

MESSRS.

SPECIFICATION FOR APPROVAL**承 認 书**

Product	MAGNETIC BUZZER
Part No.	HS-903Q-W(RoHS)
Customer Approval	

Approved By	Checked By	Made By
王台平 APR-15-2017	曹丽萍 APR-15-2017	LILY APR-15-2017

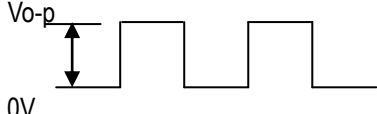
常 州 华 龙 电 子 有 限 公 司**Changzhou Dragon State Electronic Co., Ltd**

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**

1. Specifications

HS-903Q-W (RoHS)

Items		Units	Specifications	Conditions
01	Rated Voltage	Vo-p	3	
02	Operating Voltage	Vo-p	2.0~4.0	
03	Consumption Current	mA (Max)	Mean 80	Applying rated voltage, rated frequency Square wave, 1/2 duty subject to standard state.
			Peak 240	
04	Direct Current Resistance	Ohm	15 ± 2.0	
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	2731	
07	Operating Temp.	°C	-30 ~ +70	
08	Storage Temp.	°C	-40 ~ +80	
09	Weight	Gram	1	

2. Measuring Method

2-1. Test Condition

Standard

Temperature : 15 ~ 35°C

Relative humidity : 25% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

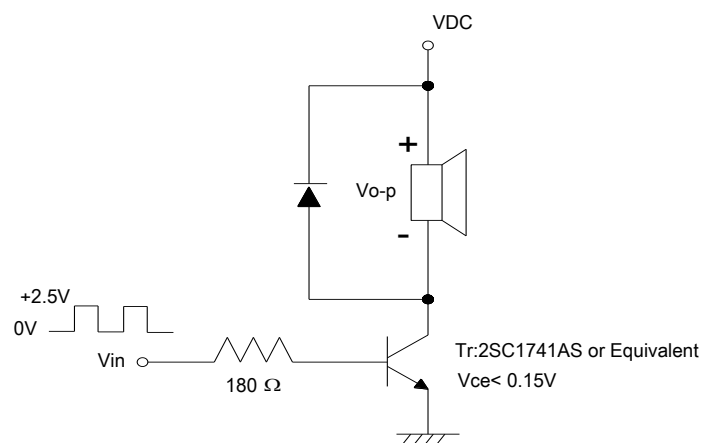
Judgement

Temperature : 20±3°C

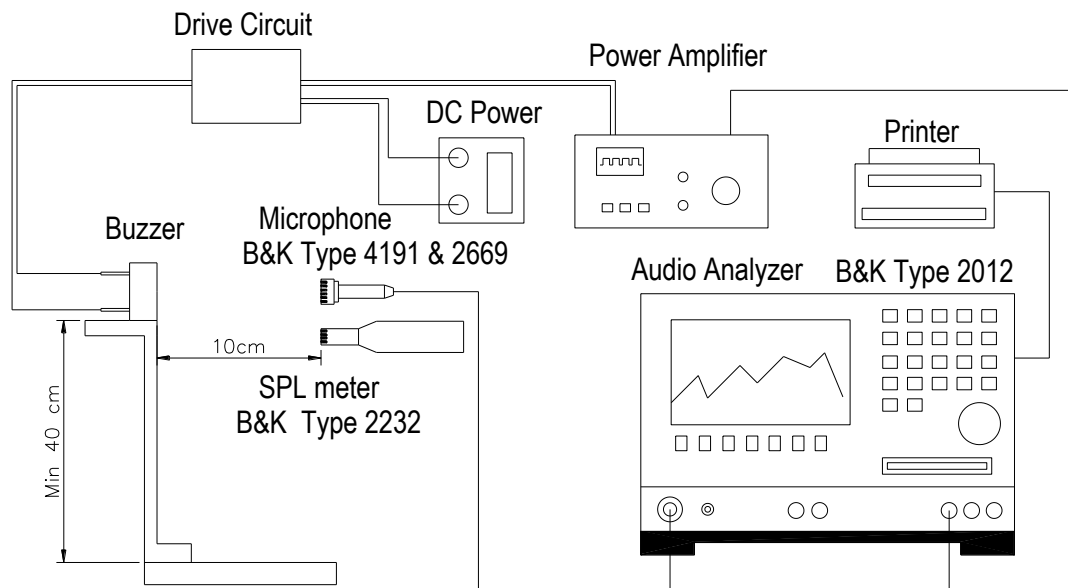
Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

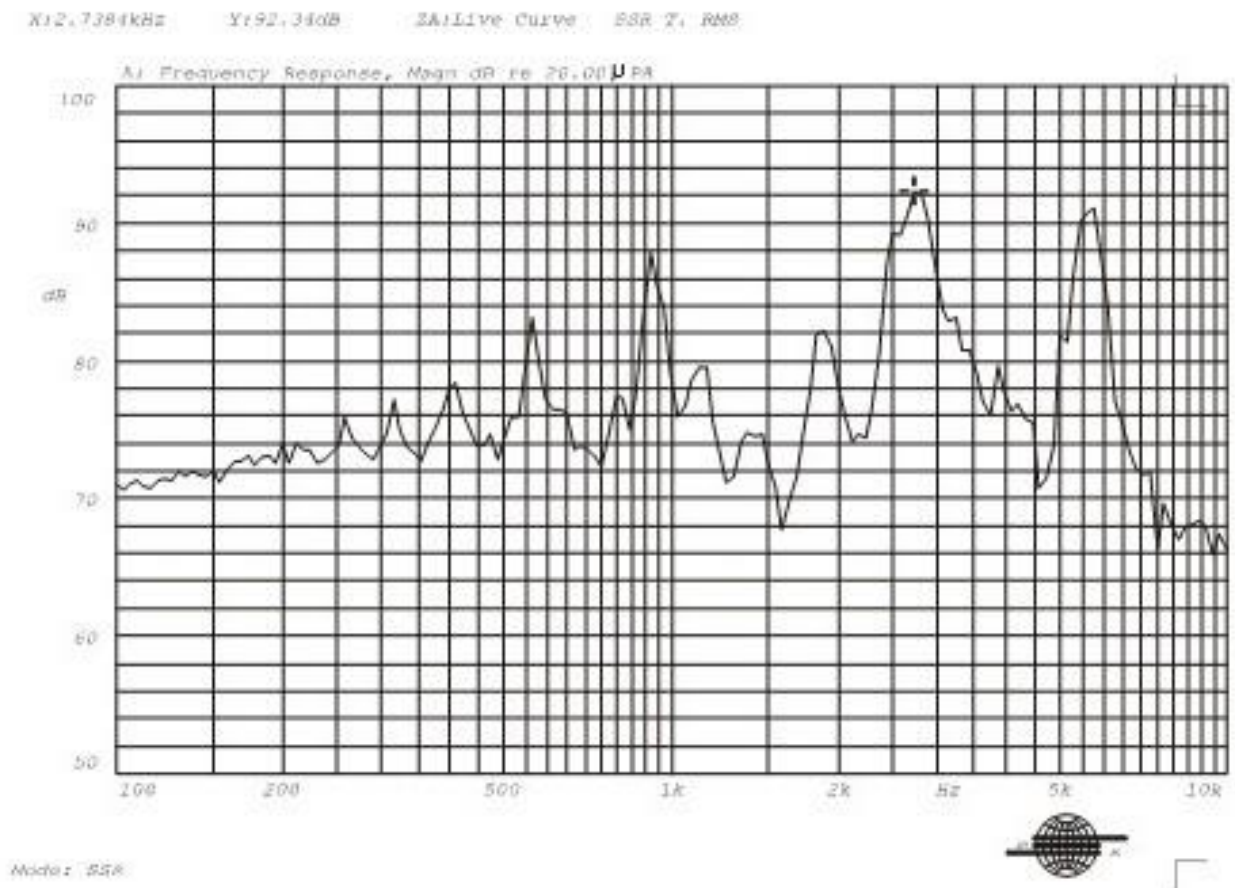
2-2. Standard Drive Circuit:



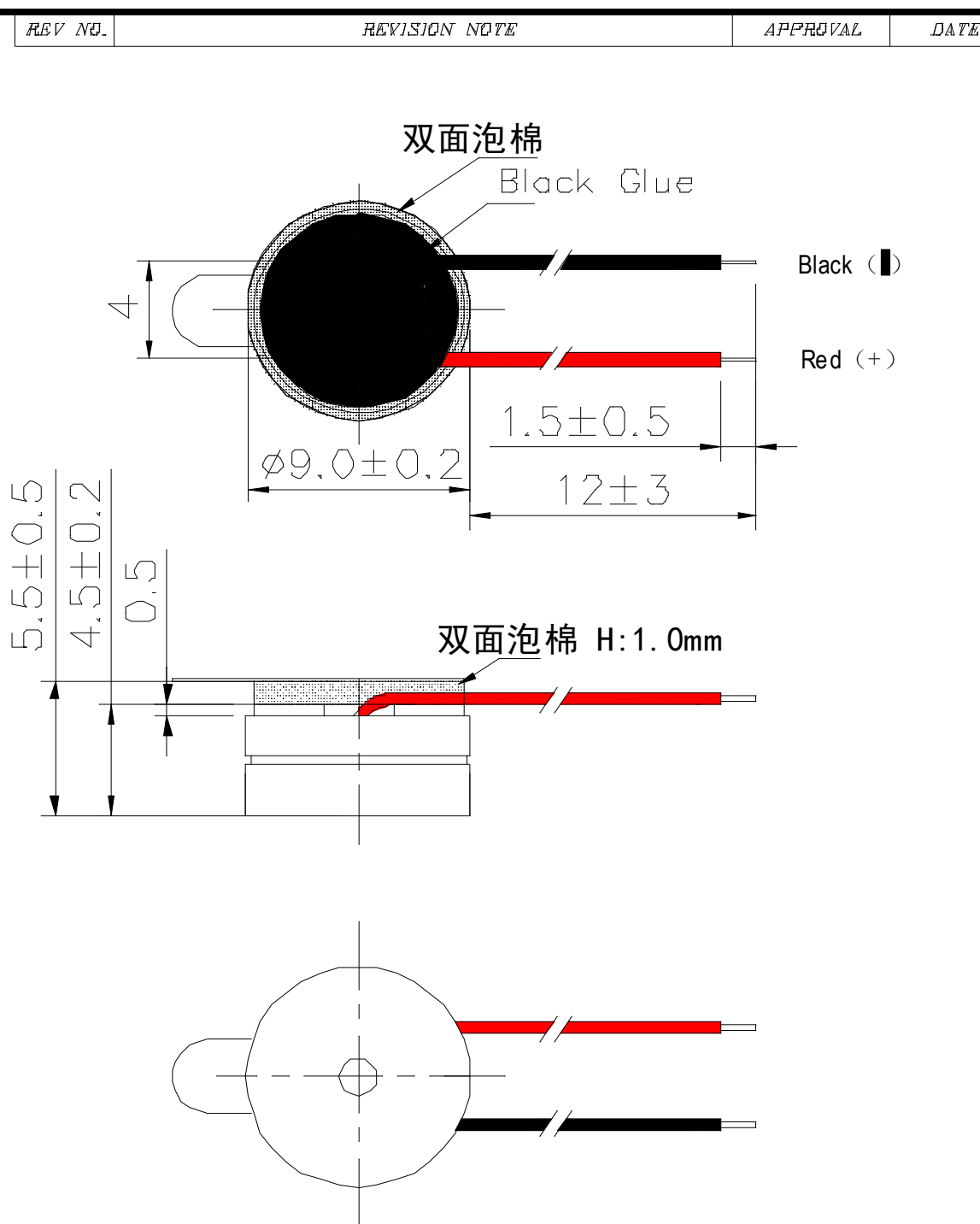
2-3. Standard Test Fixture



2-4. Frequency Response Curve



3. Dimension



Wire: UL1571 AWG30

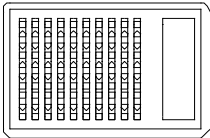
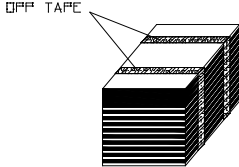
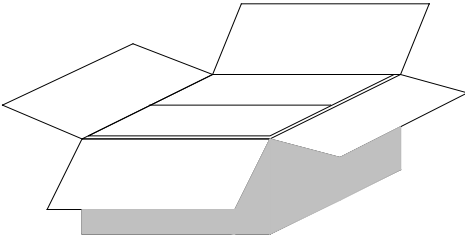
TITLE: SOUND TRANSDUCER DIMENSIONS		DRAWN: Lily	2024/07/23	SCALE: 1/1	SHEET: 1 OF 1
PART NO.	HS-903Q-W	DESIGNED: R&D OF R.S.	UNITS: mm		
DWG NO.	DTE-2085	CHECKED: Emily	TOLERANCE ± 0.5		
		APPROVAL: Eric	UNLESS OTHERWISE SPECIFIED:		
		MATERIAL: PPO	ONE PLACE DECIMAL $\pm$ ***		
		TWO PLACE DECIMAL $\pm$ ***			
		THREE PLACE DECIMAL $\pm$ ***			

4. Reliability test

Item		Test conditions	Evaluation standard
01	High temp.Storage life	The part shall be capable of withstanding a storage Temperature of 80℃ 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 74dB or more.
02	Low temp.Storage life	The part shall be capable of withstanding a storage Temperature of -40℃ for 96 hours.	
03	Temp. cycle	The part shall be subjected 10 cycles. One cycle shall consist of; -40℃ 30min 85℃ 30min 60min	
04	Temp./Humidity cycle	The part shall be subjected 10 cycles. One cycle shall be 12 hours and consist of; 65℃ 25℃ 90 ~ 95 % RH 0.5hr 6hrs 0.5hr 5hrs	
05	Operating life	Rated Voltage,Frequency applied. 1. Ordinary temperature The part shall be subjected to 1000 hours at room temperature (25 ±10℃) 1. High temperature The part shall be subjected to 500 hours at 80℃ 2. Low temperature The part shall be subjected to 500 hours at -40℃	
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)	After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L S.P.L shall be 74dB or more.
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 heat resistance	Soldering into solderbath : $350\pm5^{\circ}\text{C}$ Soaking time : 3.5 ± 0.5 sec	
11	Solder ability	Soldering : $250\pm5^{\circ}\text{C}$ / 5 Sec. $350\pm5^{\circ}\text{C}$ / 1.5 Sec Soldering t into solderbath : $250\pm5^{\circ}\text{C}$ / 2 ± 0.5 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. : $55\pm5^{\circ}\text{C}$ Soaking time : 5 ± 0.5 min.	

5. Packing

REV NO.	REVISION NOTE	APPROVAL	DATE
	 Cover(240*160*5mm) Material: Paper		
	↓  Box(240*160*29mm) 100pcs Material: Paper+Epe		
	↓  Middle(240*160*250mm) 1000pcs(10*100pcs) Material: Paper+Epe		
	↓  Outer Box(515*420*280mm) 5000pcs(5*1000pcs) Material: Paper		
单位: mm			
TITLE: packing		DRAWN: Lily 2024/07/29 DESIGNED: R&D OF D.S. CHECKED: Emily APPROVAL: Eric MATERIAL: ***	
PART NO.	1	SCALE: 2:1	
DWG NO.		SHEET: 1 of 1	
		UNITS: mm	
		TOLERANCE	
		20~11	± 0.3
		10~5	± 0.2
		<4	± 0.1
DS Changzhou Dragon State Electronic Co., Ltd			



6. History change record

[illegible]