

承 认 书

Specification For Approval

客 户

Customer: _____

客户料号:

CUST PN: _____

产品名称:

产品型号

Product Name: Ultrasonic Sensor Part No. JYAT-T/R1007200B

产品规格

Descriptions: Ø10mm/72KHz/1900pF

样品数量

日 期

Samples Qty: 20PCS Date: NOV.20,2024

超声波传感器明细 (SPEC List)

1. 规格型号-Part Number
2. 基本性能参数-Electrical Performance
3. 外观尺寸图-Appearance and Dimensions
4. 探测角度测试图- Detection angle test chart
5. 模拟测试线路- Analog test circuit
6. 产品的测试方法及仪器设备- Product testing methods and equipment
7. 产品包装方式- Product packaging
8. 注意事项-Notes
9. 环保承诺- Environmental Commitment

客户签认 Customer Approval	承认 APPD.		承认章 Company Chop
出图 Drawing	制作 DWN	审核 CHK	核准 APPD.

备注: 规格书编号: **EG-SPA103013**, 请确认后回传, 并以此作为生产件的批准.

Remarks: Spec file No.: EG-SPA103013, please return after confirmation, and use this as approval for production parts

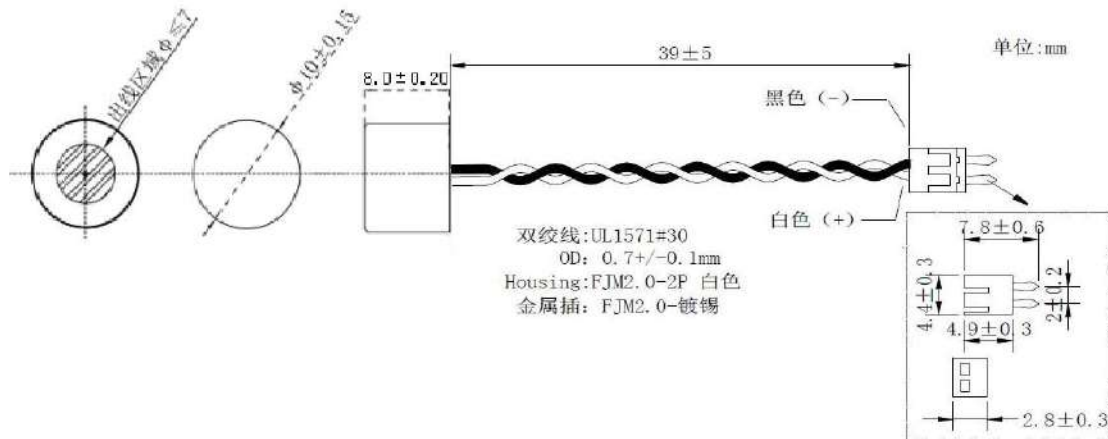
超声波传感器规格书 Ultrasonic Sensor Specification

EG-SPA103013

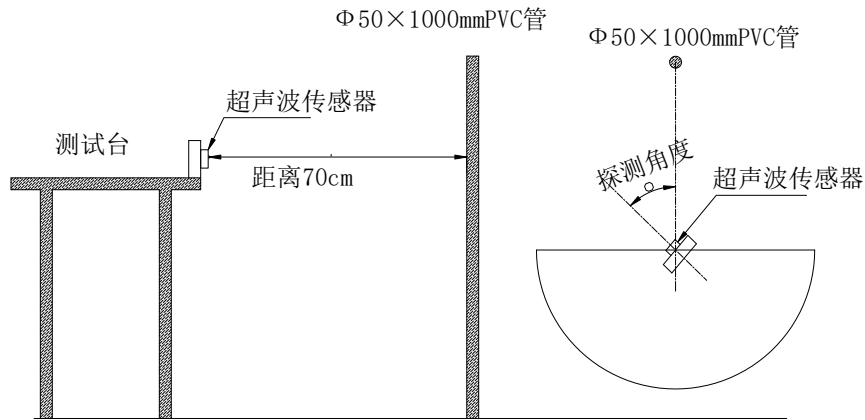
1. 规格型号(Part Number):JYAT-T/R1007200B
2. 基本性能参数(Electrical Performance):

No.	Item	Standard
1	Center Frequency (khz)	72±1.5
2	Static capacitance (pF)	1600-2300(At 1Khz)
3	Decay Time (Ms)	≤1.95(A22-72Khz Jigs, Including transmitted waves)
4	Echo Sensitivity	1.3V ≤ Echo lower half cycle amplitude ≤ 2.4V (A22-72Khz Jigs distance 1.0m with Φ75mm*1000mm PVC Tube)
5	Directivity (deg)X-axis	60±15deg (Refer to the detection angle test chart)
6	Directivity (deg)Y-axis	60±10deg (Refer to the detection angle test chart)
7	Allowable Max. input voltage (Vp-p)	140 (Fr:72Khz)
8	Working Temperature(°C)	-30~+80
9	Storage Temperature (°C)	-40~+85
10	Out Case Materials	AL
11	Surface painting Requirements	Bright Black

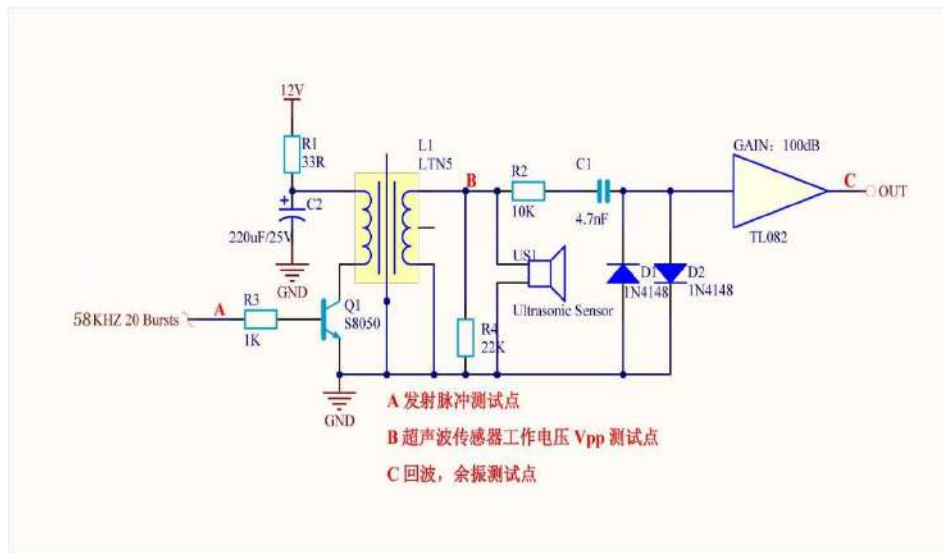
3. 外观及尺寸(Appearance and Dimensions):



4. 探测角度测试 (Detection angle test chart) :



5. 模拟测试线路 (Analog test circuit) :

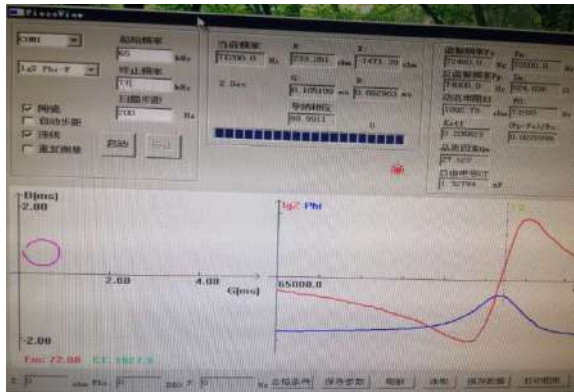


6. 产品的测试方法及仪器设备(Product testing methods and equipment):

1. 电容/频率- Capacitance/Frequency

采用 PV70(80)阻抗分析仪，产品两极接入测试端接口，测试显示如下图

Use PV70(80) impedance analyzer, connect the two poles of the product to the test terminal interface, and the test display is as shown below



2. 灵敏度与余振测试

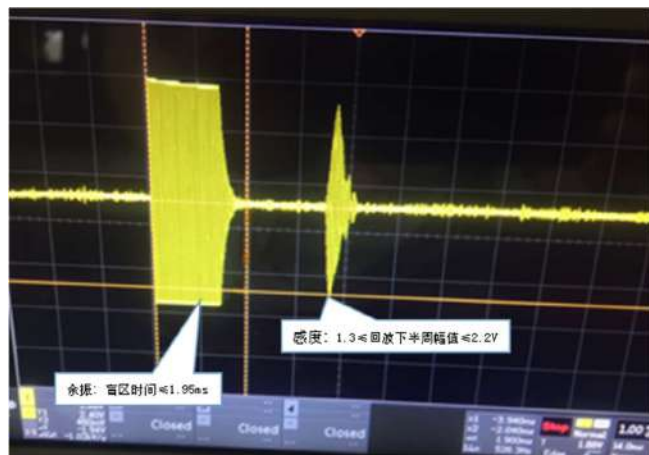
灵敏度与余振测试采用客户 A22_72KHz 接收一体检具与示波器连接，供电压 5VDC，测试波形如下图：

The sensitivity and decay time test uses the fixture of A22-72KHz integrated receiving connected to the oscilloscope, voltage of 5VDC. The test waveform is as follows:

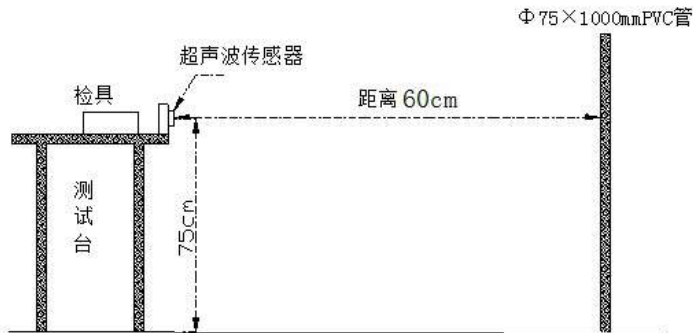
探芯测试夹具



A22-72KHz 接收一体检具测试波形



3 测试示意图 Test Sketch:



4 测试环境 Test Environment: Normal Temp T=25+/-3°C,H=45~65%R.H.

7. 产品包装(Product packing):
EPE + Inner Box and Carton



8. 注意事项 Notes:

1. 本产品一般用于障碍物距离探测用途，为防止失效产生不必要的损失，产品在设计时需加入防失效功能。

This product is used to detect the distance from the obstacle. In order to prevent sensor malfunction, the product should be designed with an anti-failure function.

2 给本产品加外壳时，在超声波探头和外壳之间应用质地软富有弹性的硅橡胶隔开。为了保证超声波传感器正常振动，请保持超声波传感器振动工作面无阻碍，否则会影响超声波传感器性能。

When adding a casing to this product, a soft and elastic silicone rubber should be used to separate the ultrasonic sensor and the casing. In order to ensure the ultrasonic sensor working well-vibration, please keep the vibration working surface of the ultrasonic sensor unobstructed, otherwise, its performance will be affected.

3 本产品适用于气体环境中，不能长时间暴露在高温高湿、具有腐蚀气体环境中，不能在水中或
Technology Empowers, just for you JYY 1007200B P5/6 Version:A0

有机溶剂的环境中使用，长时间暴露在粉尘的环境中使用会导致超声波传感器失效。

This product is suitable for use in an Air environment. It cannot be exposed to high temperature, high humidity or corrosive gas environment for a long time. It cannot be used in an environment with water or organic solvents. Using it in an environment with dust for a long time will cause the ultrasonic sensor failure.

4 本产品两端不得施加超过允许输入的交流电压，不得施加直流电压。

Do not apply AC Voltage exceeding the allowable input to both ends of this product, and do not apply DC voltage

5 本产品的外壳为铝合金，不能对其正面进行强力冲击，否则会造成外壳变形或产品失效。

The Sensor's outer case is made of AL alloy, and it cannot be strongly impacted on its front, otherwise AL Case will be deformed which may cause the product failure.

6 本产品油漆厚度建议 60~100um,烤漆温度/时间不超过 85°C/2h, 油漆返修次数不超过 2 次，否则会影响产品的性能。油漆返修产品应检测性能后再投入产线。

The Sensor's paint thickness is recommended to be 60~100um, the paint temperature and time should not exceed 85°C/2h, and the paint rework can't be more than twice, otherwise the sensor's performance will be affected. Paint repaired products should be tested before being put into the production line.

7 对本产品使用不当、进行再加工改变了产品出厂状态、以及其他不属生产方责任的情况，以上均不在退换货范畴。

Improper use or reprocessing of this product, which changes the product's normal state, or other situations which are not the manufacturer's responsibility, are not included in the scope of return or exchange.

9. 环保承诺(Environmental Commitment):

本产品符合 ROHS 标准,压电陶瓷片已获得 ROHS 豁免.

The Pb in Ceramic element is exempt, other ingredients are all in ROHS compliance.

Spec Version Record:

Version	Date	History	Prep.
A0	2024.11.20	Submitted to Client for the first time	Hujian