



# PUIaudio

Data Sheet

UTR-16295K-TP-LWC60

## Key Features

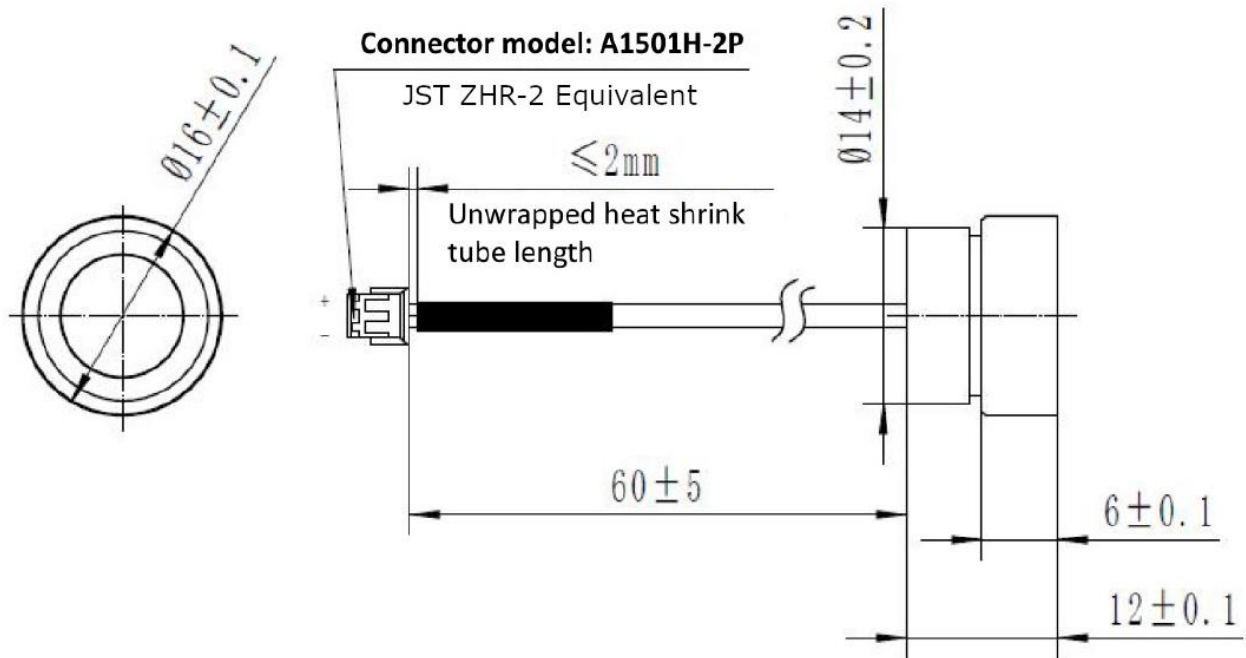
- Primarily for short range detection application
- Innovative acoustic material
- High precision
- Good directivity
- Excellent consistency

## Specifications

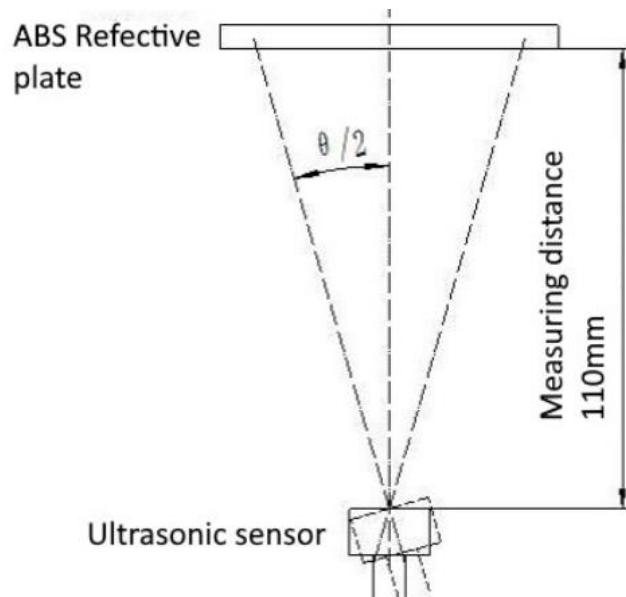
Parameters	Values	Units
Function	Transmitter/Receiver	Dual Mode
Nominal Drive Frequency	295 ± 15	KHz
Hard Ground Sensitivity (measuring distance 30cm)	First echo: 2750 +750/-200 Second echo: 2600 +900/-1100	mVp-p
Typical Beam Angle	9 ± 3	°
Max. Driving Voltage	120	Vp-p (Max. number of pulse: 96; Pulse 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  $\pm 6$  dB of the original SPL after 24 hours of rest in normal conditions.**

## Packaging

