



**APPROVAL SHEET  
FOR  
PIEZO BUZZER**

**常州富鸿达电子有限公司**

**CHANG ZHOU FHD ELECTRONICS CO., LTD.**

**CUSTOMER:**

**MODEL NUMBER: BP1790-20**

**OUR PART No.:**

**CUSTOMER PART No.:**

**DOCUMENT No.:**

<b>CUSTOMER</b>	<b>APPROVED</b>	<b>CHECKED</b>

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<b>Specification for Piezoelectric Ceramic Buzzer PIN Type</b>		Des.	Page 3 of 6
		Wang Min	Update/2015-03-20
Model No.: <b>BP1790-20</b>	P/N: 011-1790A-SP	Chk.	Apr.

## 2. Technical Parameter

### Measuring condition

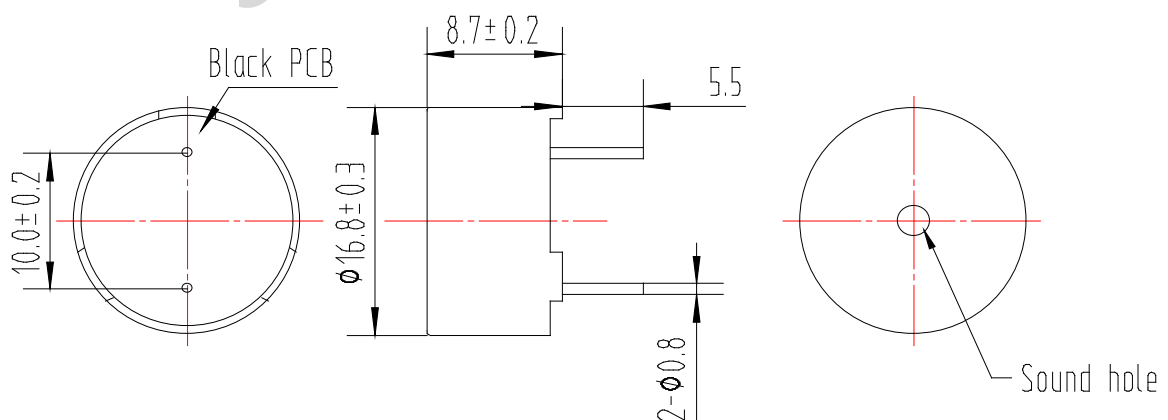
Part shall be measured under a condition (Temperature: 5~35°C, Humidity: 45%~85%R.H., Atmospheric pressure: 860 ~1060hPa) unless the standard condition (Temperature: 25±3°C, Humidity: 60±10%R.H. Atmospheric pressure: 860 ~1060hPa) is regulated to measure.



1	Resonant Frequency	2000±400Hz
2	Operating Voltage	1~25Vp-p
3	Rated Current	Max.5mA , At 2KHz 50% duty Square Wave 3Vp-p
4	Sound Output at 10cm	Min. 70dB, At 2KHz 50% duty Square Wave 3Vp-p
5	Capacitance	25000±30% pF At 120Hz
6	Operating Temperature	-20°C~+70°C
7	Store Temperature	-30°C~+80°C
8	Net Weight	Approx 1.5g
9	RoHS	Yes

## 3. Dimensions

Unit: mm



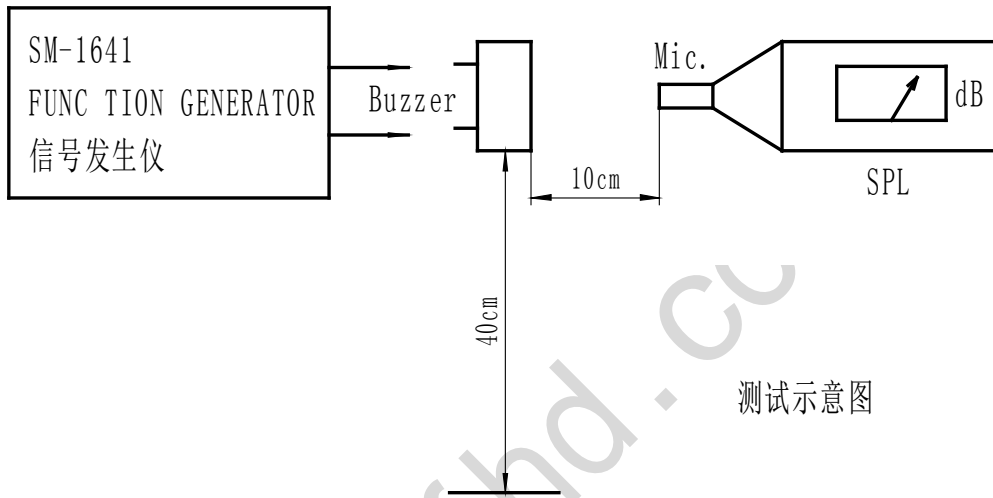
\*Unit: mm; Tolerance:  $\pm 0.5$ mm Except Specified

\*Housing Material: Black PBT

<b>Specification for Piezoelectric Ceramic Buzzer PIN Type</b>		Des.	Page 4 of 6
		Wang Min	Update/2015-03-20
Model No.: BP1790-20	P/N: 011-1790A-SP	Chk.	Apr.

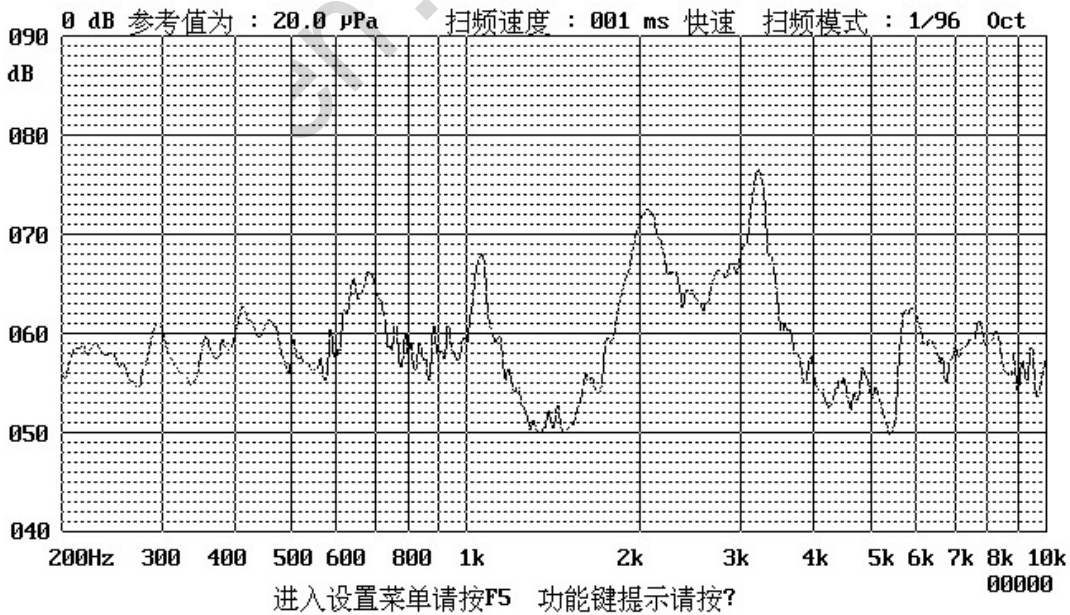
#### 4. Electrical And Acoustical Measuring Condition

##### Recommended Setting



测试示意图

#### 5. Frequency Response



3Vp-p 50% duty Square wave, 10cm

<b>Specification for Piezoelectric Ceramic Buzzer PIN Type</b>		Des.	Page 5 of 6
		Wang Min	Update/2015-03-20
<b>Model No.: BP1790-20</b>	P/N: 011-1790A-SP	Chk.	Apr.

## 6. 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

### 6.1 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.

### 6.2 High Temperature Test

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

### 6.3 Low Temperature Test

The part shall be capable of with standing a storage temperature of  $-20^\circ\text{C}$  for 96 hours.

### 6.4 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

### 6.5 Temperature Shock Test

Temperature:  $70^\circ\text{C}$  /1hour  $\rightarrow$   $25^\circ\text{C}$ /3hours  $\rightarrow$   $-20^\circ\text{C}$ /1hour  $\rightarrow$   $25^\circ\text{C}$ /3hours (1cycle)  
Total cycle: 10 cycles

### 6.6 Drop Test

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

### 6.7 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.

## 7. Packing

<b>Specification for Piezoelectric Ceramic Buzzer PIN Type</b>		Des.	Page 6 of 6
		Wang Min	Update/2015-03-20
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包装要求	1. 泡沫板 100PCS/板; 泡沫板料号: F6-703 2. 内盒 1000PCS/盒 上盒料号: F6—057 下盒料号: F6--058 3. 外箱 4000PCS/箱 料号: F6-022 外箱尺寸 405*40*19.5cm	
唛头要求	内盒:	外箱:

