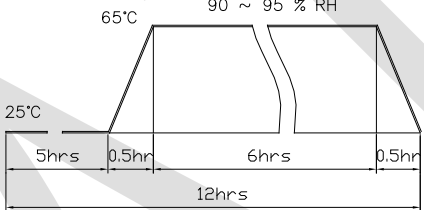
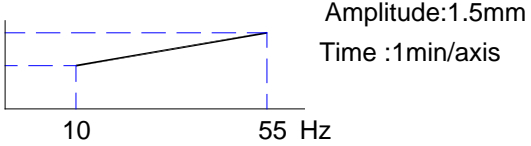
RoHS

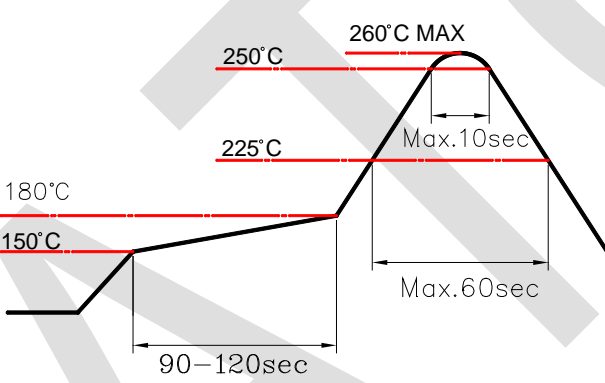
TITLE: SOUND TRANSDUCER (SMD)		DRAWN: <i>Jerry</i> 2013/05/23	SCALE: 1:1	SHEET: 1 : 1
PART NO. AD-8504-CQ14		DESIGNED: R & D OF AAT	UNITS: mm	
DWG NO. JTG8503A16		CHECKED:	TOLERANCE ± 0.5	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
REV 1		MATERIAL: LCP		



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 -40°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 of;</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 ±10°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 -30°C 	<ol style="list-style-type: none"> After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L S.P.L shall be ±7 dB.
06 Vibration	 <p>Amplitude:1.5mm Time :1min/axis</p> <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 heat resistance	<p>1.Hand Soldering : $360\pm 10^{\circ}\text{C}$, 2 ± 0.5 Sec. Recommend using constant searing-iron</p> <p>2.Soldering into solder bath:$260\pm 5^{\circ}\text{C}$, 5~10 Sec. Soldering profile.</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>
10	Wash ability	<p>Solvent : deionizer water</p> <p>Solvent temp. : $55\pm 5^{\circ}\text{C}$</p> <p>Soaking time : 5 ± 0.5 min.</p> <p>After the washing process, be sure to tear off the label.</p>	

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.