

MESSRS.

SPECIFICATION FOR APPROVAL

承 认 书

Product	MAGNETIC BUZZER
Part No.	AP-1612Z-P (RoHS)
Customer Approval	

Approved By	Checked By	Made By
王台平 JUL-15-2012	曹丽萍 JUL-15-2012	LILY JUL-15-2012

常 州 华 龙 电 子 有 限 公 司

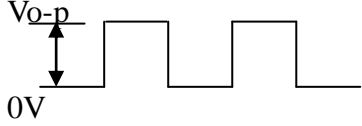
DRAGONSTATE ELECTRONIC CORPORATION

中国江苏省常州市新区电子园新四路 36 号

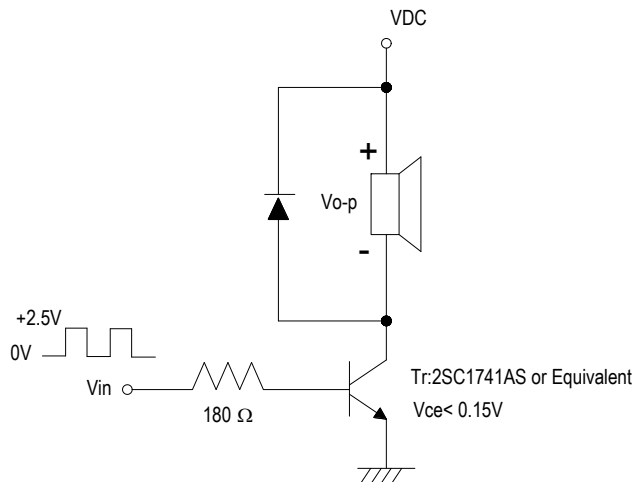
Tel: +86-519-85110078. 86-519-85106698, Fax: +86-519-85101081

EDITION:1.1

AP-1612Z-P

Items		Units	Specifications				Conditions
01	Rated Voltage	Vo-p	12				
02	Operating Voltage	Vo-p	6~15				
03	Mean Current	mA (Max)	80				Applying rated voltage, rated frequency Square wave, 1/2 duty subject to standard state.
04	Direct Current Resistance	Ohm	75 ±11				
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	2048				
07	Operating Temp.	°C	-40 ~ +85				
08	Storage Temp.	°C	-50 ~ +95				
09	Dimension	mm	Φ	16	Height	14	See attached drawing.
10	Weight	Gram	7				
11	Terminal		Two Pins				See attached drawing.

※Standard Drive Circuit:



※Standard Conditions:

Temperature 15 ~ 35°C

Humidity 25 ~ 80 %

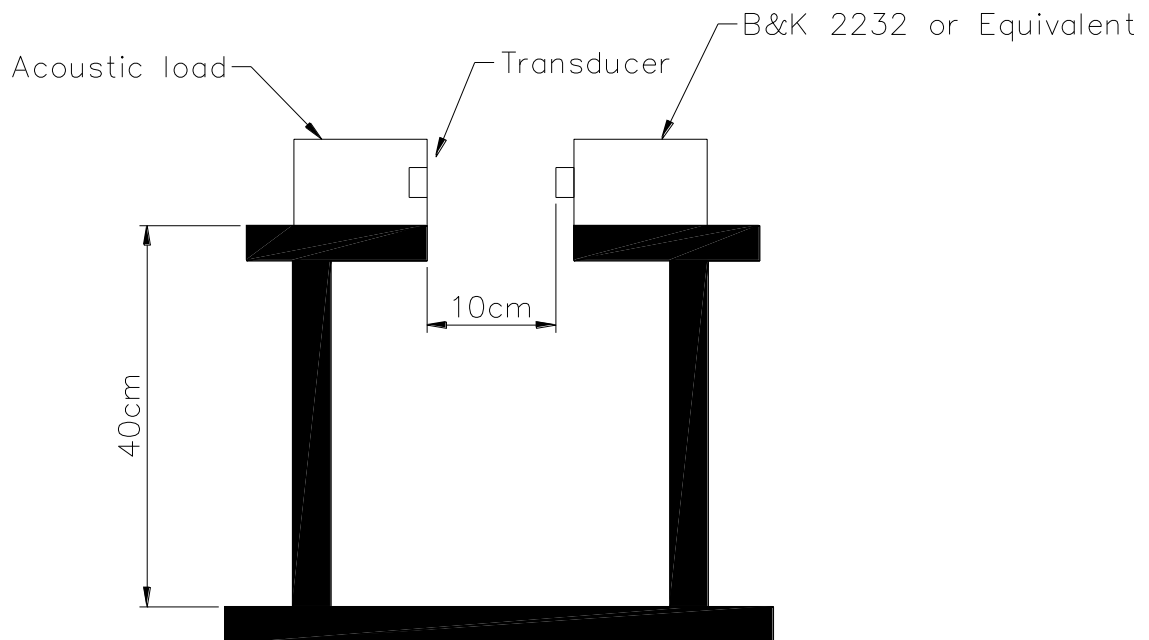
Air pressure 860 ~ 1060 HPa.

If the result is doubtful, should retested with the conditions below: Temp. $20\pm 2^{\circ}\text{C}$, Humidity 60 ~ 70 %, ,

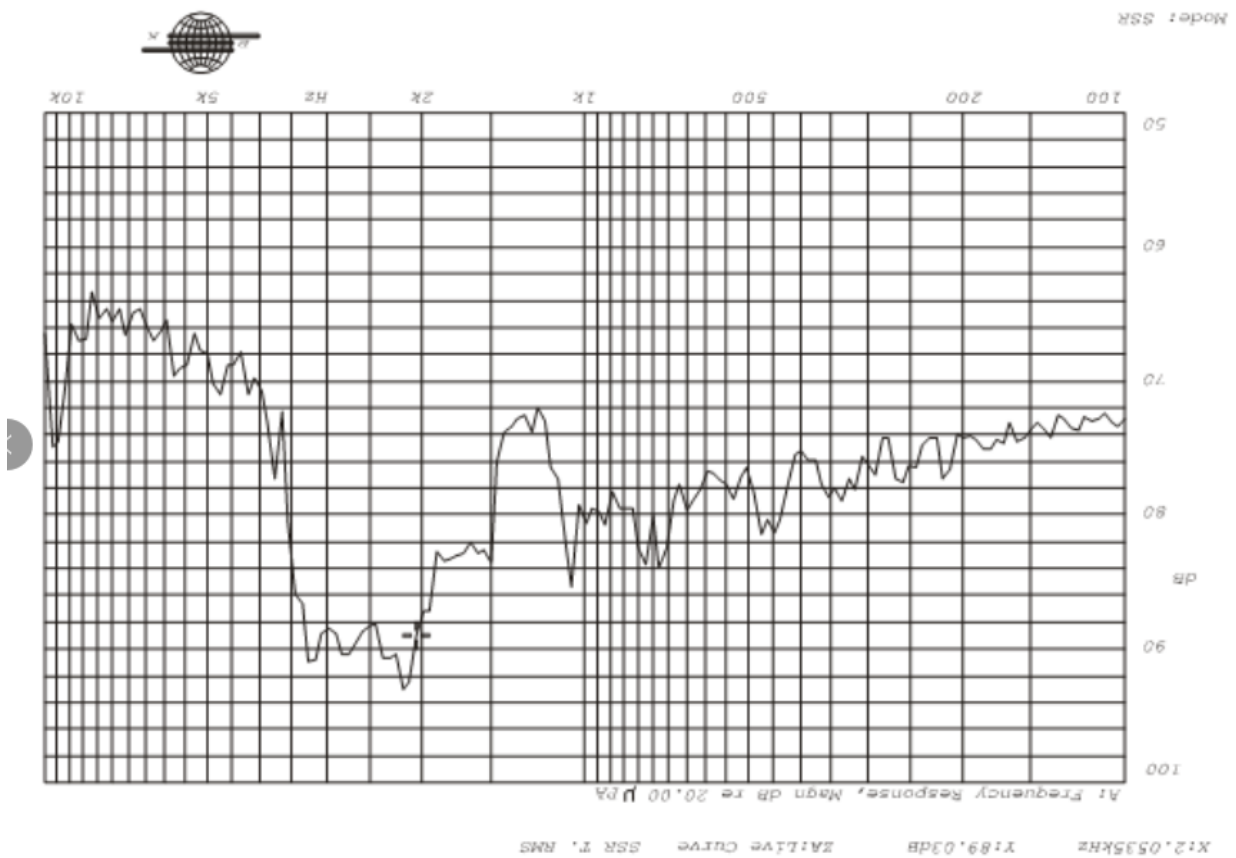
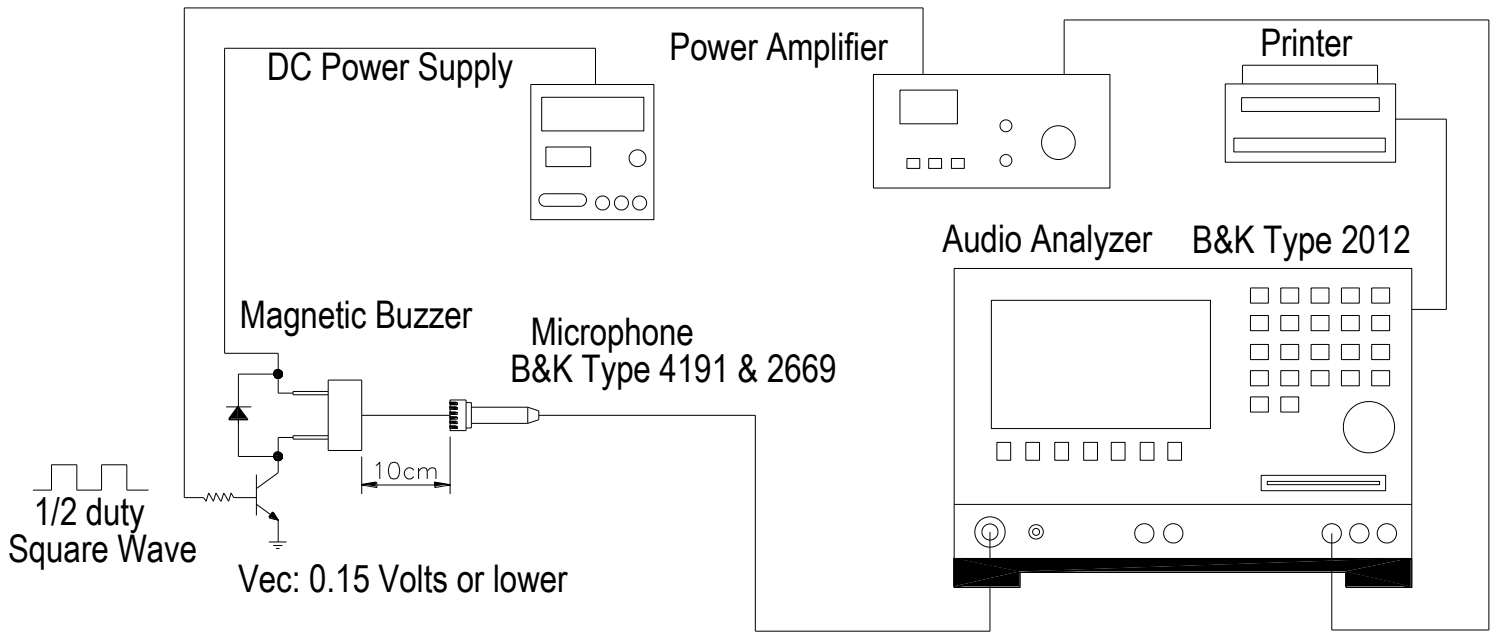
Air pressure 860 ~ 1060 HPa.

※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.

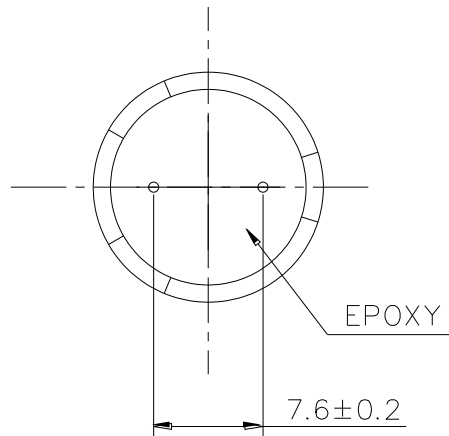
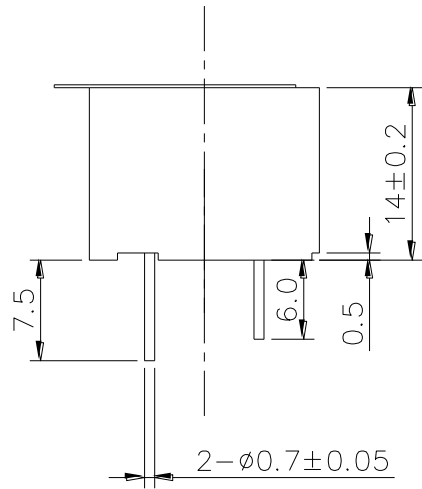
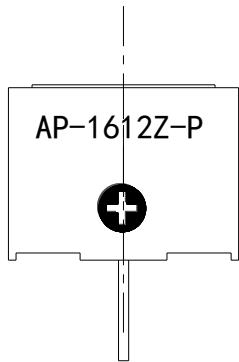
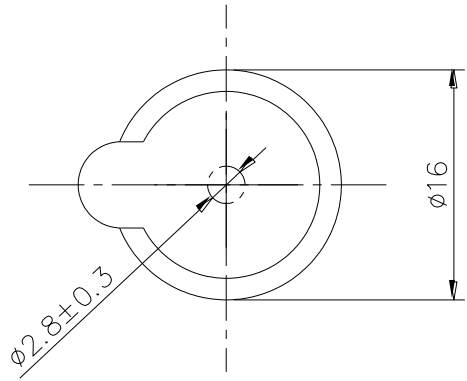
STANDARD TEST FIXTURE



Standard test condition of magnetic buzzer



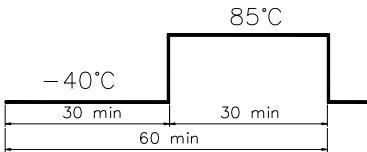
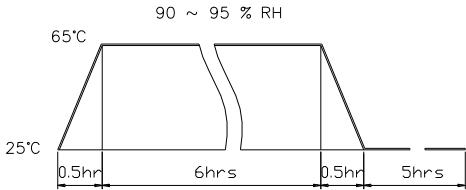
REV NO.	REVISION NOTE	APPROVAL	DATE
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TITLE: SOUND TRANSDUCER		DRAWN: <i>Lily</i> 2012/07/15	SCALE: 3:1	SHEET: 1 of 1
PART NO. AP-1612Z-P	1 REV	DESIGNED: R&D OF D.S.	UNITS: mm	
DWG NO. DTE-1122		CHECKED: <i>Emily</i>	TOLERANCE ± 0.5	
		APPROVAL: <i>Eric</i>	UNLESS OTHERWISE SPECIFIED:	
		MATERIAL: PBT	ONE PLACE DECIMAL \pm ***	
			TWO PLACE DECIMAL \pm ***	
			THREE PLACE DECIMAL \pm ***	

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4. RELIABILITY TEST

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.	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 Low temp. Storage life	The part shall be capable of withstanding a storage Temperature of -40°C for 96 hours.	
03 Temp. cycle	The part shall be subjected 10 cycles. One cycle shall consist of; 	
04 Temp./Humidity cycle	The part shall be subjected 10 cycles. One cycle shall be 12 hours and consist of; 	
05 Operating life	Rated Voltage, Frequency applied. <ol style="list-style-type: none"> 1. Ordinary temperature The part shall be subjected to 1000 hours at room temperature (25 ±10°C) 2. High temperature The part shall be subjected to 500 hours at 75°C 3. Low temperature The part shall be subjected to 500 hours at -30°C 	
06 Lead Strength	Pull load on the direction of the lead axis for 10 ±1 sec.	
07 Vibration	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.	

Item		Test conditions	Evaluation standard
08	Fixed drop	The part shall be mounted on 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)	<p>After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L</p> <p>S.P.L shall be 77dB or more.</p>
09	Free drop	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).	
10	Solder ability	Soldering by hand : $250\pm 5^{\circ}\text{C}$ / 5 Sec. $350\pm 5^{\circ}\text{C}$ / 1.5 Sec Soldering t into solder bath : $245\pm 5^{\circ}\text{C}$ / 2 sec	
11	Solder heat resistance	Soldering into solder bath : $350\pm 5^{\circ}\text{C}$ Soaking time : 3 sec	
12	Lead strength	Pull lead with a force of 10N,on the direction of the lead axis for 10 : 10 ± 1 sec	
13	Washability	Solvent : deionized water Solvent temp. : $55\pm 5^{\circ}\text{C}$ Soaking time : 5 ± 0.5 min.	