



PUI audio

Data Sheet

UTR-16295K-TP-LWC60

Key Features

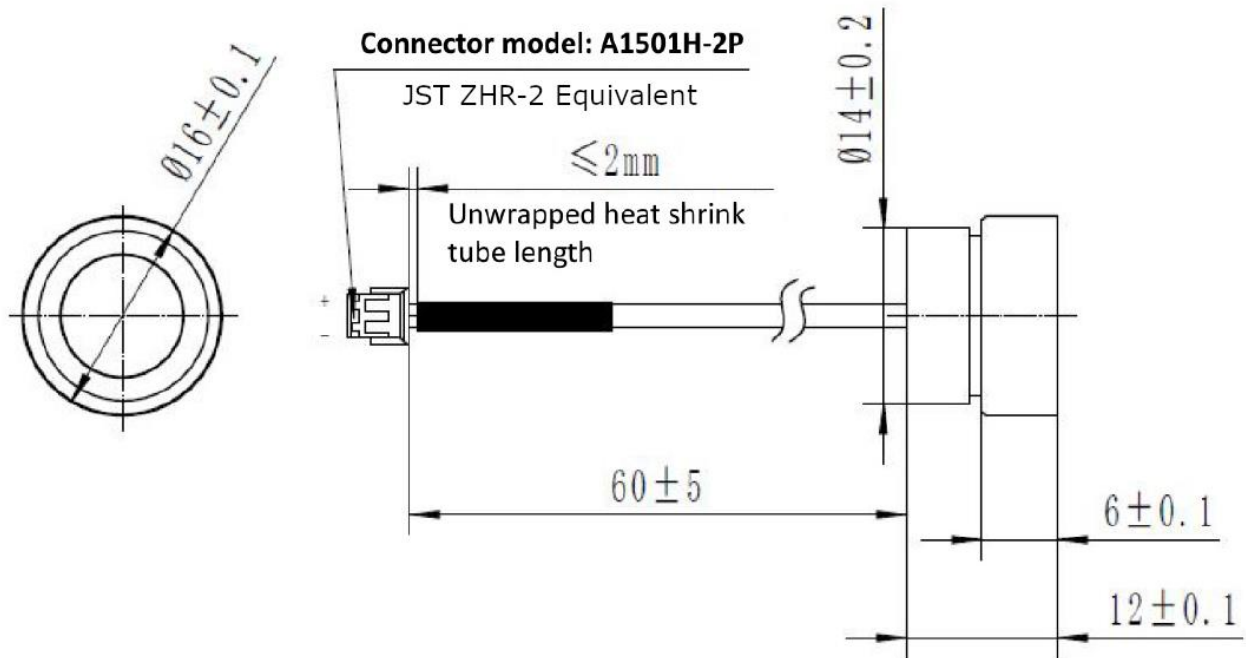
- Primarily for short range detection application
- Innovative acoustic material
- High precision
- Good directivity
- Excellent consistency

Specifications

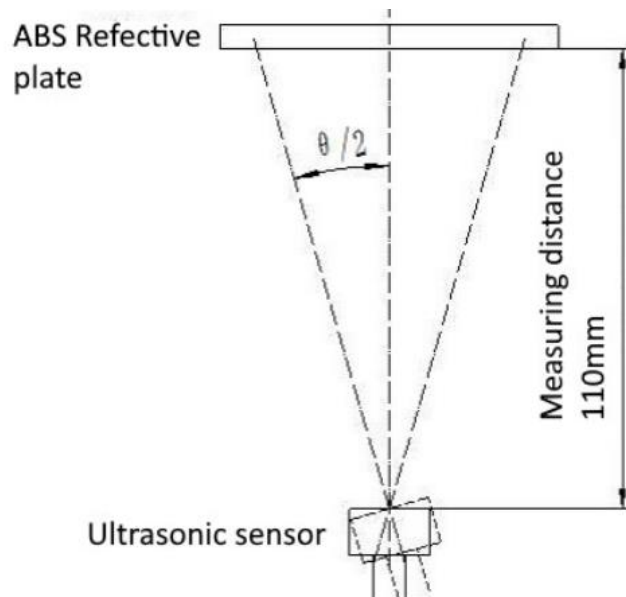
| Parameters | Values | Units |
|--|--|--|
| Function | Transmitter/Receiver | Dual Mode |
| Nominal Drive Frequency | 295 ± 15 | KHz |
| Hard Ground Sensitivity (measuring distance 30cm) | First echo: 2750 +750/-200 Second echo: 2600 +900/-1100 | mVp-p |
| Typical Beam Angle | 9 ± 3 | ° |
| Max. Driving Voltage | 120 | Vp-p (Max. number of pulse: 96; Pulse interval: 30ms) |
| | 12 | Vp-p Continuous Square Wave |
| Capacitance | 1,300 ± 20% | pF |
| Environmental Compliances | RoHS/REACH | - |
| Housing Material | Black Plastic (PC) | - |
| Operating Temperature | -20 ~ 70 | °C |
| Storage Temperature | -40 ~ 70 | °C |

Test condition: T=25±3°C, H=45~75% R.H

Dimensions



Product direction angle test



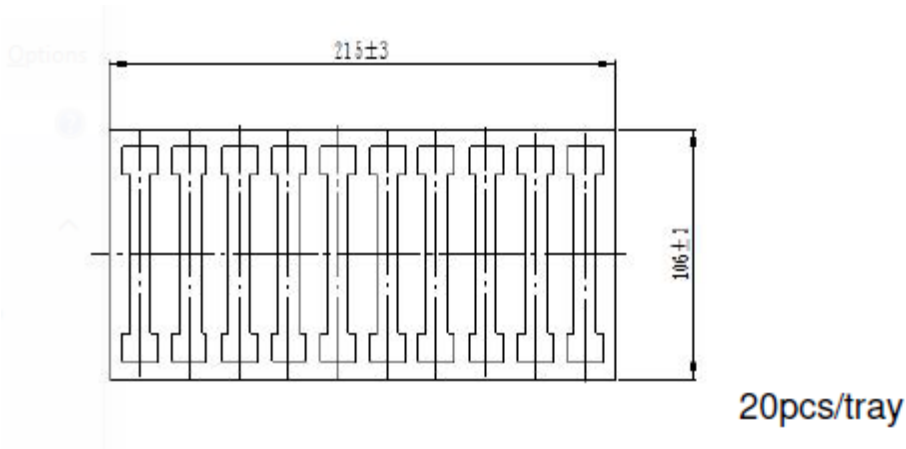
During the test, the launch angle is perpendicular to the plate as a base, then shift the sensor to the left or right for testing.

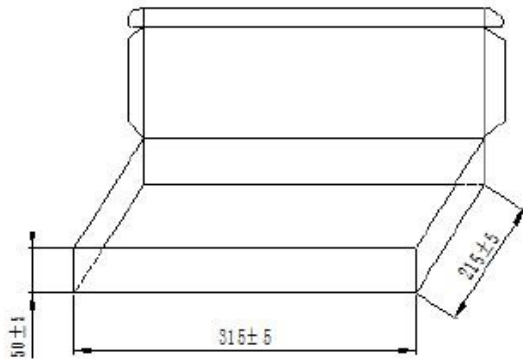
Reliability Testing

| Type of Test | Test Specifications |
|---------------------------|---|
| High Temperature Test | 240 hours at $70 \pm 2^\circ\text{C}$ |
| Low Temperature Test | 240 hours at $-40 \pm 3^\circ\text{C}$ |
| Humidity Test | 240 hours at $70 \pm 2^\circ\text{C}$ with relative humidity at 90-95% |
| Temperature Cycle Testing | The part is subject to 100 cycles consisting of: $-40 \pm 3^\circ\text{C}$ for 30 mins, raise to $70 \pm 2^\circ\text{C}$ within 3 mins, keep at $70 \pm 2^\circ\text{C}$ for 30 mins, and then cool to $-40 \pm 3^\circ\text{C}$ within three minutes |
| Vibration Test | Constant frequency acceleration of 20Hz with acceleration of 4.4g in each direction for 24 hrs. Then sweep frequency from 10Hz to 200Hz with acceleration of 4.4g and rising time and falling time of 15 mins in each direction. |
| Drop Test | Drop 3 times in each direction, at the height of 1.0m. |

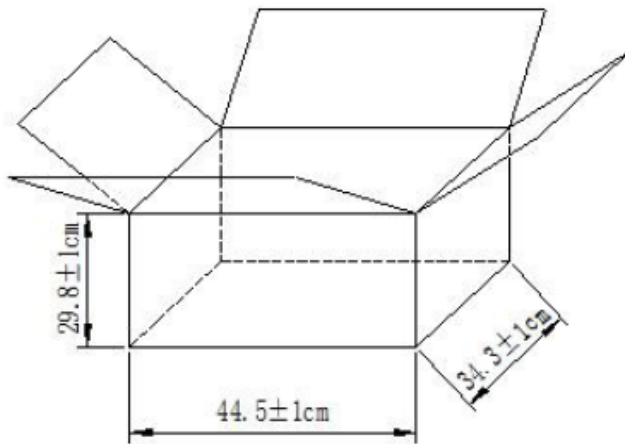
After each test, the SPL shall be ± 6 dB of the original SPL after 24 hours of rest in normal conditions.

Packaging





9 trays per case (180pcs)



10 cases per box (1800pcs)

Specifications Revisions

| Revision | Description | Date |
|----------|---------------------------|------------|
| A | Released from Engineering | 10/20/2022 |

Note:

1. Unless otherwise specified:
 - A. All dimensions are in millimeters.
 - B. Default tolerances are ± 0.5 mm and angles are $\pm 3^\circ$.
2. Specifications subject to change or withdrawal without notice.
3. Typical mounting is panel mount with unsupplied spring clip.
4. Mating connector is ZR insulation displacement connectors, such as B2B-ZR(LF)(SN)