

# APPROVAL SHEET



FHD ELECTRONICS CORPORATION

CUSTOMER NAME : \_\_\_\_\_  
COMMODITY : PIEZO INDICATOR  
FHD PART NO. : I304005-PC3500A-L  
CUSTOMER PART NO. : \_\_\_\_\_

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

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## A. PART NO.: I304005-PC3500A-L

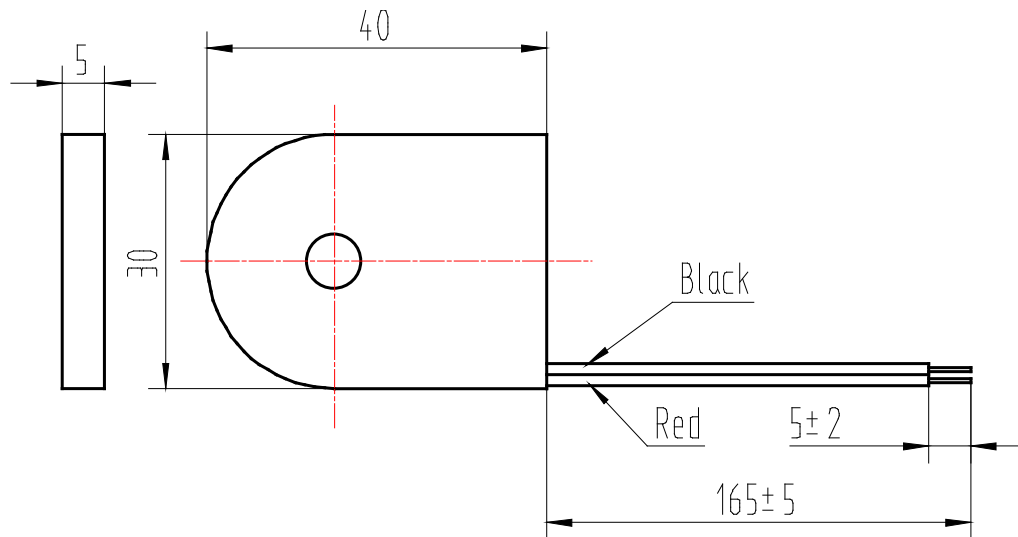


## B. SPECIFICATION

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.

No.	Item	Unit	Specification	Condition
1	Resonant Frequency	Hz	3500 ± 500	square wave
2	Rated Voltage	VDC	12	
3	Operating Voltage	VDC	6 ~ 15	
4	Current Consumption	mA	Max. 30	At 12VDC
5	Sound Output Level	dB	Min. 100	At 12VDC, 10cm
6	Operating Temperature	°C	-20 ~ +60	
7	Storage Temperature	°C	-30 ~ +70	
8	Dimension	mm	30 x 40	See appearance drawing
9	Weight (MAX)	gram	6.0	
10	Housing Material		ABS	
11	Tone		Continuous	
12	Environmental Protection Regulation		RoHS	

### C. APPEARANCE DRAWING Unit: mm

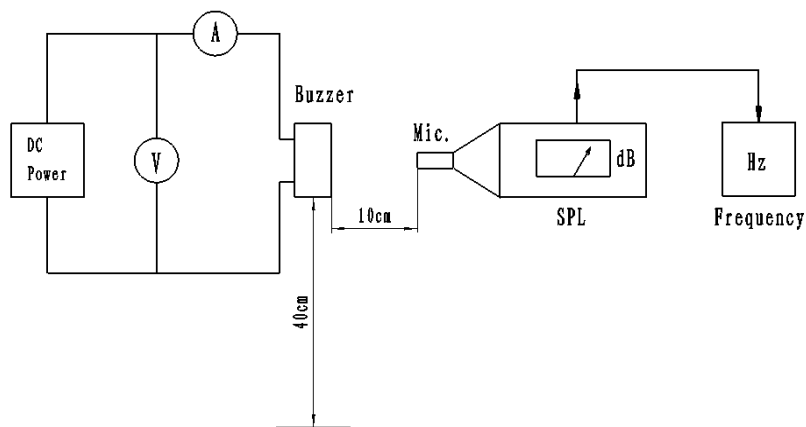


\* Wire: UL1571 AWG28#

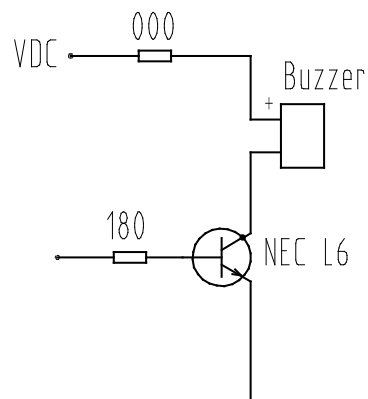
\* Tolerance:  $\pm 0.5$ mm Except Specified

### D. ELECTRICAL AND ACOUSTICAL MEASURING CONDITION

#### Recommended Setting



#### Recommended Test Circuit



## E. 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 -10dB from the initial value

### 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.

### 2. High Temperature Test

The part shall be capable of withstanding a storage temperature of  $+70^{\circ}\text{C}$  for 96 hours.

### 3. Low Temperature Test

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

### 4. Humidity Test

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

### 5. Temperature Shock Test

Temperature:  $70^{\circ}\text{C} / 1\text{hour} \rightarrow 25^{\circ}\text{C} / 3\text{hours} \rightarrow -30^{\circ}\text{C} / 1\text{hour} \rightarrow 25^{\circ}\text{C} / 3\text{hours}$  (1 cycle)

Total cycle: 10 cycles

### 6. Drop Test

In standard packing

From Height 75cm (Drop on hard wood or board of 5cm thick, three sides, six plain.)

### 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 material enter it.