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# SPECIFICATION FOR APPROVAL

Product	MAGNETIC BUZZER
Part No.	AC-1403G
Customer Approval	

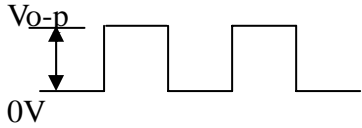
Approved By	Checked By	Made By



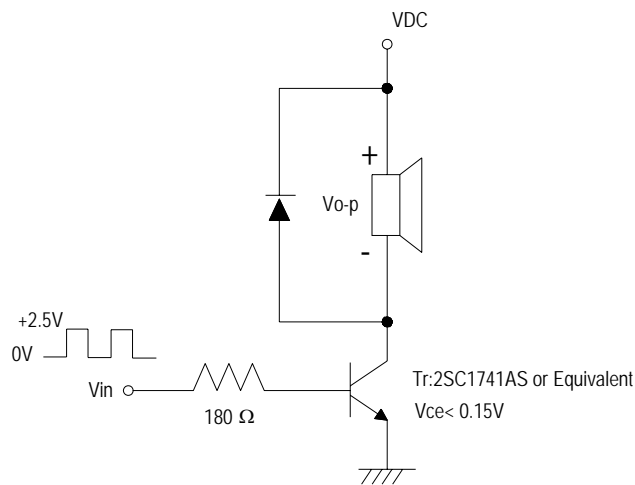
**A & B Components**

**<http://www.speaker-tw.com>**

# AC-1403G

Items		Units	Specifications				Conditions
01	Rated Voltage	Vo-p	3.0				
02	Operating Voltage	Vo-p	2.0~4.0				
03	Mean Current	mA (Max)	35				Applying rated voltage, rated frequency Square wave, 1/2 duty subject to standard state.
04	Direct Current Resistance	Ohm	40±6				
05	Sound Output	dBA (min)	85				Distance at 10cm, applying rated voltage, rated frequency square wave, 1/2 duty subject to standard state.
06	Rated Frequency	Hz	2000				
07	Operating Temp.	°C	-40 ~ +85				
08	Storage Temp.	°C	-50 ~ +95				
09	Dimension	mm	Φ	14	Height	5	See attached drawing.
10	Weight	Gram	2				
11	Terminal		Two Pins				See attached drawing.

※Standard Drive Circuit:



※Standard Conditions:

Temperature 15 ~ 35°C

Humidity 25 ~ 80 %

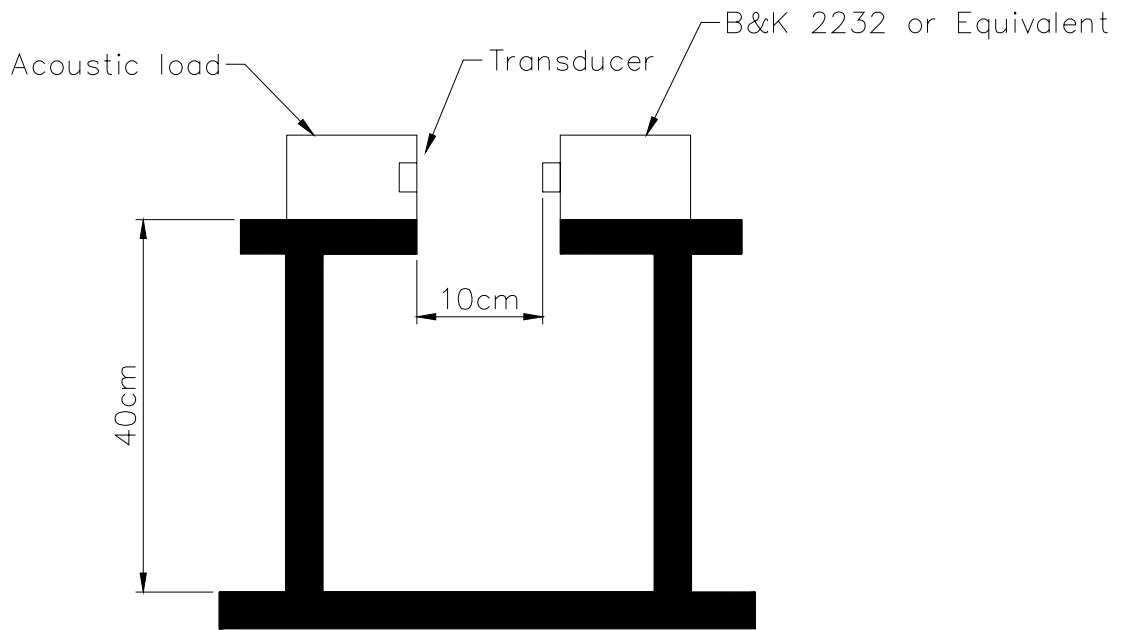
Air pressure 860 ~ 1060 HPa.

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

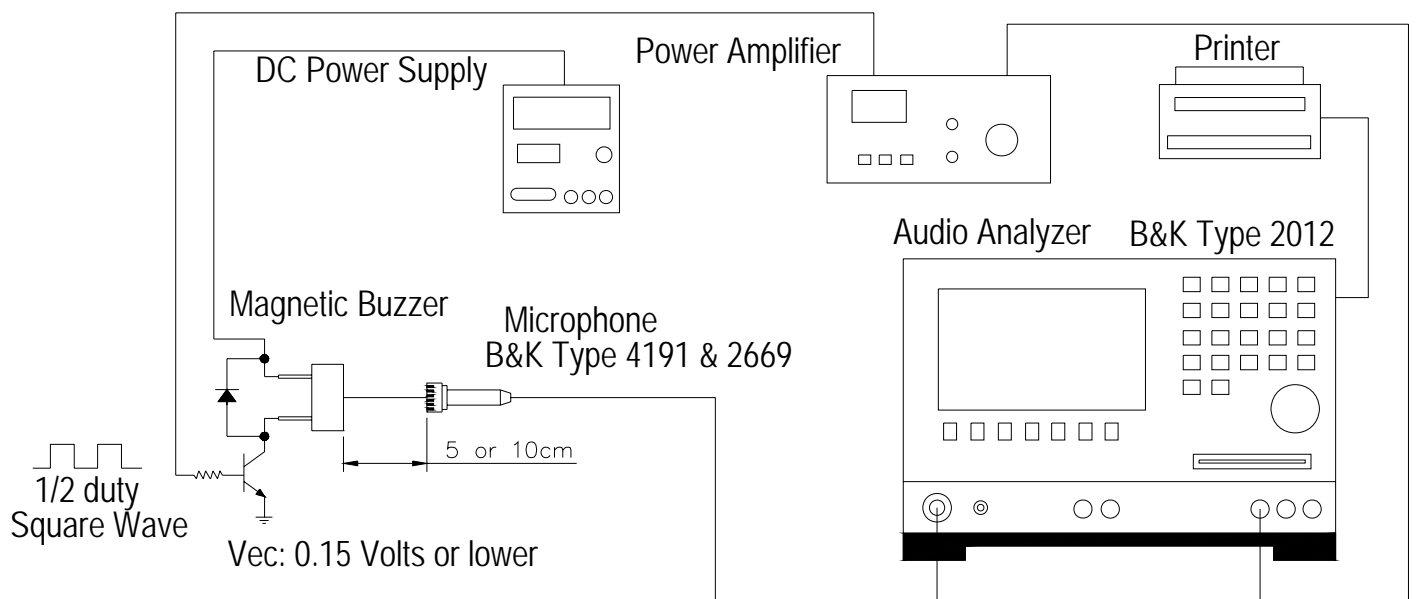
Air pressure 860 ~ 1060 HPa.

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

# STANDARD TEST FIXTURE



## Standard test condition of magnetic buzzer



AC-1403G

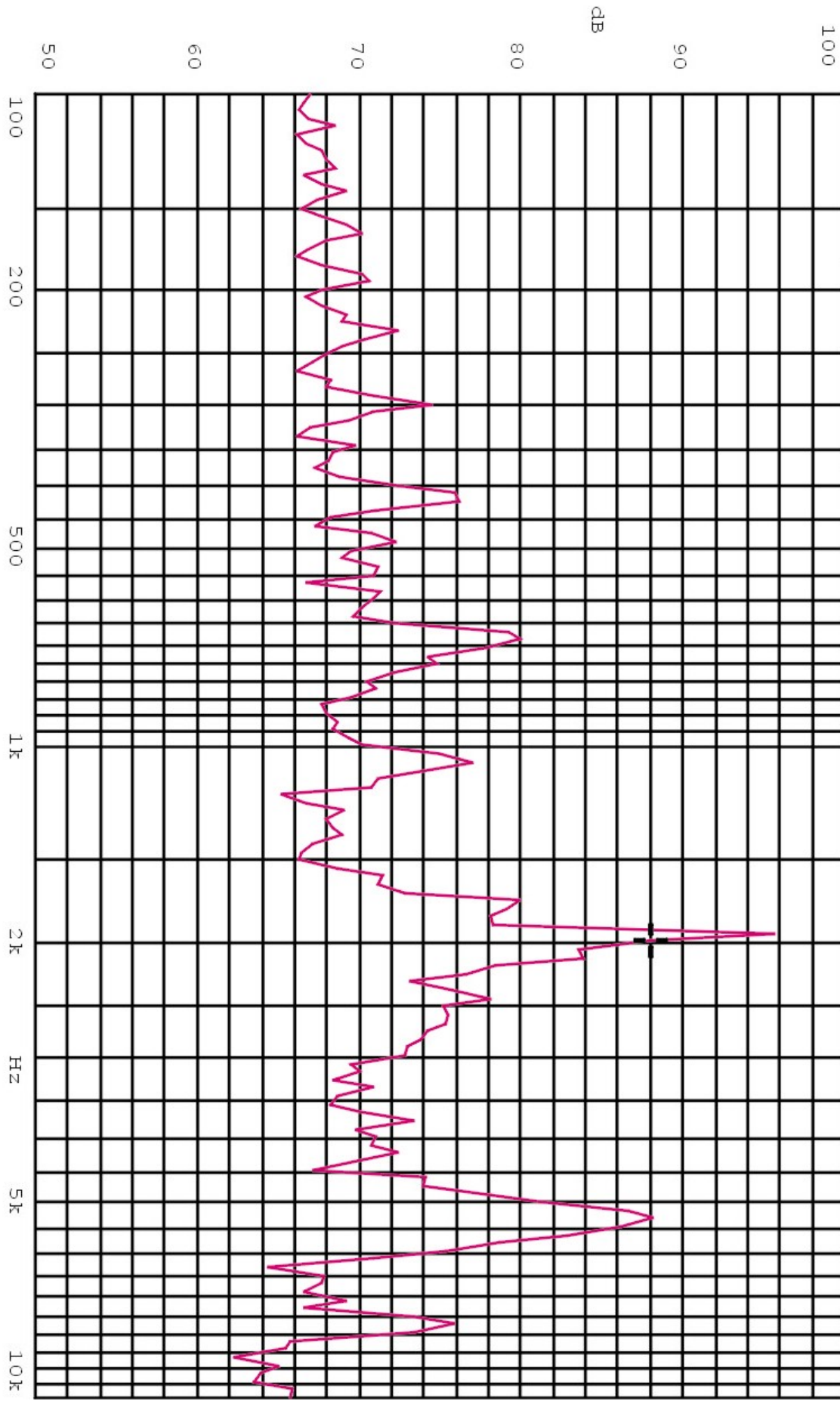
X:1.9953KHZ

Y:88.05dB

ZA:Live Curve

SSR T. RMS

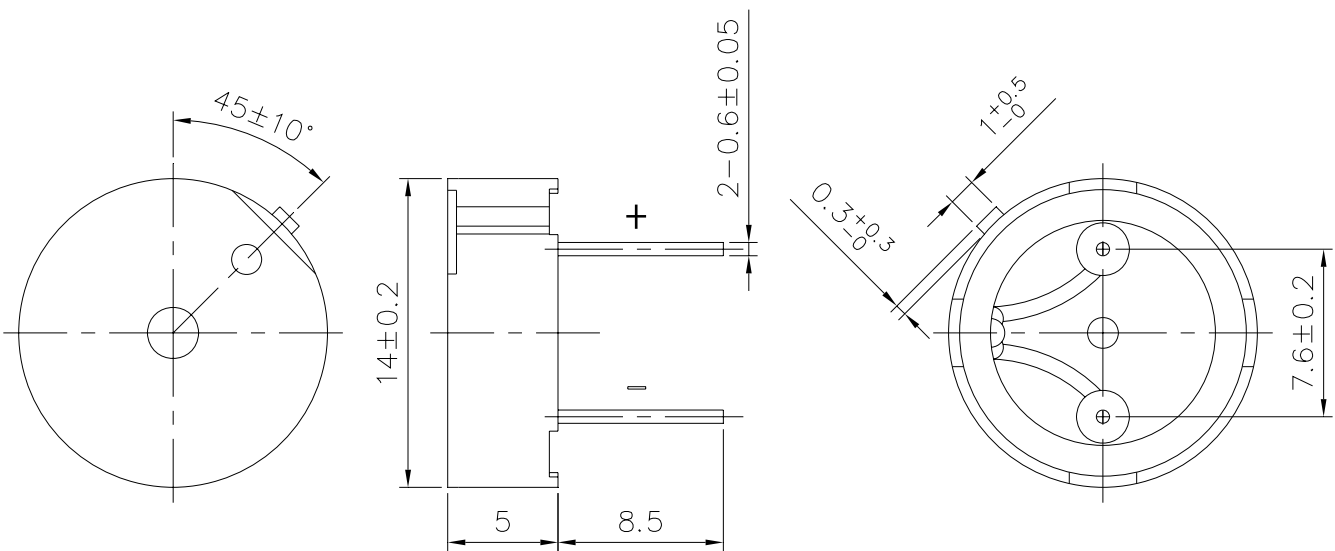
HPAFrequency Response, Magn dB re 20.00



Mode: SSR



REV NO.	REVISION NOTE	APPROVAL	DATE
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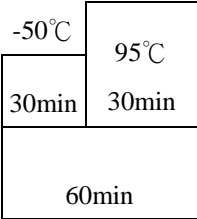
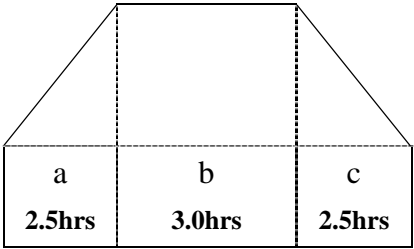
WAVE SOLDER AND WASH NOT ALLOWED

TITLE: SOUND TRANSDUCER DIMENSIONS		DRAWN: <i>Richard</i> 05/21/2004	SCALE: 3/1	SHEET: 1 OF 1
PART NO. AC-1403G	1	DESIGNED: R&D DEP.	UNITS: mm	
DWG NO. DTT-1084		CHECKED:	TOLERANCE $\pm 0.5$	
	REV	APPROVAL:	UNLESS OTHERWISE SPECIFIED:	
		MATERIAL: PBT	ONE PLACE DECIMAL $\pm$ ***	
			TWO PLACE DECIMAL $\pm$ ***	
			THREE PLACE DECIMAL $\pm$ ***	

A & B Components

# AC-1403G

## 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             subgraph Cycle [60min]               direction TB               T1[-50°C] --- T2[95°C]               T1 --- T3[30min]               T2 --- T3             end           </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             subgraph Cycle [8hrs]               direction TB               T1[25°C] --- T2[95°C] --- T3[25°C]               T1 --- T4[2.5hrs]               T2 --- T4               T3 --- T4             end             subgraph Humidity [RH]               direction TB               H1[90~98%RH] --- H2[80~98%RH]               H1 --- T4               H2 --- T4             end           </pre> </div> <p style="text-align: center;">a,b:90~98%RH c :80~98%RH</p>	

# AC-1403G

## 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 3.0V ,2000Hz applied. 2. High temperature The part shall be subjected to 500 hours at 85°C with 3.0V, 2000Hz applied. 3. Low temperature The part shall be subjected to 500 hours at -40°C with 3.0V, 2000Hz applied.	