
SPECIFICATION FOR APPROVAL

Product	MAGNETIC BUZZER
Part No.	AS-303Q-F1P1
Customer Approval	

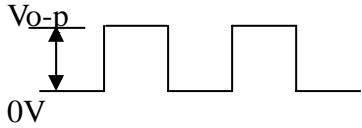
Approved By	Checked By	Made By



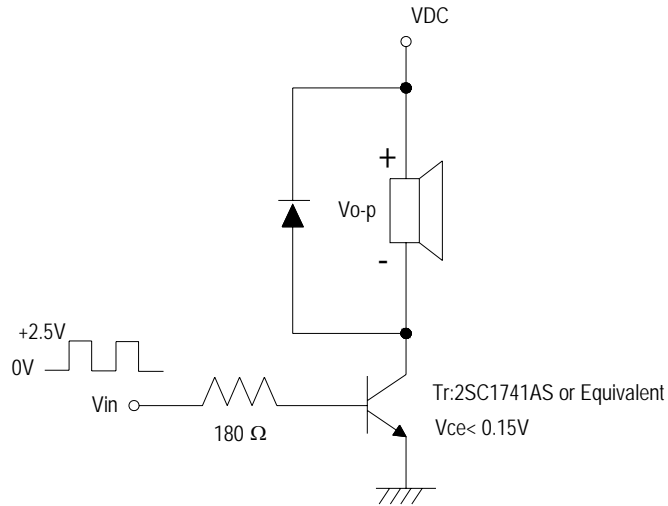
A & B Components

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

AS-303Q-F1P1

Items		Units	Specifications				Conditions
01	Rated Voltage	Vo-p	3.0				
02	Operating Voltate	Vo-p	2~4				
03	Mean Current	mA (Max)	100				Applying rated voltage, rated frequency Square wave, 1/2 duty subject to standard state.
04	Direct Current Resistance	Ohm	15±2.0				
05	Sound Output	dBa (min)	85				Distance at 5cm, applying rated voltage, rated frequency square wave, 1/2duty subject to standard state.
06	Rated Frequency	Hz	2731				
07	Operating Temp.	°C	-40 ~ +85				
08	Storage Temp.	°C	-50 ~ +95				
09	Dimension	mm	Φ	10	Height	2.8	See attached drawing.
10	Weight	Gram	0.2				
11	Terminal		None				See attached drawing.

※Standard Drive Circuit:



※Standard Conditions:

Temperature 15 ~ 35°C

Humidity 25 ~ 80 %

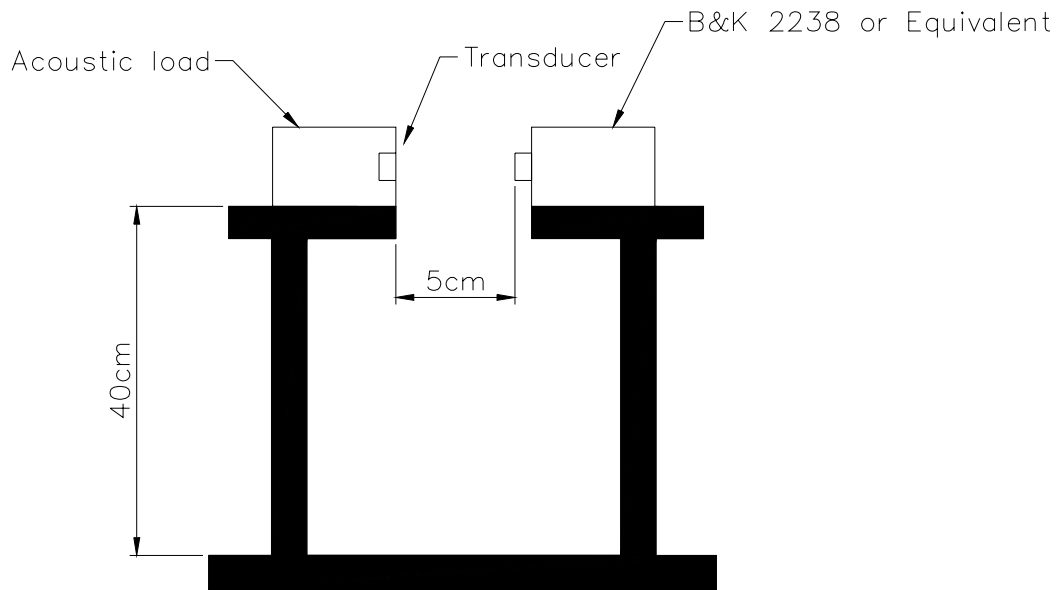
Air pressure 860 ~ 1060 HPa.

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

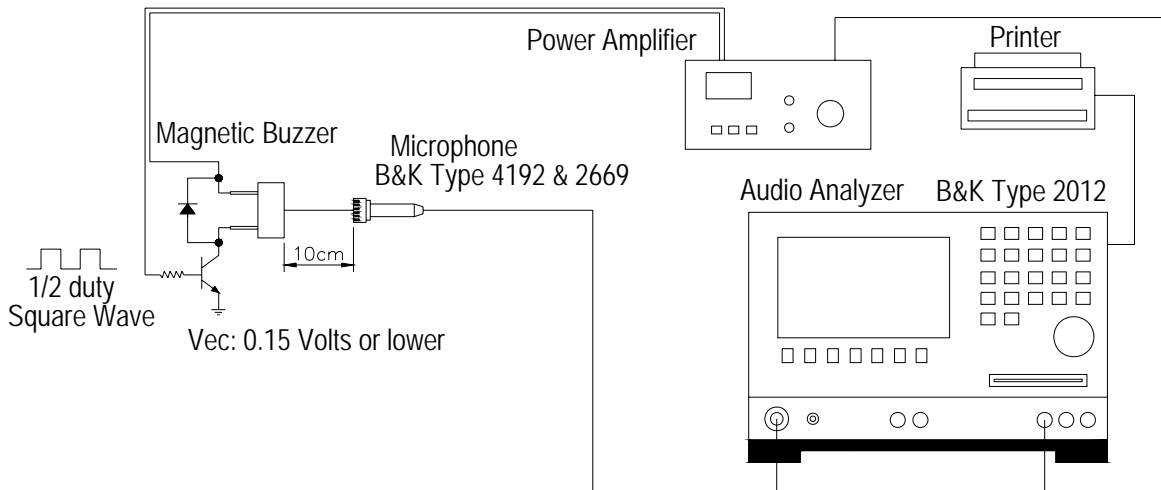
Air pressure 860 ~ 1060 HPa.

※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



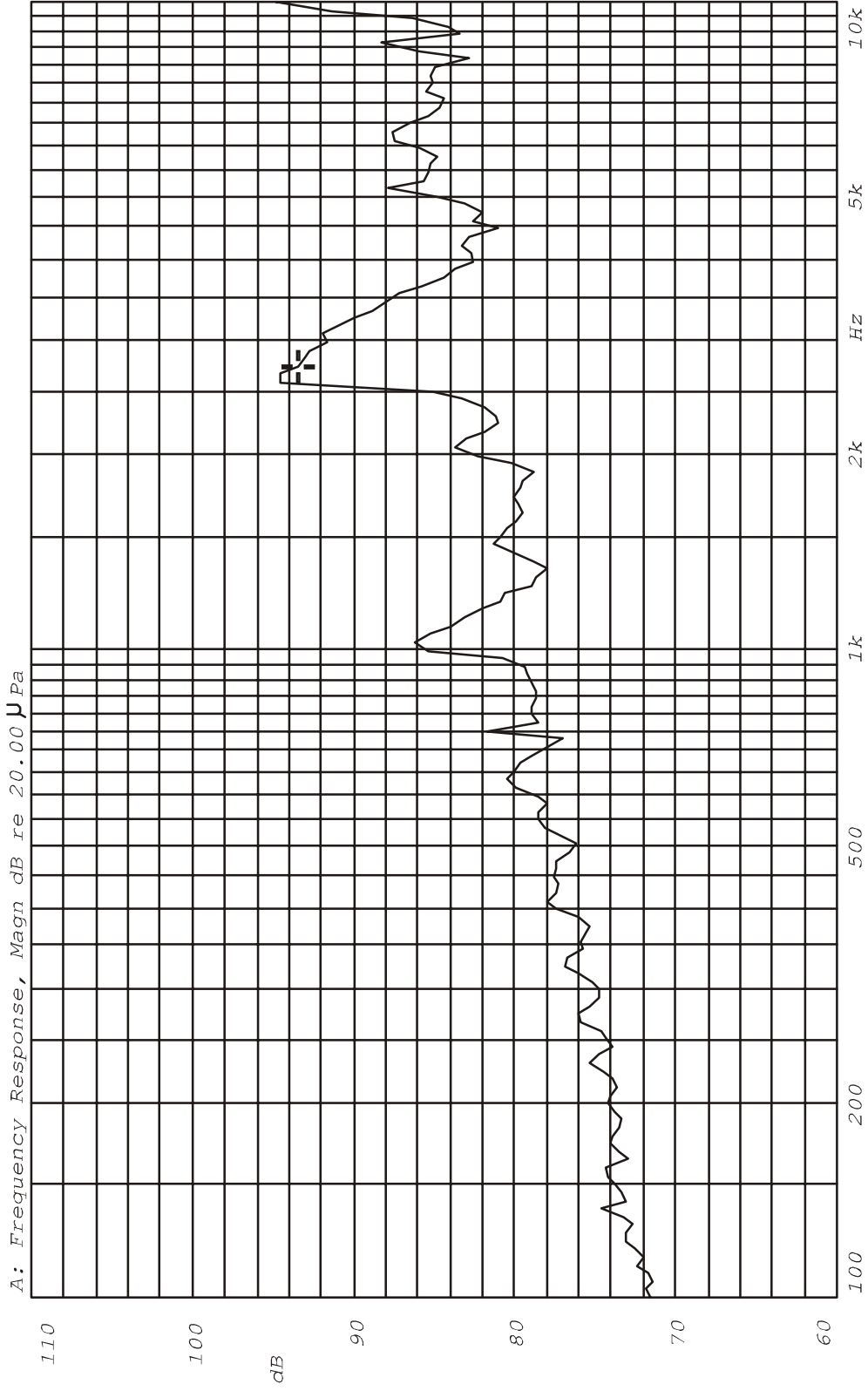
MODEL: AS-303Q-F1P1

X: 2.7384kHz

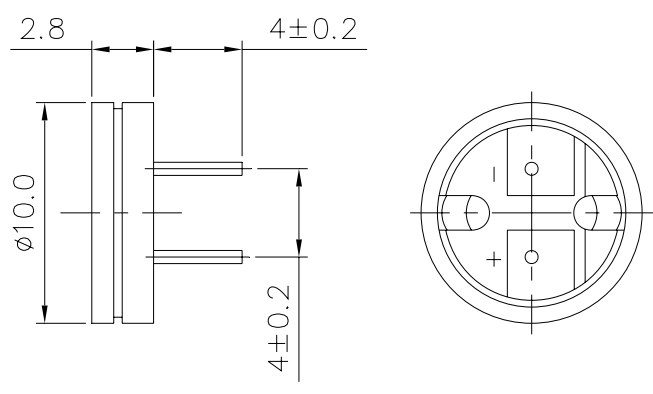
Y: 93.39dB

ZA: Live Curve

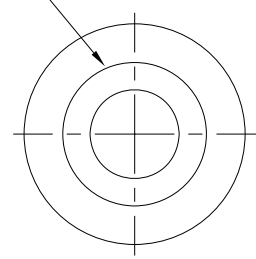
SSR T. RMS



Mode: SSR



← SOUND EMISSION HOLE $\phi 6.5$



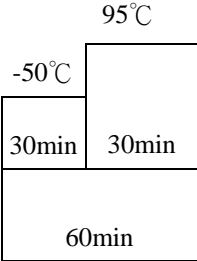
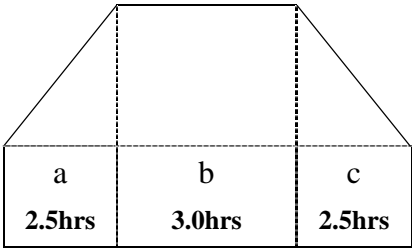
BACK VIEW

TITLE: SOUND TRANSDUCER DIMENSIONS		DRAWN: <i>Richard</i> 08/15/2001	SCALE: 3/1	SHEET: 1 OF 1
PART NO. AS-303Q-F1P1	1	DESIGNED: R&D DEP.	UNITS: mm	
DWG NO. DTT-1091		CHECKED:	TOLERANCE ± 0.2	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL \pm *** TWO PLACE DECIMAL \pm *** THREE PLACE DECIMAL \pm ***	
	REV	MATERIAL: PPO		

A & B Components

RELIABILITY TEST

AS-303Q-F1P1

Item	Test conditions	Evaluation standard
01 High temp. Storage life	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 degrance 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 -50°C for 96 hours.	
03 Temp.cycle	The part shall be subjected 10 cycles. One cycle shall consist of; <div style="text-align: center;">  <p>The diagram shows a rectangular cycle. The top edge is labeled 95°C, the left edge is labeled -50°C, and the bottom edge is labeled 60min. The cycle is divided into two equal vertical sections, each labeled 30min.</p> </div>	
04 Temp./Humidity cycle	The part shall be subjected 10 cycles. One cycle shall be 8 hours and consist of; <div style="text-align: center;">  <p>The diagram shows a trapezoidal cycle. The bottom edge is labeled 25°C and is divided into three sections: 'a' (2.5hrs), 'b' (3.0hrs), and 'c' (2.5hrs). The top edge is labeled 95°C. Vertical dashed lines separate the sections. Below the diagram, it specifies: 'a,b:90~98%RH' and 'c :80~98%RH'.</p> </div>	

RELIABILITY TEST

AS-303Q-F1P1

Item	Test conditions	Evaluation standard
05 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.	After the test the part shall meet specifications without Any degraance and performance except S.P.L S.P.L shall be 77dB or more.
06 Fixed drop	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 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).	
08 Operating life	1. Ordinary temperature The part shall be subjected to 1000 hours at room temperature ($25 \pm 10^{\circ}\text{C}$)with 3V 2731Hz applied. 2. High temperature The part shall be subjected to 500 hours at 85°C with 3V, 2731Hz applied. 3. Low temperature The part shall be subjected to 500 hours at -40°C with 3V, 2731Hz applied.	