



**AUDIOWELL**  
SENSOR TECHNOLOGY

# AUTOMOTIVE ELECTRONICS



## 小形ロボット、FA ロボット用 ローコスト防水小型超音波センサー



メーカー名: Audiowell Electronics(Guangdong)CO.,Ltd.  
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認証: ISO14001, ISO/TS16949, OHSAS18001

製品名: ロボット用ローコスト防水小型超音波センサー  
型式: T/R

概要: 超音波で物体を検出する非接触センサーです。  
検出物体で超音波が遮断される場合に出力信号が出ます。

特長:

- ①小形構造
- ②高精度
- ③耐水性
- ④検出物の色や透明体(透明フィルム、透明ガラス)に影響され難い特長があります。

アプリケーション:

- 小型ロボット
- パーキングアシスト
- 盗難防止器
- アラームシステム
- 窓セキュリティセンサー

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### Ultrasonic Parking Transducer

**Features**

- Quality control standard of Automotive OEM manufacturers
- Outstanding consistency and stability
- High sensitivity and low power consumption

**Applications**

- Reverse parking system
- Parking assist system



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### Ultrasonic Assembled Sensor

**Features**

- Integrated design, easy to install
- High sensitivity

**Applications**

- Parking Distance Control(PDC)
- Reversing aid system



Model	TC0120-001	TC0121-002	TC0062-003	TC0223-000
Appearance				
Resonant frequency (kHz)	48	55.5	58	55.5
Direction angle (°)	X: 60 Y: 60	X: 90 Y: 45	X: 90 Y: 45	X: 90 Y: 45
Decay time (ms)	≤1.8	≤2.2	≤1.8	≤2.0
Size (mm)	Φ 15.5 x H9.0	Φ 15.5 x H9.0	Φ 14.0 x H9.0	Φ 15.5 x H9.0

Model	TK0139
Appearance	
Resonant frequency (kHz)	55.5±1
Direction angle (°)	X: 85 Y: 45
Decay time (ms)	0.9~1.5
Detection range* (m)	≥2.5

\* Φ 75mm tube measurement

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### 密闭式超声波传感器 Water Proof Type Ultrasonic Sensor

Supply to OEM Automotive Manufacturer with OEM Quality Standard

Water-proof ultrasonic sensor is the core component of Parking System. Audiowell is the main supplier of water-proof ultrasonic sensor for OEM manufacturers of Automotive, which means the quality and performance of our products is up to the standard of automotive manufacturer.

**Feature**

- Quality control standard of Automotive OEM manufacturers
- Outstanding consistency and stability
- High sensitivity and low power consumption
- Excellent waterproof performance and weatherability

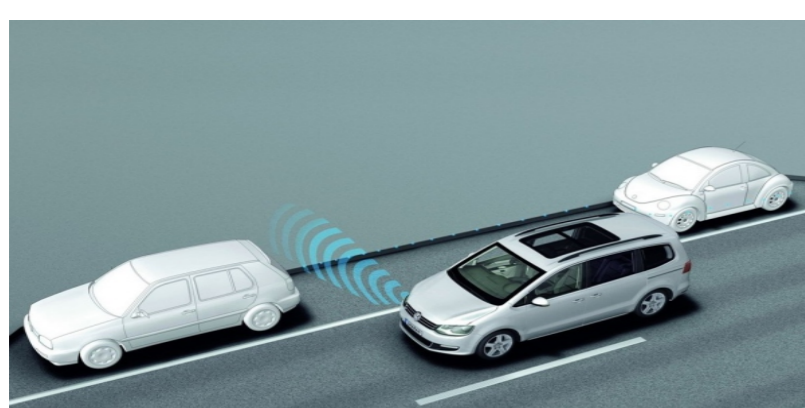


**Specification**

Item	Center frequency	Echo sensitivity	Decay time	Directivity X-axis	Directivity Y-axis	Capacitance
TC0033-002	40±1.0KHz	≥150mV	≤1.20ms	120±15°	60±10°	1800pF±15%
TC0062-005	58±1.0KHz	3.0±1.0V	≤1.80ms	90±15°	45±10°	2000pF±15%
TC0096-067	48±1.0KHz	≥150mV	≤1.30ms	100±15°	50±10°	1800pF±15%

**Specification**

- Auto-parking Blind zone detection



### 倒车雷达传感器 Assembled Parking Sensor

Ultrasonic Parking Sensor with high Stability and Adaptability

Assembled parking sensor is assembled ultrasonic sensor module, which consist of sensor, silicone ring, plastic housing and cable. It can be used by connected directly with the signal processing module, and it is the key component of parking system.

**Feature**

- High sensitivity, low power consumption and strong anti-interference ability
- Strong suitability, extensively applied for different ECU and car model types
- Excellent waterproof performance and weatherability, can be used in humid and dusty environment



**Specification**

Item	Center frequency	Echo sensitivity	Decay time	Capacitance	Max.input voltage
14C01-TK001L9-01	40±1.0KHz	≥350mV	≤1.20ms	2000pF±15%	140Vp-p
14.4A01-TK017L3-01	40±1.0KHz	≥600mV	≤1.20ms	2000pF±15%	140Vp-p

• 数字倒车雷达传感器 Digital Ultrasonic Sensor

**Feature**

- High sensitivity, stable and reliable
- Good consistency, low decay time
- High and low temperature resistance, impact resistance



**Specification**

Item	Center frequency	Echo sensitivity	Decay time	Capacitance	Max.input voltage
TK618	48±1.0KHz	250cm	20cm	5V	Digital signal