




MESSRS. *Ivent Solutions Limited*

SPECIFICATION FOR APPROVAL

承 認 書

Product	SMD PIEZO BUZZER
Part No.	APD-1205-PQ1
Customer Approval	
Customer Part No.	

Approved By	Checked By	Made By
 <p>工程 部 JASON CHEN MAR-14-2013</p>	 <p>工程 部 JERRY CHEN MAR-14-2013</p>	 <p>工程 部 ZACK GUO MAR-14-2013</p>



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

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EDITION:1.1

RoHS



ADVANCED ACOUSTIC TECHNOLOGY CORP.

昊宸股份有限公司

REVISIONS			
PRODUCT		SMD PIEZO BUZZER	
PART NO.		APD-1603-KP2-LF	
REV.	REVISER	DATE	DESCRIPTION
1	ZACK	2012-04-06	Creating new drawing SPEC.
2	JERRY	2013-03-14	更新公司名稱“昊宸股份有限公司”

RoHS

1. SPECIFICATION

APD-1205-PQ1

ITEM		UNITS	SPECIFICATIONS	CONDITIONS
01	Rated Voltage	V	5	Vp-p (Square Wave)
02	Operating Voltage	V	1~ 25	
03	Rated Current	mA(Max)	5	Rated Voltage
04	Sound pressure level (Distance at 10cm)	dBA(Min)	75	Rated Voltage Rated Frequency
05	Resonant Frequency	Hz	4000± 500	Rated Voltage
06	Capacitance	pF	16000±30%	At 100 Hz
07	Operating Temp.	°C	-20 ~ +70	
08	Storage Temp.	°C	-30 ~ +80	
09	Weight	g	0.4	
10	Housing Material		LCP	

2. MEASURING METHOD

2-1. Test Condition

STANDARD

Temperature : 15 ~ 35°C

Relative humidity: 45% ~ 85%,

Atmospheric pressure: 860mbar to 1060mbar.

JUDGEMENT

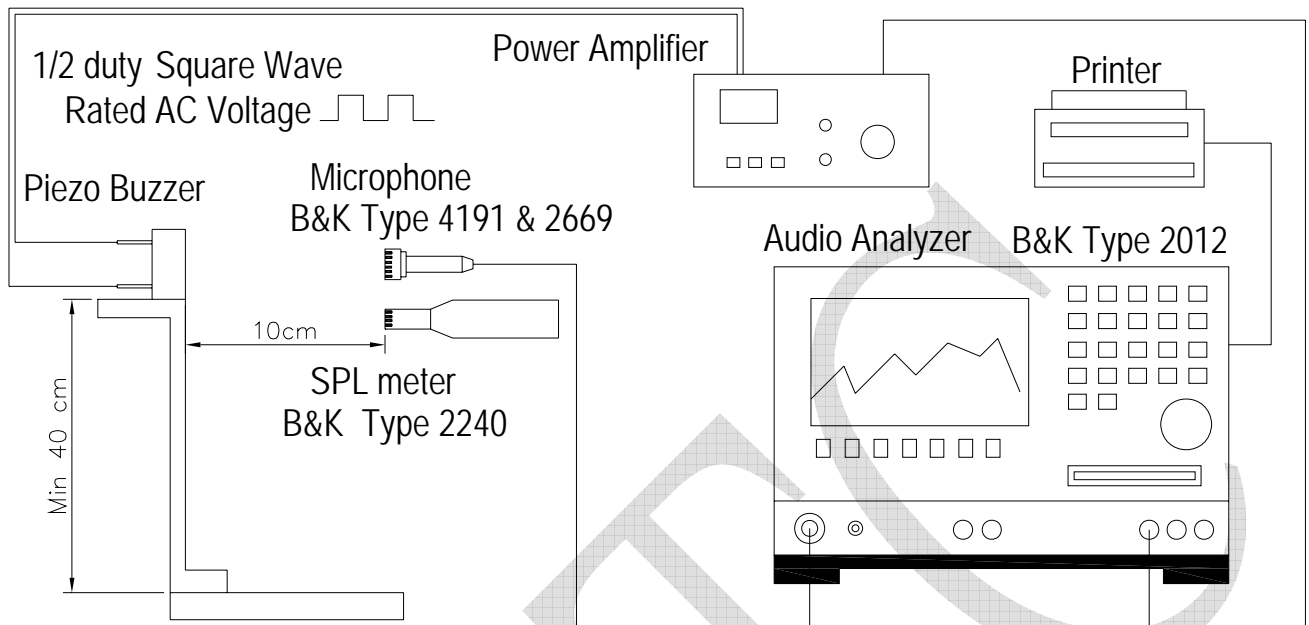
Temperature : 20±3°C

Relative humidity: 60% ~ 70%,

Atmospheric pressure: 860mbar to 1060mbar

RoHS

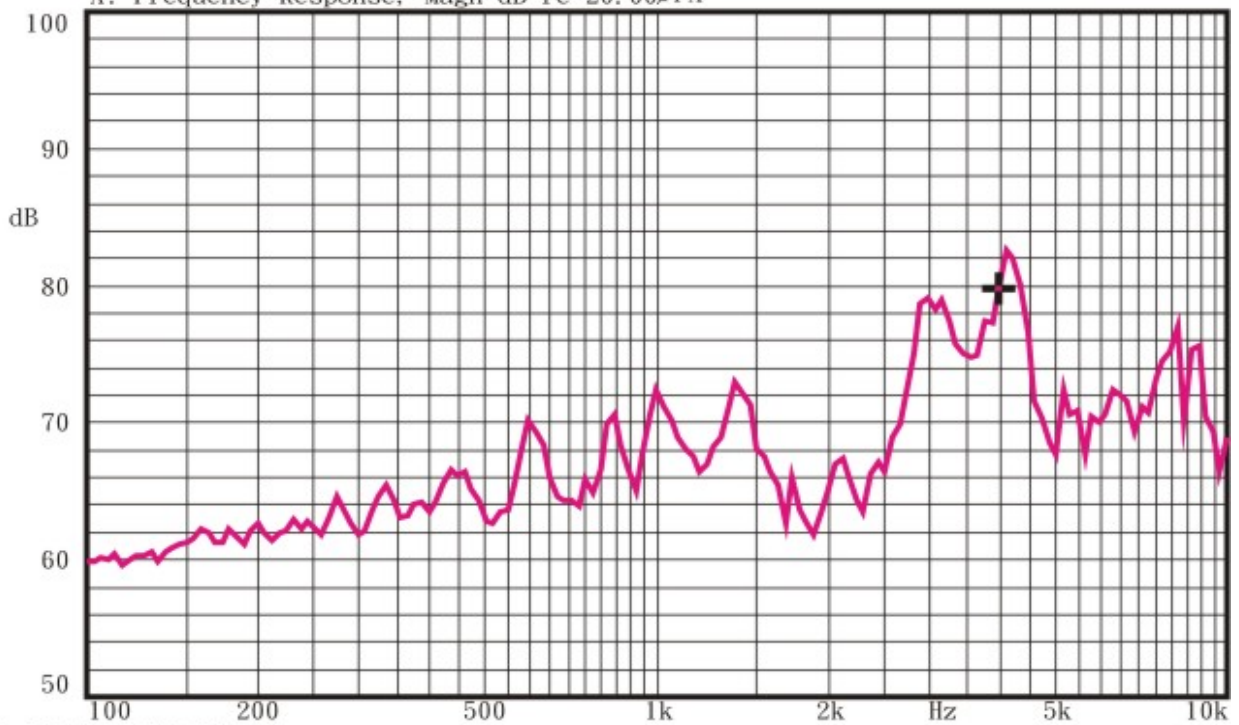
2-2. Standard Test Fixture



2-3. Frequency Response Curve

X: 3.9811kHz Y: 79.78dB ZA: Live Curve SSR T. RMS

A: Frequency Response, Magn dB re 20.00µPA

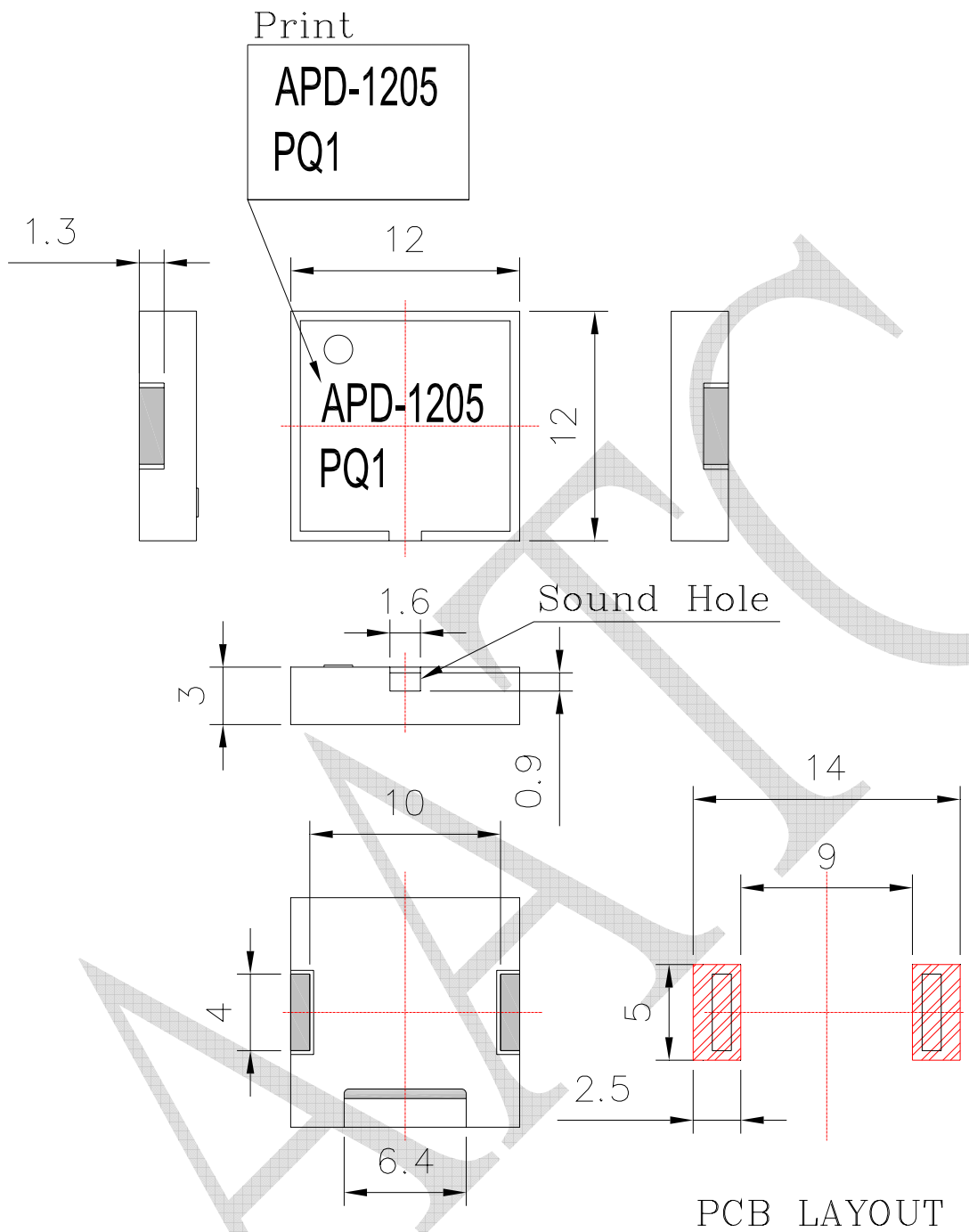


05-APR-2012 17:17:10

Mode: SSR



REV NO.	REVISION NOTE	APPROVAL	DATE
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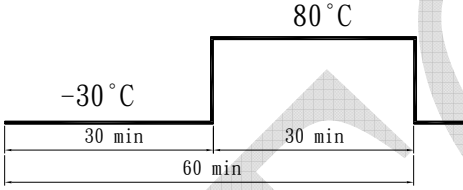
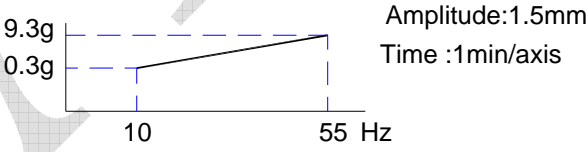
RoHS

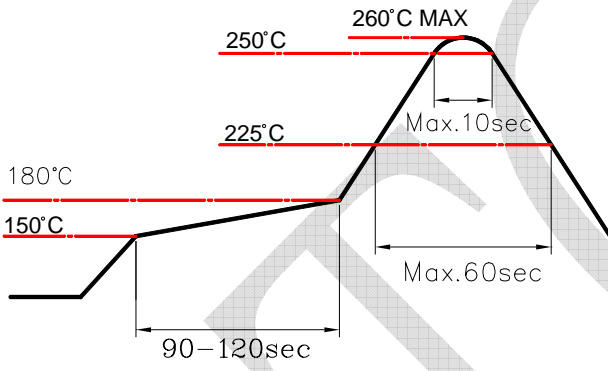
TITLE: SMD PIEZO BUZZER		DRAWN: Jerry 2013/03/14	SCALE: 2:1	SHEET: 1 of 1
PART NO. APD-1205-PQ1	2	DESIGNED: R&D OF AAT	UNITS: mm	
DWG NO. SMD-120030H-05040T		CHECKED:	TOLERANCE ± 0.5	
REV		APPROVAL:	UNLESS OTHERWISE SPECIFIED:	
		MATERIAL: LCP	ONE PLACE DECIMAL ± ***	
			TWO PLACE DECIMAL ± ***	
			THREE PLACE DECIMAL ± ***	



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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 120 hours.	
02 Low temp. Storage life	The part shall be capable of withstanding a storage Temperature of -30°C for 120 hours.	
03 Temp. cycle	<p>The part shall be subjected 10 cycles. One cycle shall of ;</p> 	
04 Temp./Humidity cycle	The part shall be subjected with 90~95% R.H at +40°C for 96 hours.	
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 	<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>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 (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).	
08 Solder ability	Hand Soldering : $360\pm 5^{\circ}\text{C}$ / ≤ 2 Sec. Recommend using constant searing-iron	
09 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.

Note:

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

CAUTION : WAVE SOLDERING AND WASH NOT ALLOWED!

警告：不可使用於錫爐及水洗製程!