# MESSRS:

## SPECIFICATION FOR APPROVAL

## 产品规格书

DESCRIPTION : SMD BUZZER

PART NO. : HYG-8540D

USER' S PART NO. :

DATE : 2013-06-06

CUSTOMER APPROVED :

Approved By	Checked By	Made By

## 兴化市华宇电子有限公司

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## **HYG8540D**

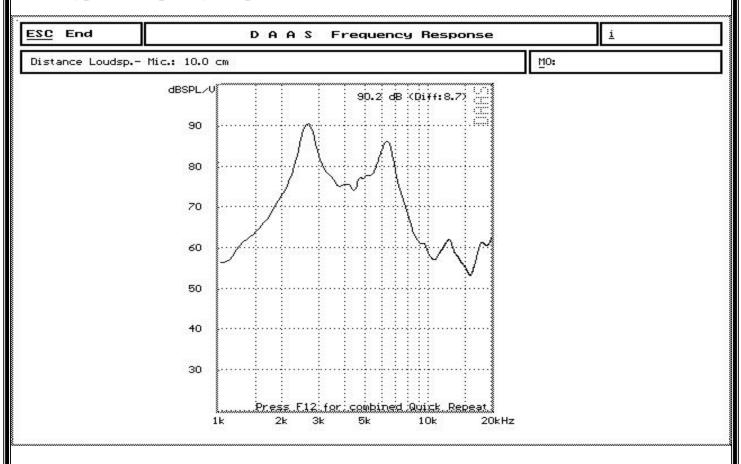
#### 1. Electrical Characteristics

VER .:0

Oscillation Frequency (Hz)	2700	
Operating Voltage (Vp-p)	2~4	
Rated Voltage (Vp-p)	3	
Current Consumption (mA/max.)	90 at Rated Voltage	
Sound Pressure Level (dB/min.)	86 at 10cm at Rated Voltage	
Coil Resistance (Ω)	$16 \pm 2$	
Operating Temperature (°C)	<b>-</b> 20 ∼ +60	
Storage Temperature (°C)	-30 ~ +80	
Environmental protection rule	ROHS	

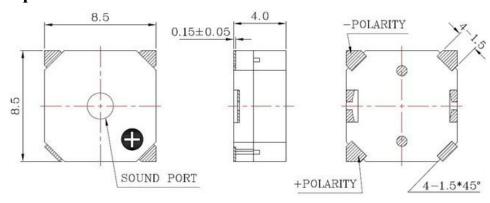
PS: Vp-p=1/2duty, square wave

### 2 . Typical Frequency Response Curve



#### 3. Dimensions and Material

#### 3-1 Shape

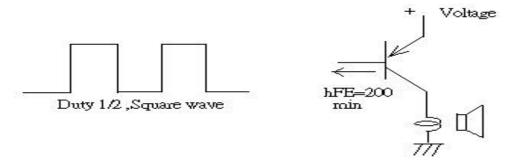


Unit: mm TOL:  $\pm 0.3$ 

#### 3-2 Material

Housing	LCP plastic resin (Color : Black)
Leading Pin	Tin Plated Brass
Weight (Gram)	0.6

### 4 . Recommend Driving Circuit



The base current Ib should high enough so that it saturates the collector current of the transistor with the CB load.

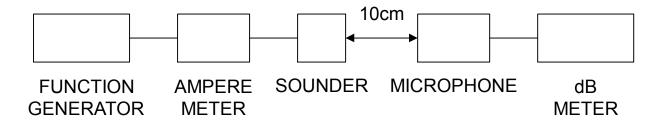
#### **5. TESTING METHOD**

#### · Standard Measurement conditions

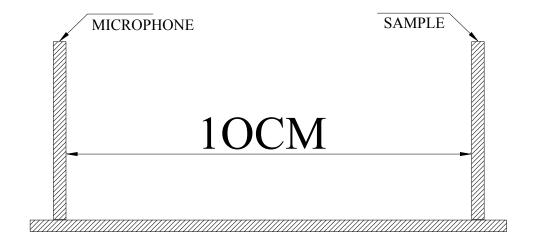
Temperature:25 $\pm$ 2 C Humidity:45-60%

#### · Acoustic Characteristics

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



In the measuring test, buzzers is placed as follows:



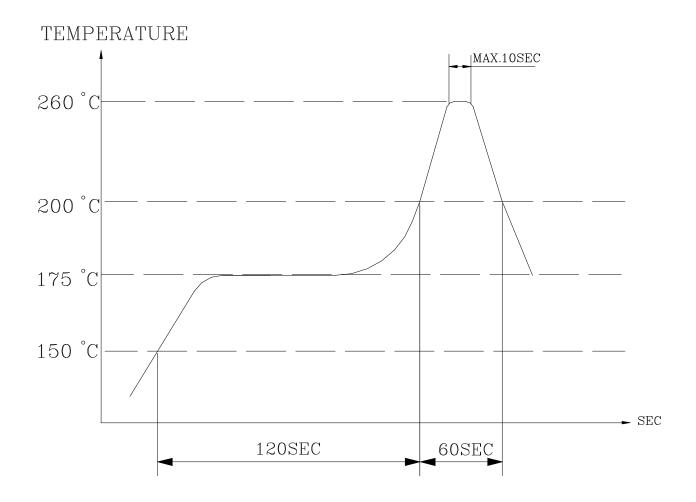
#### 6. RELIABILITY

Coldness	After 98 hours of being exposed to -30 $^\circ\!\!C$	No abnormality
withstanding	environment, should be returned to normal	shall exist
	environment for 2 hours, then re-proceed to test.	
Hotness	After 98 hours of being exposed to +80 $^\circ\!\!C$	No abnormality
withstanding	environment, should be returned to normal	shall exist
	environment for 2 hours, then re-proceed to test.	
Humidity	After 98 hours of being exposed to 40 $^{\circ}\!$	No abnormality
withstanding	environment in actual operation, should be	shall exist
	returned to normal environment for 2 hours, then	
	re-proceed to test.	
Durability	Testing after 1,000 hours actual continuous	No abnormality
	operation. (at standard measurement conditions)	shall exist
Drop	A natural drop from 75cm high down to the	No abnormality
withstanding	ground.	shall exist
Vibration	Vibration of 2,000 cycles per minute, 2mm	No abnormality
withstanding	amplitude, applied in X, Y and Z directions for 30	shall exist
	minutes each.	

#### 7.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.

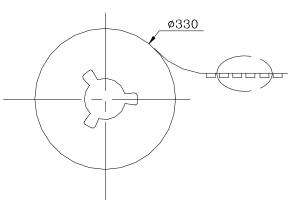


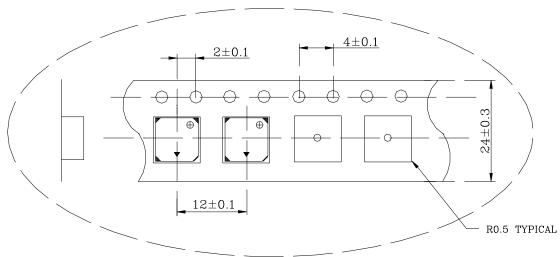
Heat resistant line (Used when heat resistant reliablity test is performed)

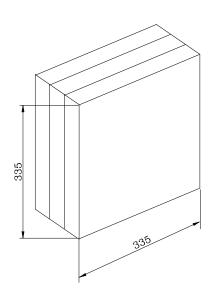
(2) Manual soldering Manual soldering temperature 350 C within 10 sec.

#### 8. PACKAGE METHOD

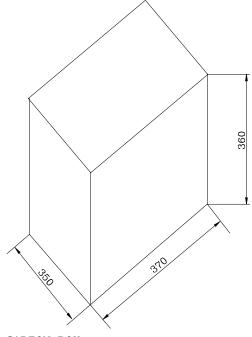
CARRIER REEL 1K PCS BUZZER







INNER BOX 1 ROLL CARRIER REEL



CARTON BOX 10 INNER BOX 10K PCS BUZZER

Unit:mm