

# APPROVAL SHEET



## FHD ELECTRONICS CORPORATION

CUSTOMER NAME : \_\_\_\_\_

COMMODITY : Piezo Transducer

FHD PART NO. : T14068-P4000G-J

CUSTOMER PART NO. : \_\_\_\_\_

Approved by	Y. J.	Prepared by	HY Shen
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Customer Approval			
Approved		Rejected	

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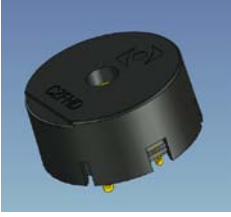
# FHD ELECTRONICS CORPORATION

## REVISIONS

PRODUCT PART NO. : T14068-P4000G-J

DATE	REVISER	REV.	DESCRIPTION	REMARK
2018/10/5	HY SHEN	1	Initial edition	

## 1. Technical Parameter

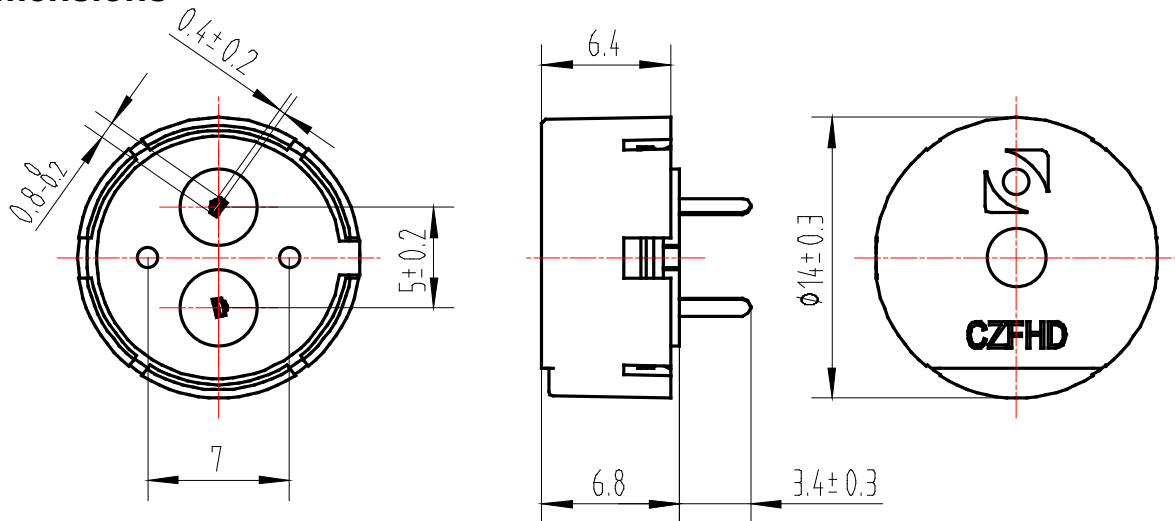


### Measuring condition

Part shall be measured under a condition (Temperature: 5~35°C, Humidity: 45%~85%R.H., Atmospheric pressure: 860 ~ 1060hPa) unless the standard condition (Temperature: 25±3°C, Humidity: 60±10%R.H. Atmospheric pressure: 860 ~ 1060hPa) is regulated to measure.

1	<b>Resonant Frequency</b>	4000±500Hz
2	<b>Operating Voltage</b>	3~20Vp-p
3	<b>Rated Current</b>	Max.3mA , at 4KHz 50% duty Square Wave 5Vp-p
4	<b>Sound Output at 10cm</b>	Min. 85dB, at 4KHz 50% duty Square Wave 5Vp-p
5	<b>Capacitance</b>	12000±30%pF at 1KHz
6	<b>Operating Temperature</b>	-20°C ~ 80°C
7	<b>Store Temperature</b>	-30°C ~ +85°C
8	<b>Net Weight</b>	Approx 0.9g
9	<b>RoHS</b>	Yes

## 2. Dimensions

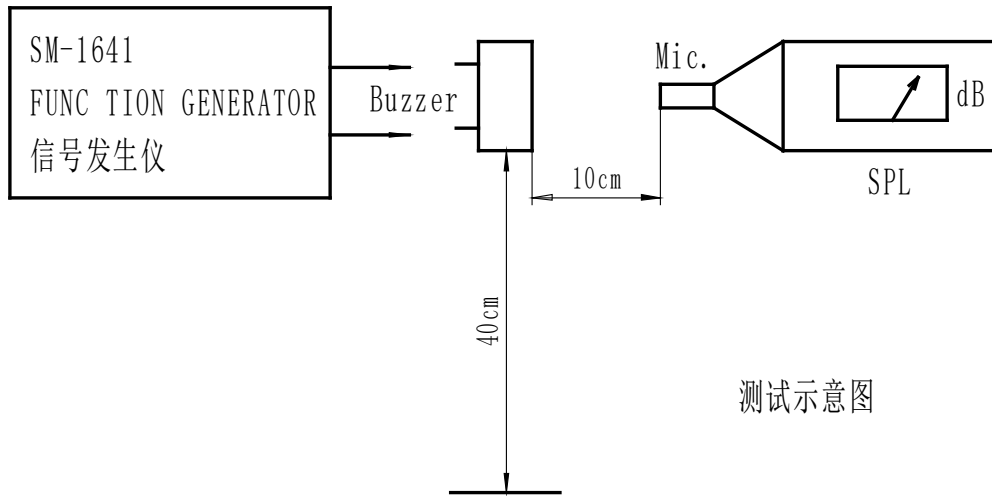


\*Unit: mm; Tolerance: ±0.5mm Except Specified

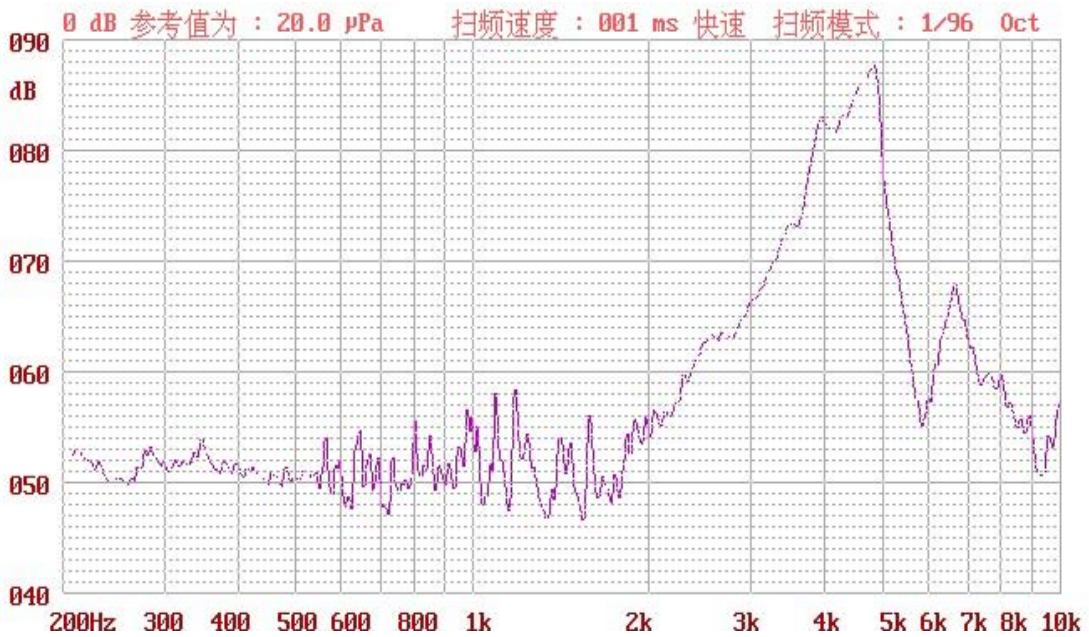
\*Housing Material: Black PBT

### 3. Electrical And Acoustical Measuring Condition

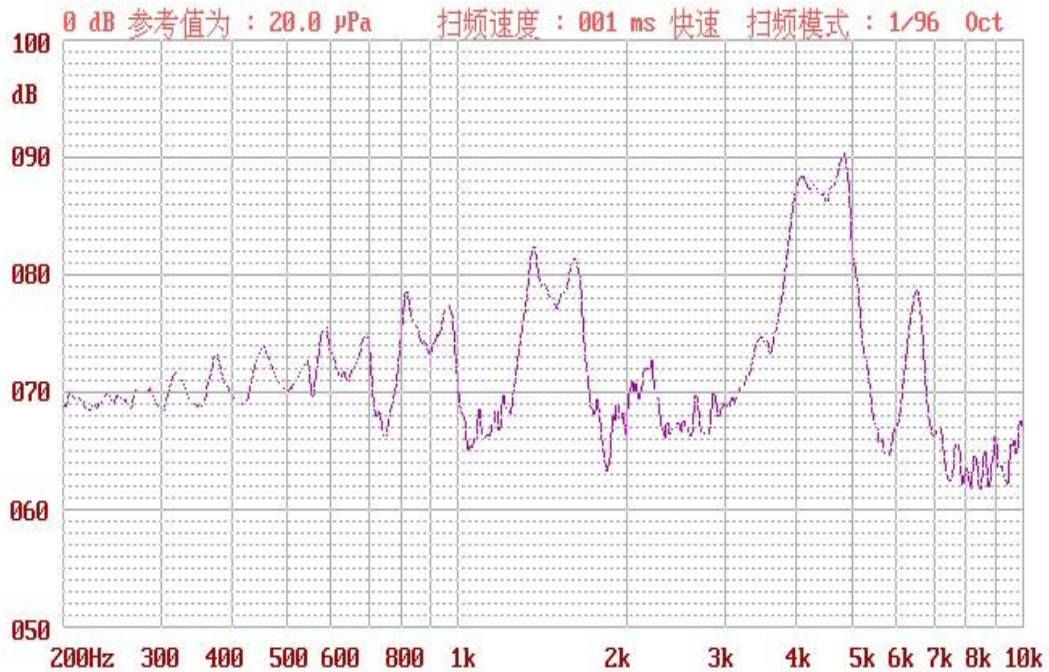
#### Recommended Setting



### 4. Frequency Response



3.6vrms sine wave @10cm



5Vp-p 50% duty Square wave,10cm

## 5. Reliability Test

After any following tests the part shall meet specifications without any degradation in appearance and performance except SPL. SPL shall not deviate more than -5 dB from the initial value

### 5.1. Ordinary Temperature Life Test

The part shall be subjected to 96 hours at  $25\pm 10^{\circ}\text{C}$ . Input rated voltage  
Resonant frequency, 1/2 duty Square wave.

### 5.2. High Temperature Test

The part shall be capable of withstanding a storage temperature of  $+85^{\circ}\text{C}$  for 96 hours.

### 5.3. Low Temperature Test

The part shall be capable of withstanding a storage temperature of  $-30^{\circ}\text{C}$  for 96 hours.

### 5.4. Humidity Test

Temperature: $+40^{\circ}\text{C}\pm 3^{\circ}\text{C}$  Relative Humidity:90%~95% Duration: 48 hours and expose to temperature for 6 hours

### 5.5. Temperature Shock Test

Temperature: $60^{\circ}\text{C}/1\text{hour}\rightarrow 25^{\circ}\text{C}/3\text{hours}\rightarrow -20^{\circ}\text{C}/1\text{hour}\rightarrow 25^{\circ}\text{C}/3\text{hours}$  (1cycle)  
Total cycle: 10 cycles

### 5.6. Drop Test

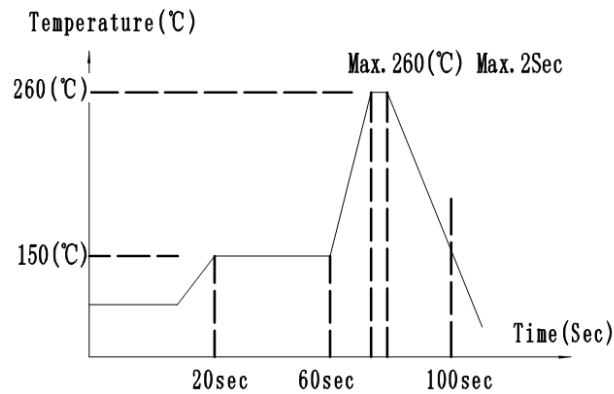
Product in standard packaging dropped from height 75 cm onto a thick 5 cm hardwood board, three sides, six plain.

### 5.7. Vibration Test

Vibration:1000cycles /min. Amplitude:1.5mm, Duration: 1 hour in each 3 axes

**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 materials enter it.

**6. Recommended the wave soldering temperature**

## 7. Packing Information

包装要求	1.珍珠棉板 150PCS/板 料号：F6-709 2.内盒 1500PCS/盒 料号：F6-057/F6-058 3.外箱 6000PCS/箱 料号：F6-022
唛头要求	
验收要求	

