



# specification

## SHEET FOR APPROVAL

Part Name: YX9650S

Type: Magnetic Sounder

Customer Name: \_\_\_\_\_

Number of the Edition: \_\_\_\_\_



	Approved by	Checked by	Issued by
Signature			
Date			

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# Magnetic Sounder

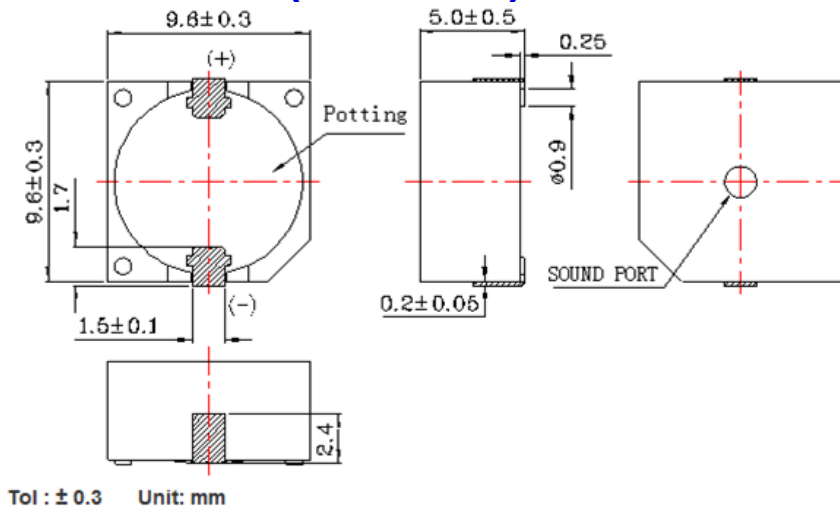
## YX9650S



### Electrical Characteristics

Model No.	Unit	YX9650S
Rated Voltage	Vo-p	5
Operating Voltage	Vo-p	4~7
Rated Current	mA	30
Min. Sound Output at 10cm	dB	≥80
Resonant Frequency	Hz	2700 ± 300
Operating Temperature	°C	-30~+70
Storage Temperature	°C	-40~+85
Dimension	mm	8.5×8.5×4
Weight(MAX)	gram	1.5
Housing Material		LCP(Black)
Lead Pin Material		Red Copper (DSn)
Environmental Protection Regulation		RoHS
Storage life	month	6 months preservation at room temp.

### Dimensions : (Unit: mm)



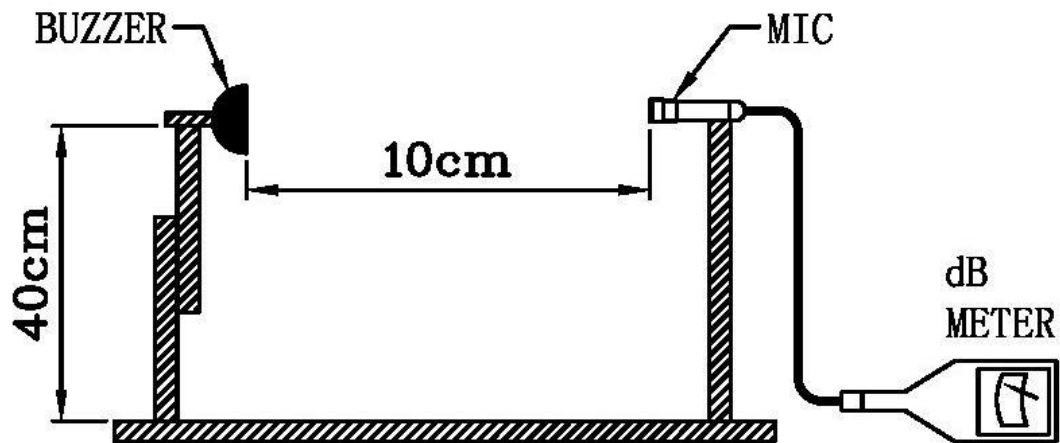
## A: TESTING METHOD

### Standard Measurement :

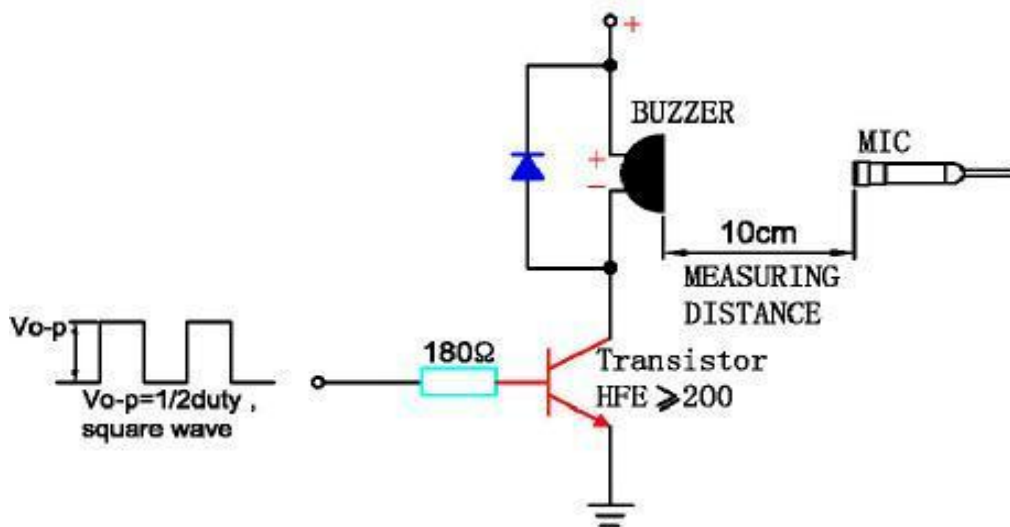
Temperature:  $25 \pm 2^\circ\text{C}$  Humidity: 60%-70%

### Acoustic Characteristics:

The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below



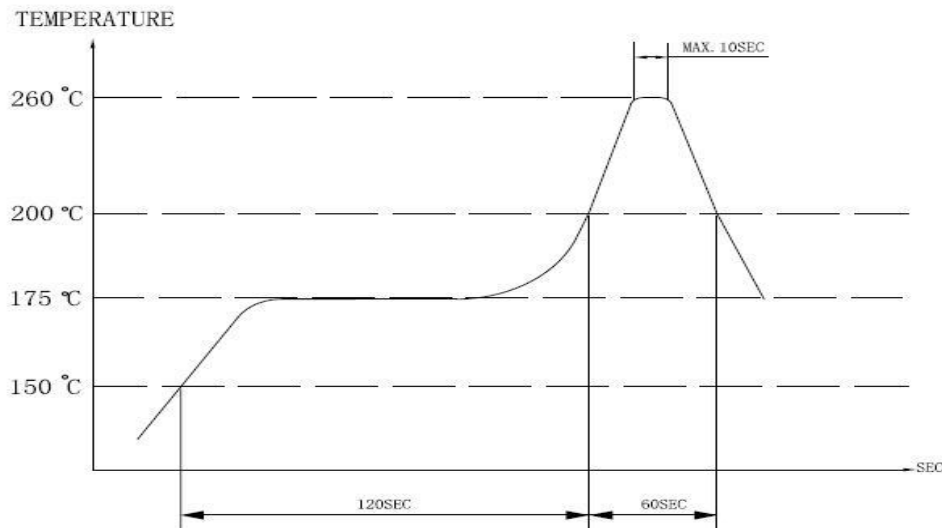
In the measuring test, buzzer is placed as follows:



## B: SOLDERING CONDITION

(1) Recommendable reflow soldering condition is as follows (Reflow soldering is twice)

**Note:** It is requested that reflow soldering should be executed after heat of product goes down to normal.



Heat resistant line

Used when heat resistant reliability test is performed

(2) Manual soldering

Manual soldering temperature 350 °C within 5 sec

## C. MECHANICAL CHARACTERISTICS

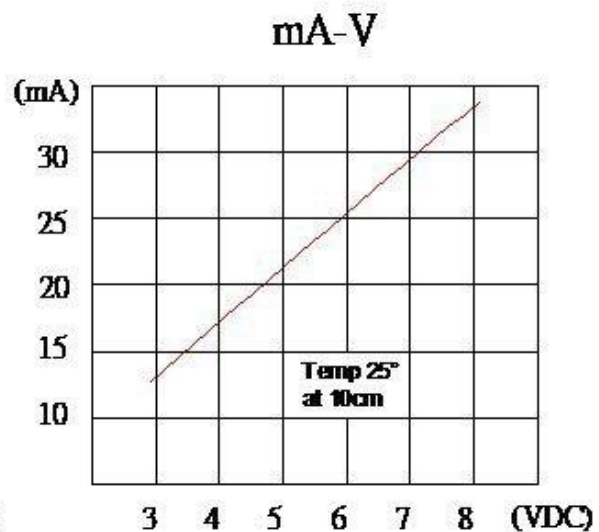
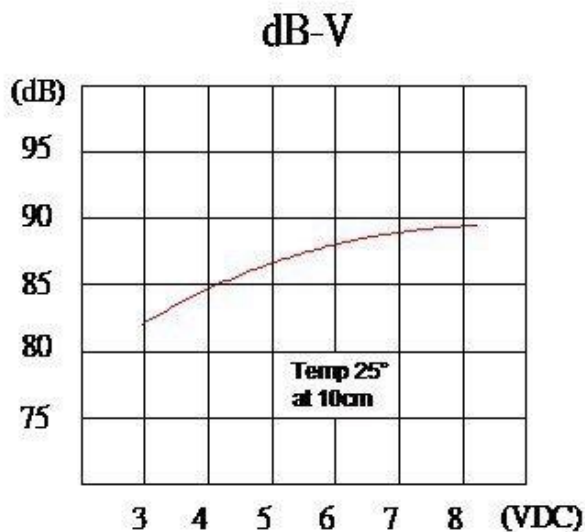
NO.	item	Test Condition	Evaluation standard
1	Solder ability	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +270±5 for 3±1 seconds.	90% min. lead terminals shall be wet with solder. (Except the edge of terminal)
2	Soldering Heat Resistance	Lead terminal are immersed up to 1.5mm from sounder's body in solder bath of +300±5 for 3±0.5 seconds or +260±5 for 10±1 seconds	No interference in operation
3	Terminal Mechanical Strength	The force 10 seconds of 9.8N (1.0kg) is applied to each terminal in axial direction.	No damage and cutting off
4	Vibration	Buzzer shall be measured after being applied vibration of amplitude of 0.75mm with 10 to 55hz band of vibration frequency to each of 3per-pendicular directions for 0.5 hours.	The value of oscillation frequency/ current consumption should be in 10% compared with initial ones .The SPL should be
5	Drop test	The part only shall be dropped from a height of 70cm onto a 10mm thick wooden board 3 times in 3 axes (X.Y.Z). (a total of 9 times).	in ± 10dB compared with initial one.

## D. ENVIRONMENT TEST

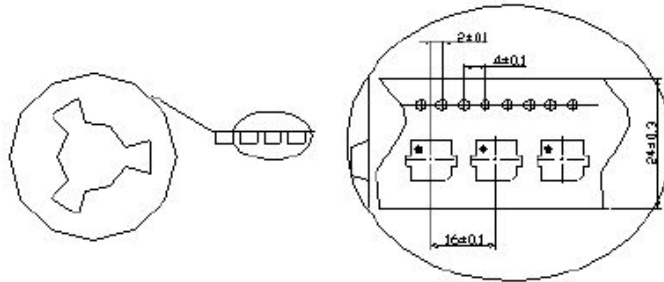
NO.	item	Test Condition	Evaluation standard
1	High temp. test	After being placed in a chamber at +80 for 96 hours	Being placed for 4 hours at +25 , buzzer shall be measured. The value of oscillation frequency/ current consumption should be in $\pm 10\%$ compared with initial ones. The SPL should be in $\pm 10\text{dB}$ compared with initial one.
2	Low temp. test	After being placed in a chamber with -30 for 96 hours	
3	Humidity test	After being placed in a chamber at +40 and 90 5% relative humidity for 96 hours	
4	Temp. cycle test	The part shall be subjected to 5 cycles. One cycle shall be consist of: <div style="text-align: center;"> <p>The diagram shows a temperature cycle with four stages: 30min at <math>-30\pm 5^\circ\text{C}</math>, 10min at <math>+25\pm 5^\circ\text{C}</math>, 30min at <math>+80\pm 2^\circ\text{C}</math>, and 10min at <math>+25\pm 5^\circ\text{C}</math>. A bracket below indicates that this sequence constitutes '1 Cycle', and a larger bracket below indicates '5 Cycles'.</p> </div>	

## F.FREQUENCY RESPONSE:

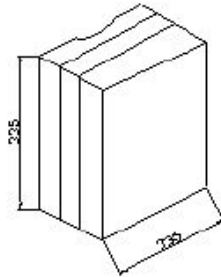
Applied voltage: 5.0Vp-p, square wave: 1/2 duty Distance for measurement: 10cm with recommended cavity



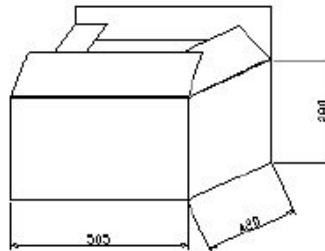
## G. PACKING FORMAT (UNIT: mm)



750PCS/CARRUER REEK; 每卷装750只



5ROLL CARRIER REEL/INNER BOX; 5卷放一小包装



7500PCS/CTN 每箱放1500只

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