

Ultrasonic Sensor Transceiver

multicomp PRO



Applications:

- Level measurement
- Automation control
- Proximity
- Obstacle avoidance
- Robotics

Features:

- Rugged sealed construction
- Cylindrical design allows for installation in various applications
- Short-range measurement capabilities

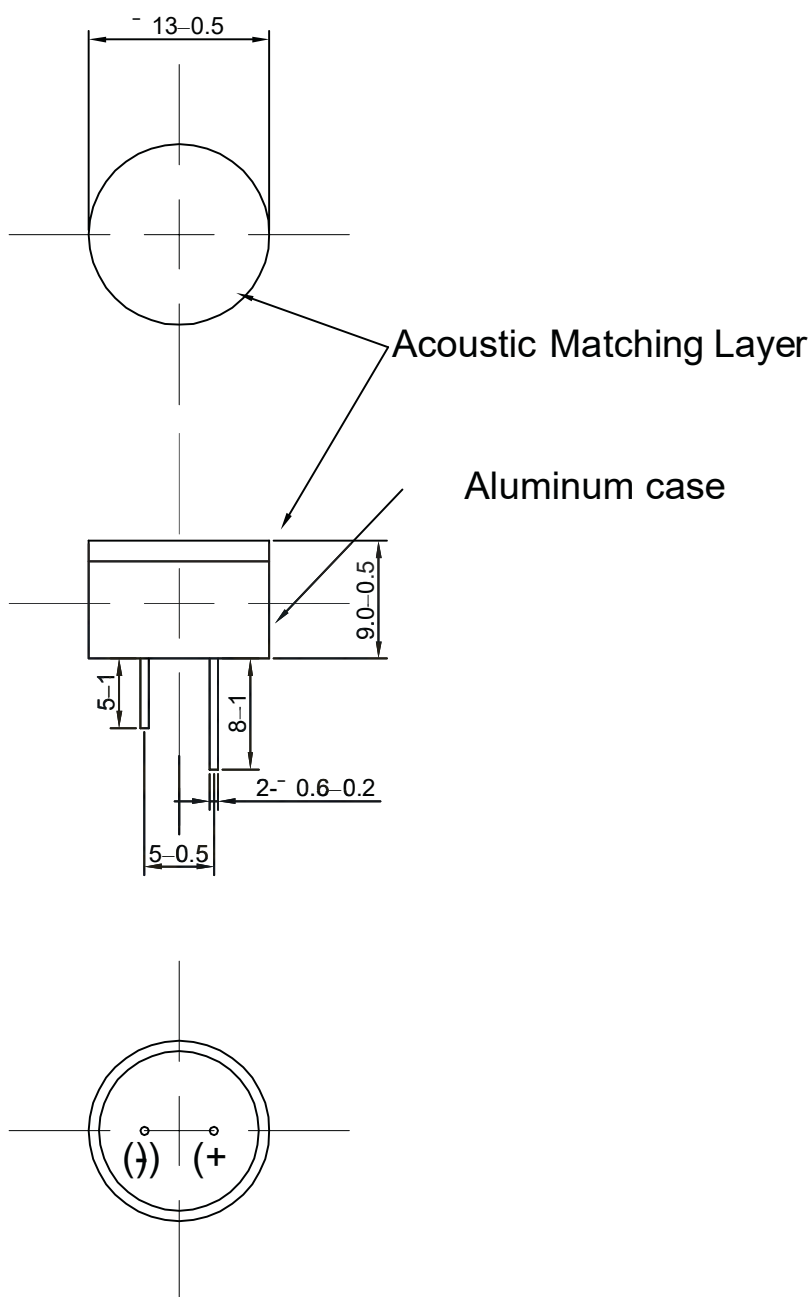
Technical Terms:

No	Item	Specification
1	Part Number	MCUSD13A300B09RS
2	Construction	Water Proof
3	Using Method	Dual Use
4	Centre Frequency	300 ± 15kHz
5	Receive Sensitivity Echo (V)	≥800mV (driven signal: 200Vp-p, 300kHz, at 20cm)
6	Capacitance (pF)	300 ± 25% at 1kHz
7	Max. Input Voltage	400Vp-p
8	Directivity (-3dB)	10 ± 2
9	Distance of Detection	0.04m to 1m
10	Protection Class	IP65
11	Material	Aluminium
12	Operating Temperature Range	-20°C to +80°C
13	Storage Temperature Range	-35°C to +85°C

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Drawing:



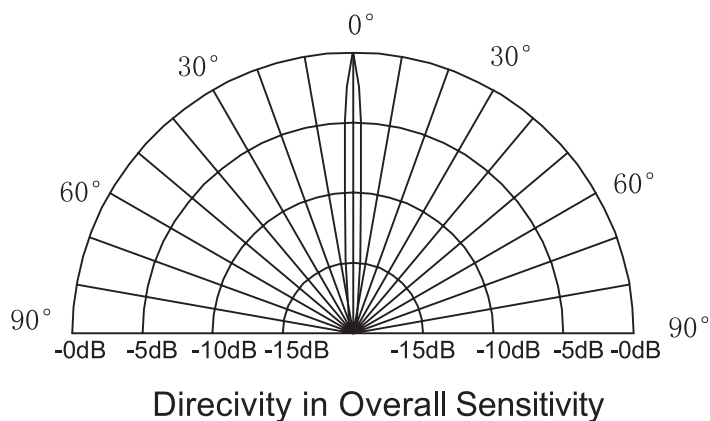
Dimensions : Millimetres

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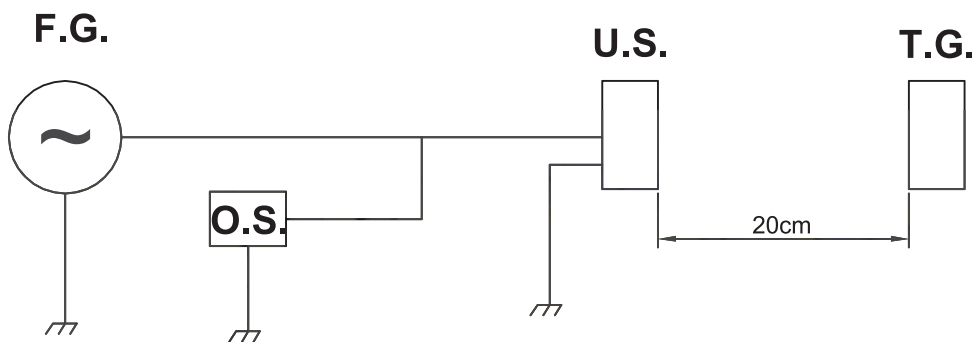
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Beam Pattern:



Test Circuit:



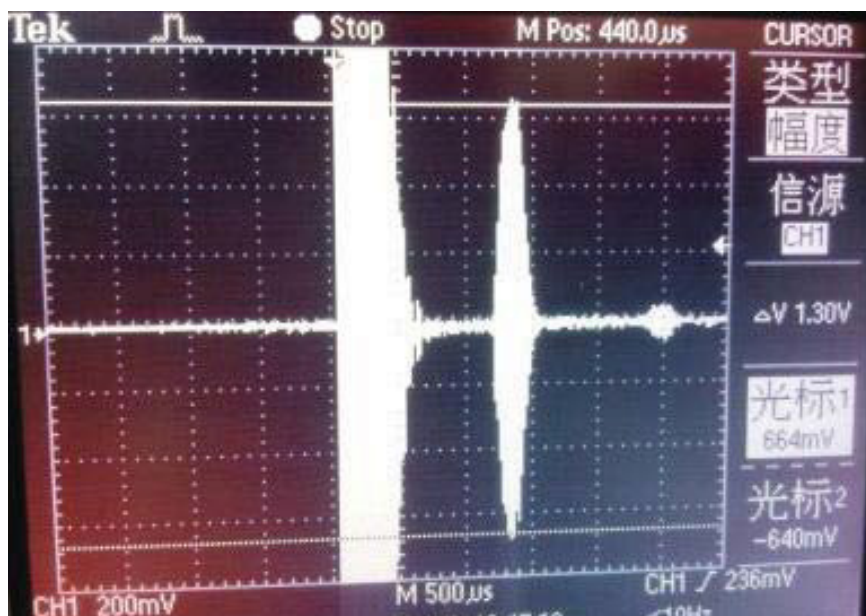
- F.G. : Function Generator
- U.S. : Ultrasonic Sensor
- T.G. : Target
- O.S. : Oscilloscope

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Echo sensitivity / Ringing

Driver Signal: 200Vp-p, 300kHz, at 20cm



Part Number Table

Description	Part Number
Transceiver, 300kHz, 13mm, Metal	MCUSD13A300B09RS

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