

## PIEZO ULT RASONIC SENSOR

Part Number: VT-US175D1901

### Applications

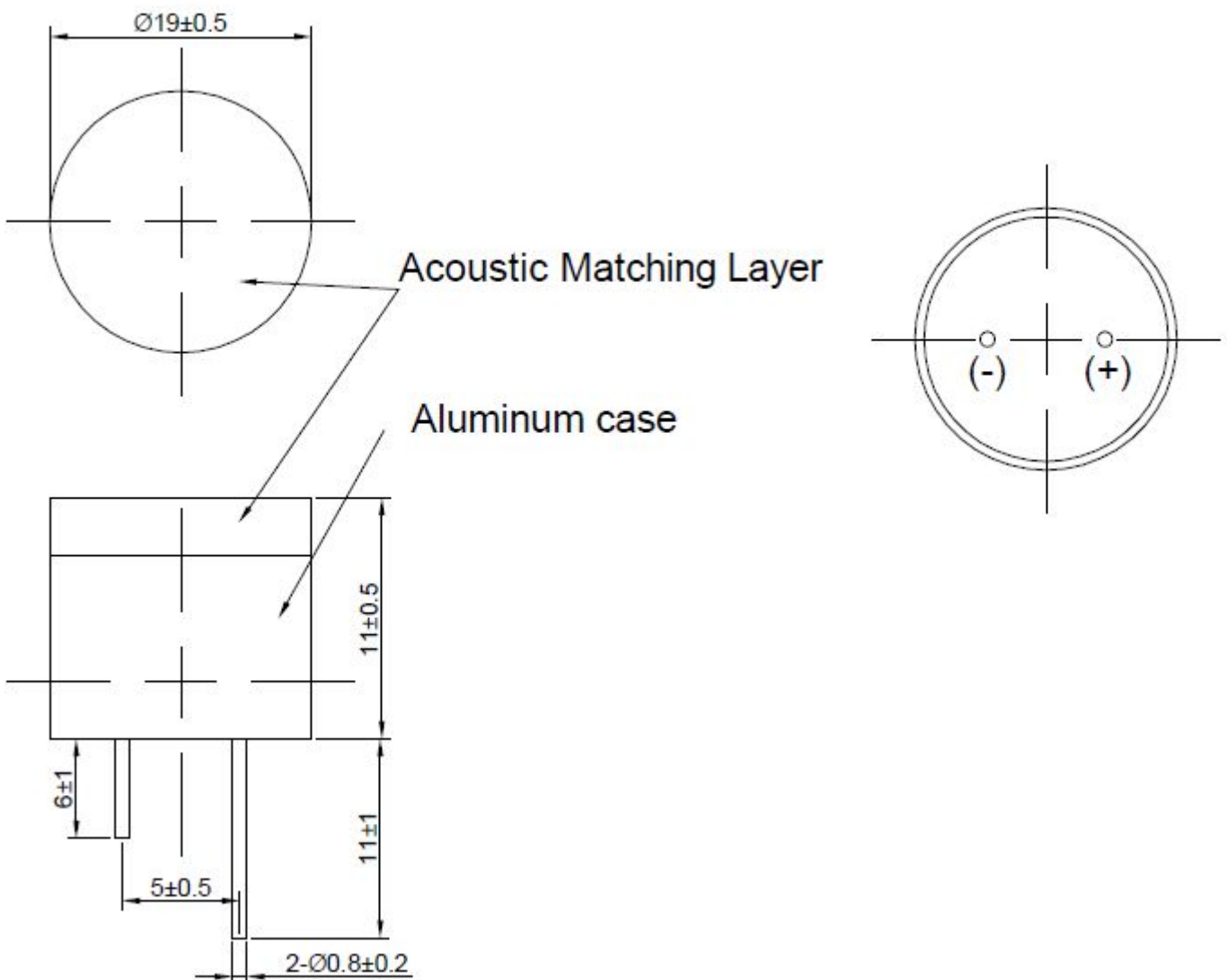
- 1.1)Level measurement
- 1.2)Automation control
- 1.3)Proximity
- 1.4)Obstacle avoidance
- 1.5)Robotics

### Feature

- 2.1)Rugged sealed construction.
- 2.2)Cylindrical design allows for installation in various applications.
- 2.3)Short-range measurement capabilities.



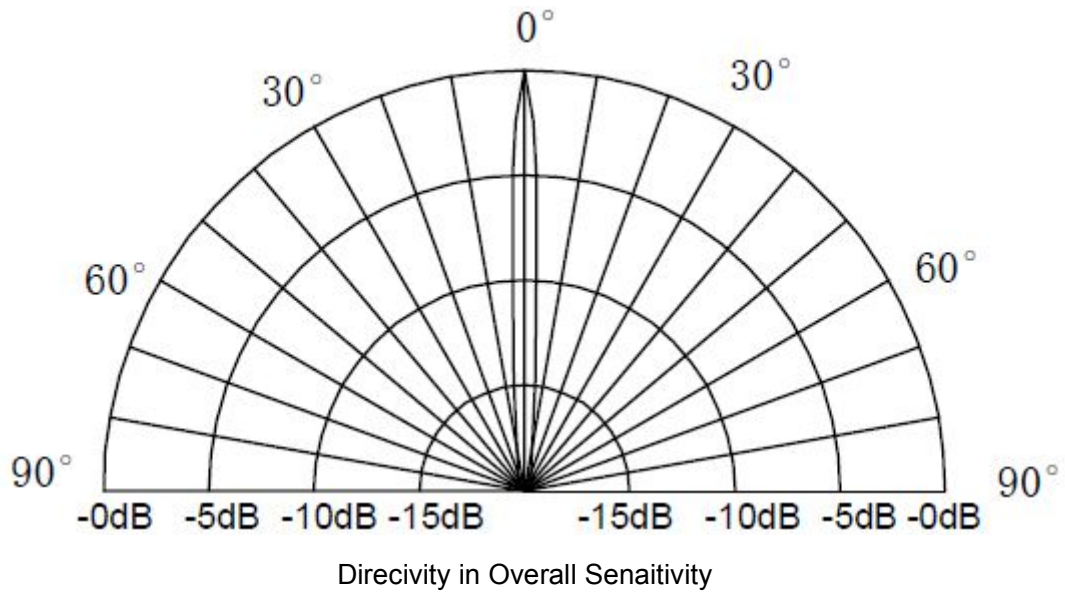
1.Dimension (Unit: mm)



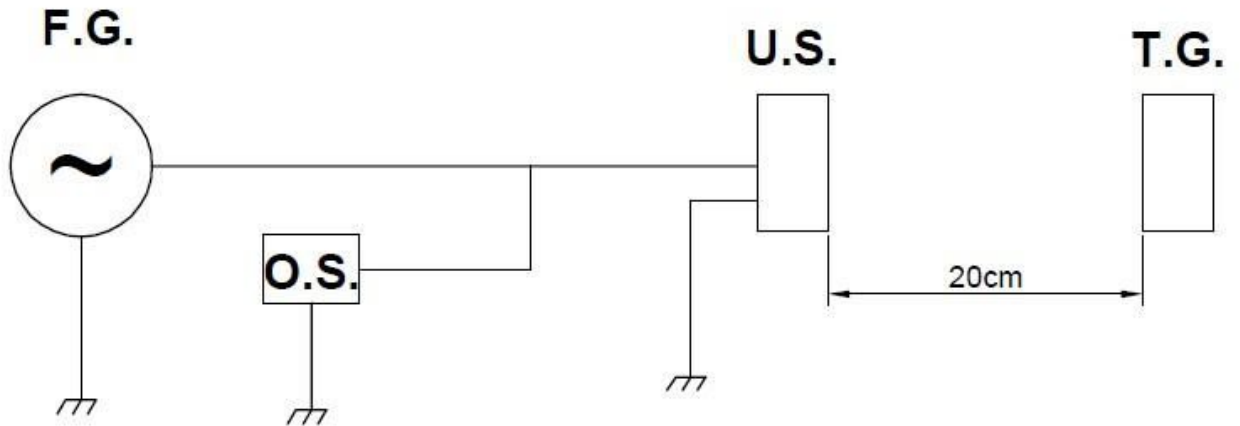
2.Electrical Characteristics

No.	Item	Unit	Specifications
1	Construction		Water Proof
2	Using Method		Dual Use
3	Center Frequency	Khz	175±10khz
4	Receive Sensitivity Echo	mV	≥1.0(driver signal:200Vp-p,175KHz,at 20cm)
5	Capacitance	pF	900pF±25% at 1KHz
6	Max. Input Voltage	Vp-p	500Vp-p
7	Directivity(-3dB)	°	7±2
8	Distance of Detection	M	0.1~2M
9	Protection class		IP65
10	Material		Aluminum
11	Operating Tem.Range	°C	-20 to +80°C
12	Storage Tem.Range	°C	-35 to +85°C

3.Directivity



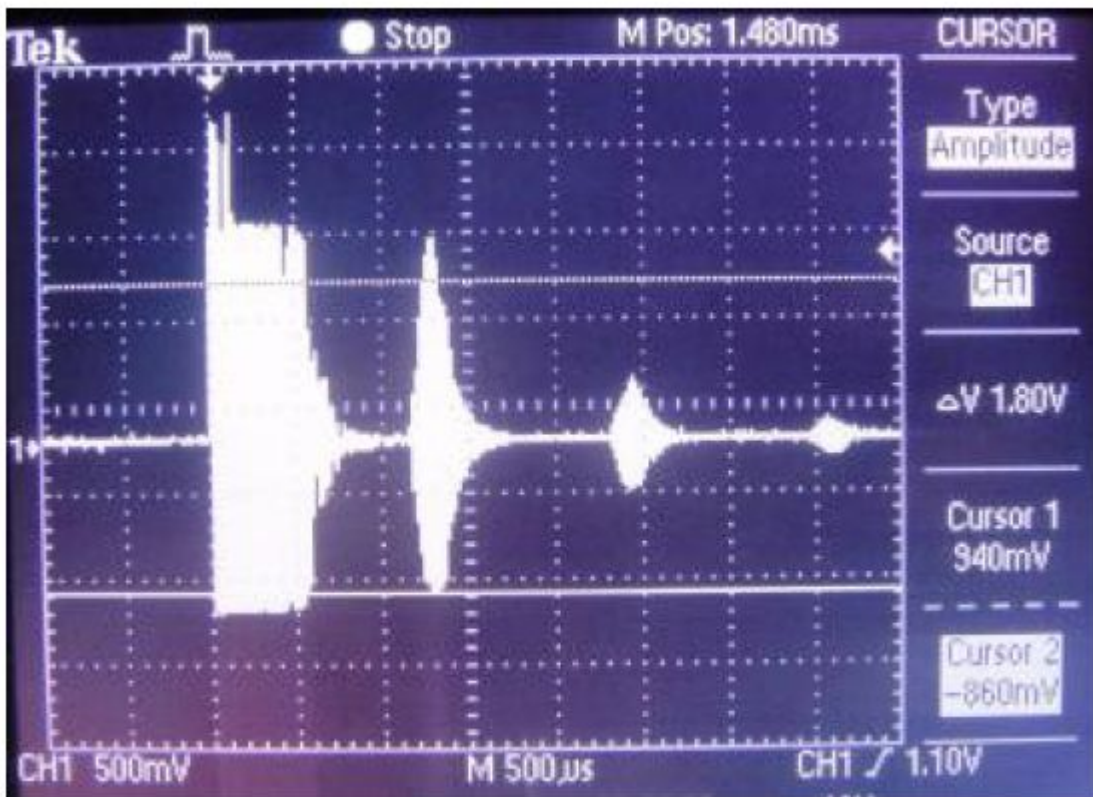
4. Test circuit



F.G.:Function Generator  
U.S :Ultrasonic Sensor  
T.G:Target  
O.S.:Oscoilloscope

5.Echo sensitivity/Ringing

Driver signal:200Vp-p,20cm



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c) Medical equipment and Transportation equipment (vehicles, trains, ships, etc.)

d) Traffic signal equipment i Disaster prevention / crime prevention equipment

e) Data-processing equipment including Application of similar complexity and/or reliability requirements to the applications listed above

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