

# *MESSRS.*

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## SPECIFICATION FOR APPROVAL

## 承 認 書

Product	MAGNETIC BUZZER Pb < 100 ppm Cd < 5 ppm
Part No.	AC-1201A-LF
Customer Approval	

Approved By	Checked By	Made By
工程 部 王台平 JUN-14-2004	工程 部 劉民祥 JUN-14-2004	工程 部 許俊程 JUN-14-2004



**ADVANCED ACOUSTIC TECHNOLOGY CORP.**

**苙 翔 科 技 股 份 有 限 公 司**



ISO 9001 Certified

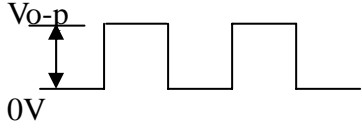
2F, No.207, Sec. 6, Chung Shan N. Rd., Taipei, Taiwan, R.O.C.

Tel: +886-2-88665255

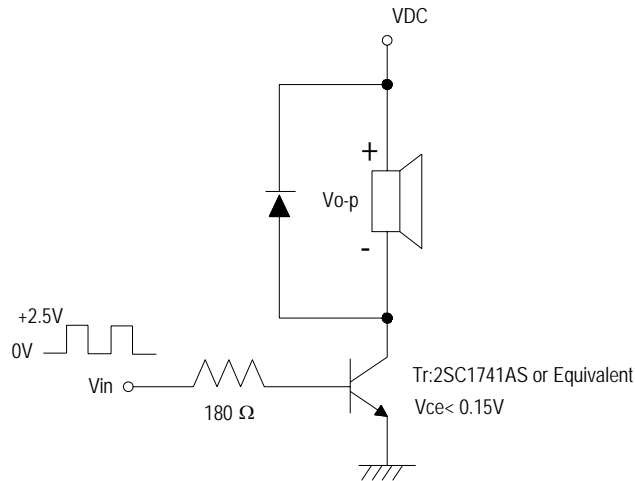
Fax: +886-2-88665250

E-mail: [aat\\_mail@seed.net.tw](mailto:aat_mail@seed.net.tw)

# AC-1201A-LF

Items	Units	Specifications	Conditions
01	Pb,Cd Content	ppm Pb < 100 ppm Cd < 5ppm	Test report by SGS No : 31241,31242,31243,31244
02	Rated Voltage	Vo-p 1.5	
03	Operating Voltage	Vo-p 1.0~2.0	
04	Mean Current	mA (Max) 40	Applying rated voltage, rated frequency Square wave,1/2 duty subject to standard state.
05	Direct Current Resistance	Ohm 16±2.4	
06	Sound Output	dBa (min) 85	Distance at 10cm,applying rated voltage, rated frequency square wave, 1/2duty subject to standard state.
07	Rated Frequency	Hz 2800±200	
08	Operating Temp.	°C -40 ~ +85	
09	Storage Temp.	°C -50 ~ +95	
10	Weight	Gram 2.0	

※Standard Drive Circuit:



※Standard Conditions:

Temperature 15 ~ 35°C

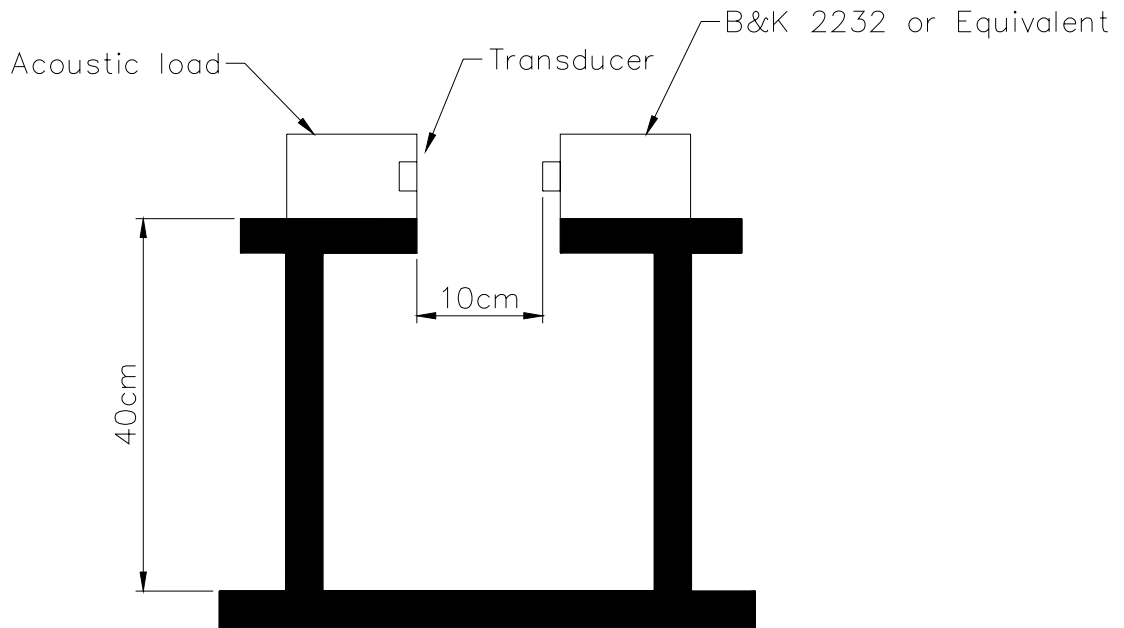
Humidity 25 ~ 80 %

Air pressure 860 ~ 1060 HPa.

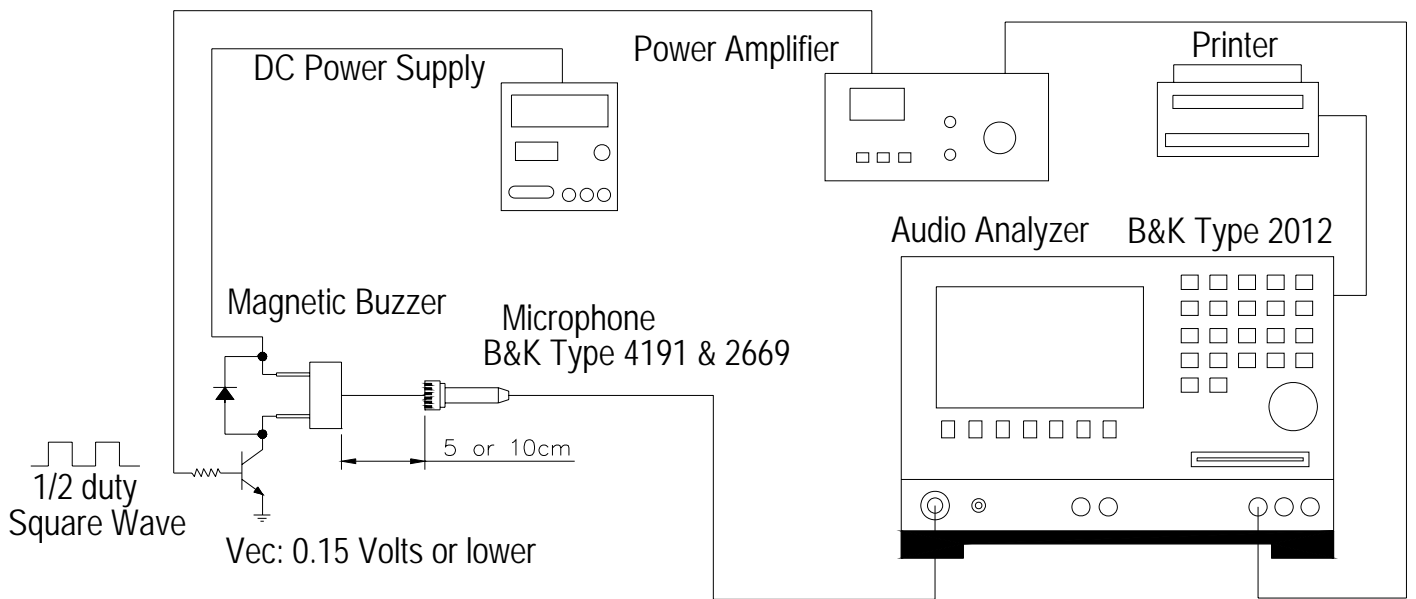
If the result is doubtful, should retested with the conditions below: Temp. 20±2°C ,Humidity 60 ~ 70 %, Air pressure 860 ~ 1060 HPa.

※Note: As this product is not protected from foreign material entering, please make sure that any foreign materials(e.g. magnetic powder, washing solved, flux, corrosive gas)do not enter this product in your production processes. The functional degradation(e.g. SPL down)may occur if foreign material enter it.

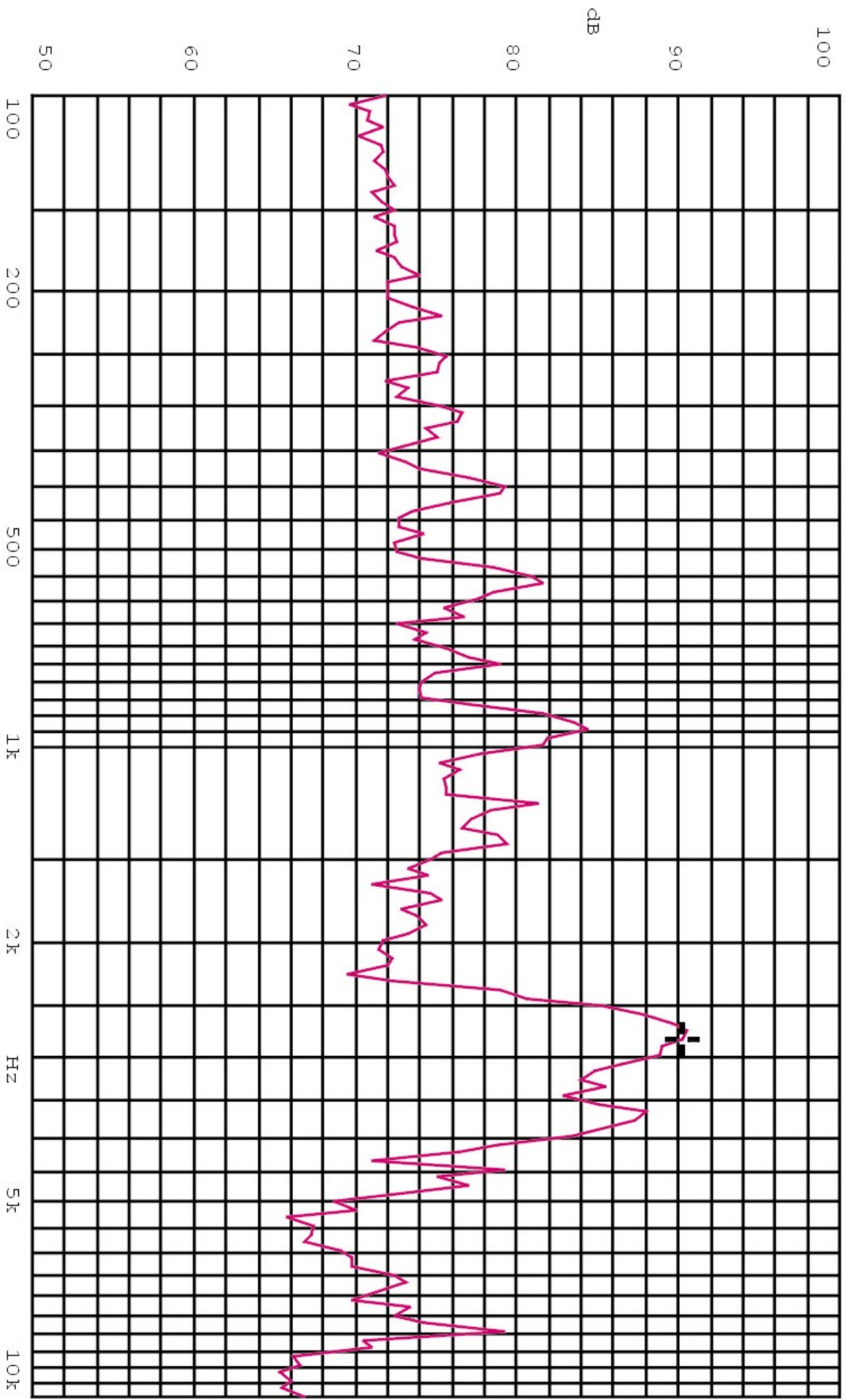
# STANDARD TEST FIXTURE



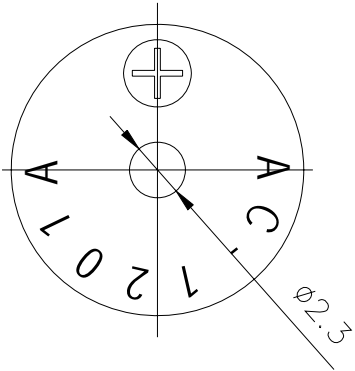
# Standard test condition of magnetic buzzer



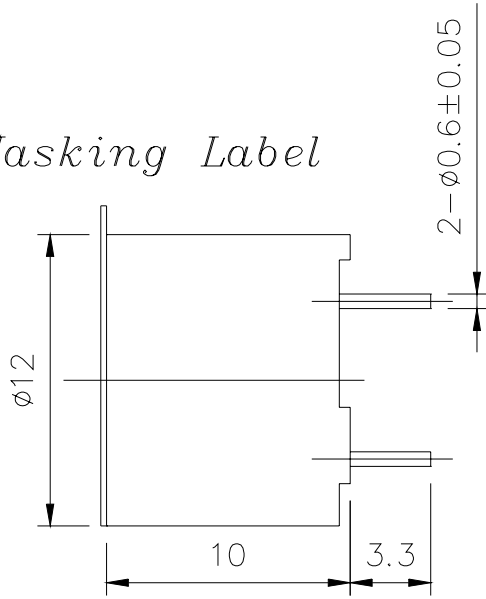
μ: Frequency Response, Magn dB re 20.00 PA



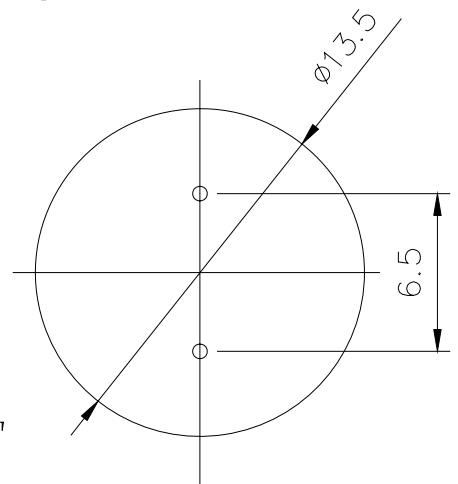
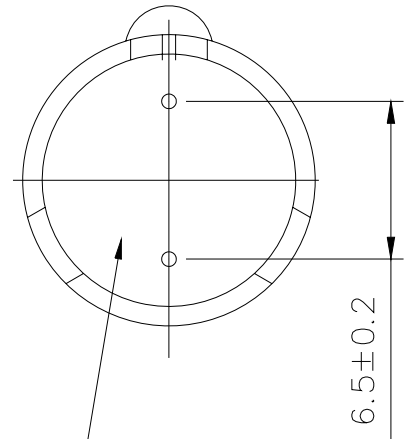
WAVE SOLDER AND WASH ALLOWED



Masking Label



Potting



PCB LAYOUT

TITLE: SOUND TRANSDUCER DIMENSIONS		DRAWN: JOYEN 06/14/2004	SCALE: 3:1	SHEET: 1 OF 1
PART NO. AC-1201A-LF		DESIGNED: R&D OF AAT	UNITS: mm	
DWG NO. DTE-1134		CHECKED:	TOLERANCE $\pm 0.5$	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL $\pm$ *** TWO PLACE DECIMAL $\pm$ *** THREE PLACE DECIMAL $\pm$ ***	
REV 1		MATERIAL: PBT		

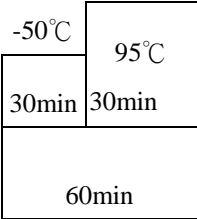
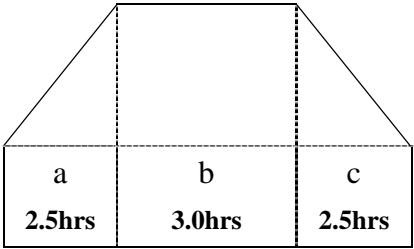


苙翔科技股份有限公司  
ADVANCED ACOUSTIC TECHNOLOGY CORPORATION

# ADVANCED ACOUSTIC TECHNOLOGY CORP.

## 苙翔科技股份有限公司

### AC-1201A-LF RELIABILITY TEST

Item	Test conditions	Evaluation standard
01 <b>High temp. Storage life</b>	The part shall be capable of withstanding a storage Temperature of 95°C 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 <b>Low temp. Storage life</b>	The part shall be capable of withstanding a storage Temperature of -50°C for 96 hours.	
03 <b>Temp.cycle</b>	The part shall be subjected 10 cycles. One cycle shall consist of; <div style="text-align: center; margin: 10px 0;">  <pre>                     graph TD                     A[60min] --- B[30min]                     A --- C[30min]                     B --- D[-50°C]                     C --- E[95°C]                     </pre> </div>	
04 <b>Temp./Humidity cycle</b>	The part shall be subjected 10 cycles. One cycle shall be 8 hours and consist of; <div style="text-align: center; margin: 10px 0;">  <pre>                     graph TD                     A[2.5hrs] --- B[3.0hrs] --- C[2.5hrs]                     A --- D[25°C]                     B --- E[95°C]                     C --- D                     </pre> <p style="text-align: center;">a,b:90~98%RH c :80~98%RH</p> </div>	

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### AC-1201A-LF RELIABILITY TEST

Item	Test conditions	Evaluation standard
05 <b>Vibration</b>	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.	After the test the part shall meet specifications without Any degradation and performance except S.P.L S.P.L shall be 77dB or more.
06 <b>Fixed drop</b>	The part shall be mounted on 100g jig(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)	
07 <b>Free drop</b>	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).	
08 <b>Operating life</b>	1. Ordinary temperature The part shall be subjected to 1000 hours at room temperature (25 ±10°C)with 1.5V,2800Hz applied. 2. High temperature The part shall be subjected to 500 hours at 85°C with 1.5V, 2800Hz applied. 3. Low temperature The part shall be subjected to 500 hours at -40°C with 1.5V, 2800Hz applied.	