

型号 (Type) : HY 40 A 10 TR 07 - 1

	1	2	3	4	5	6	7
1 华宇电子							
2 标称频率							
3 外壳材质							
4 外壳直径							
5 功能							
6 产品高度							
7 结构							

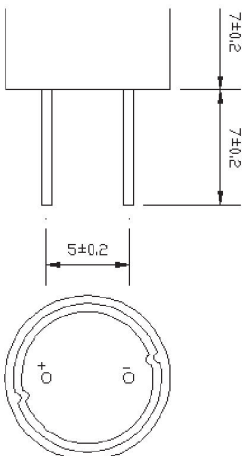
Huayu Electronic Co.,Ltd  
 Center Frequency  
 Housing Material  
 Shell diameter  
 Function  
 Product height  
 structure



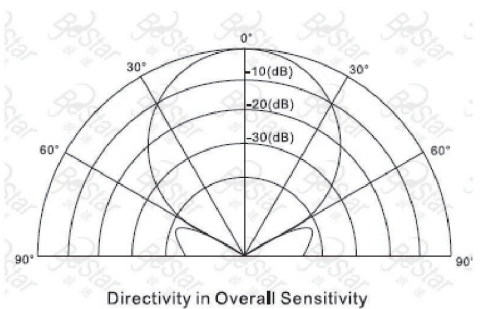
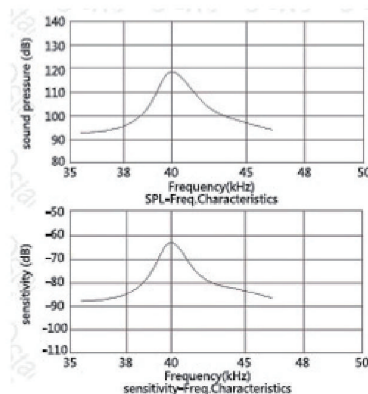
### 电气规格(ELECTRICAL SPECIFICATION)

1. 功能 (Function) : Dual use (双用途)
2. 结构 (structure) : Open Structure (开放式)
3. 外壳材质 (Housing Material) : Aluminum (铝)
4. 中心频率(Center Frequency):  $40 \pm 1.5$  KHz
5. 静态电容(Free Capacitance):  $2200\text{Pf} \pm 20\%$
6. 声压(Sound Pressure Level): 115dB min. (0dB=0.02mPa)
7. 灵敏度 (Sensitive): -67dB Min (0dB=1V/ $\mu$  bar)
8. 发射角度 (-6 dB Directivity (deg) :  $70^\circ \pm 15^\circ$
9. 使用温度(Operating Temperature):  $-30^\circ\text{C} \sim +70^\circ\text{C}$
10. 最大允许电压 (Maximum allowable voltage) : 80Vp-p
11. 储存温度(Storage Temperature):  $-40^\circ\text{C} \sim +80^\circ\text{C}$
12. 余震(Ringing) : 2.0ms MAX
13. 重量 (Weight) : 1.0g

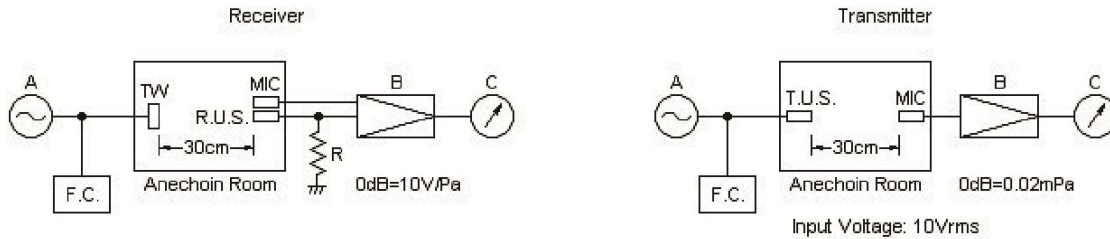
### 外观及尺寸 (Appearance and size)



### 性能参数 (graphics for performance parameters)



## 测试电路 (Test circuit)



A: Oscillator B: Amplifier C: Voltmeter R: 3.9K MIC: Microphone TW: Tweeter  
R.U.S.: Receiver Ultrasonic Sensor T.U.S.: Transmitter Ultrasonic Sensor F.C.: Frequency Counter

## 可靠性试验 (RELIABILTY TEST)

- 1 High temp test  
After being placed in a chamber at 120°C for 24 hours
  - 2 Low temp test  
After being placed in a chamber at -30°C for 96 hours
  - 3 Humidity Test  
After being placed in a chamber +50°C and 90±5% relative Humidity for 96 hours
  - 4 Vibration  
Sensor shall be measured after being applied vibration of Amplitude of 1.5mm with 10 to 55hz band of vibration frequency to each of 3 per-pendicular directions for 2 hours
  - 5 Drop test  
The part only shall be dropped from a height of 100cm onto a 10mm thick wooden board 3 times in 3 axes(X.Y.Z). (a total of 9 times).
  - 6 Treminal Mechanical strength  
The force 10 seconds of 9.8N(1.0Kg)is applied to each terminal in axial direction  
No damage and cutting off
  - 7 After the test the part shall meet specifications with-out any Degradation in appearance and performance except SPL after 4 hours at 25°C. The SPL should be in±10dB compared wit initial one.
- 1 高温试验  
120度放置 24 小时
  - 2 低温试验  
30 度放置 96 小时
  - 3 湿度测试  
50 度 90±5%，96 小时。
  - 4 振动  
10-55hz lmin 1.5mm 3 轴 (x.y.z) 2hours/direction
  - 5 跌落试验  
100CM高下跌到 10mm厚的木板上 3 次一个循环 (共做 9 次)。
  - 6 接线的机械强度  
用力 10 秒 9.8n (1.0kg) 施加到终端，在轴方向无损坏切断。
  - 7 试验结束后，在 25°C4 小时后，传感器的外观和性能均应符合规定。声压级应在 ±10db 相比初始。

## 包装规范 (Package Specification)

- |                          |                                  |
|--------------------------|----------------------------------|
| 1 每只泡沫盒 100 只产品。         | Each foam box has 100 products   |
| 2 每箱 40 只泡沫盒。            | 40 foam boxes in each case       |
| 3 每箱 4000 只产品。           | 4000 products per carton         |
| 4 包装箱尺寸 505X420X280 (mm) | Packing case size 505X420X280 mm |

