

型号 (Type) : HY 40 A 10 TR 07 - 1

1 华宇电子	1	2	3	4	5	6	7
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							

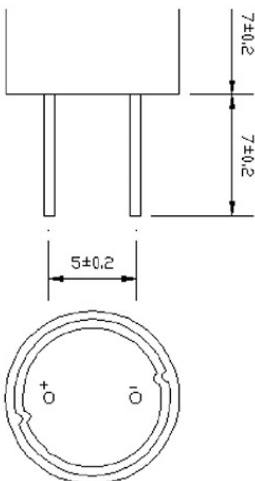
Huayu Electronic Co., Ltd
Center Frequency
Housing Material
Shell diameter
Function
Product height
structure



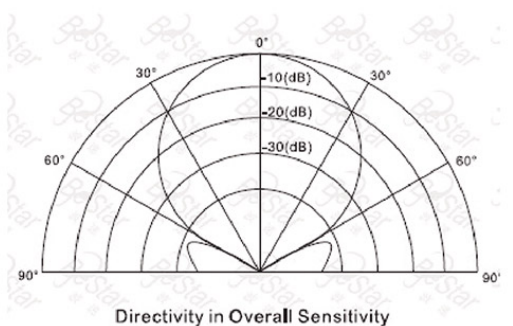
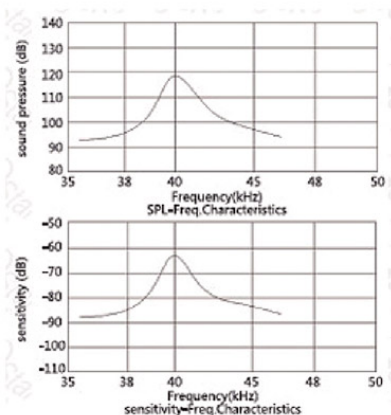
电气规格(ELECTRICAL SPECIFICATION)

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 ± 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/ μ 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

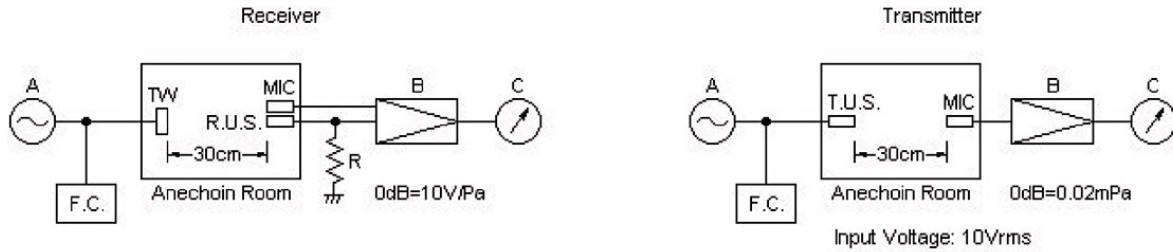
外观及尺寸 (Appearance and size)



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 (RELIABILITY 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 Terminal 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 1min 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°C 4 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

