# Ultrasonic Sensor Transceiver





### **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	MCUSD11A400B11RS
2	Construction	Water Proof
3	Using Method	Dual Use
4	Centre Frequency	400 ± 16kHz
5	Receive Sensitivity Echo (mV)	≥350mV (driven signal: 200Vp-p, 400kHz, at 20cm)
6	Capacitance (pF)	550 ± 25% at 1kHz
7	Max. Input Voltage	300Vp-p
8	Directivity (-3dB)	7 ± 2
9	Distance of Detection	0.05m to 0.3m
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

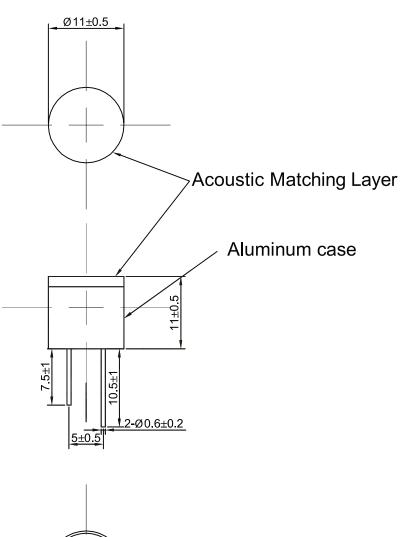
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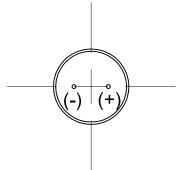


## **Ultrasonic Sensor** Transceiver



### **Drawing:**





Dimensions: Millimetres

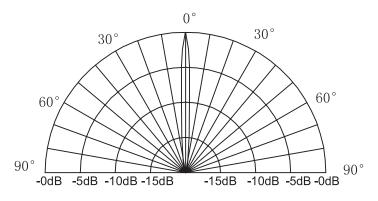




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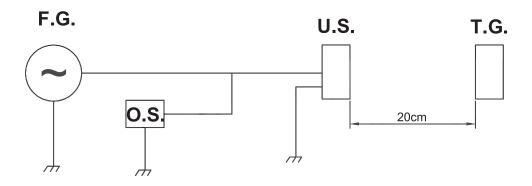


#### **Beam Pattern:**



Direcivity in Overall Sensitivity

### **Test Circuit:**



F.G.: Function Generator U.S.: Ultrasonic Sensor

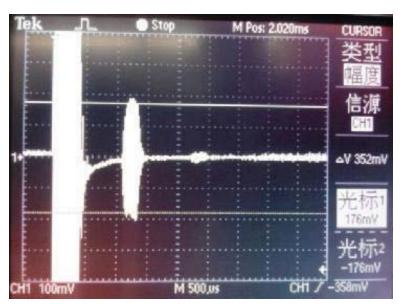
T.G. : TargetO.S. : Oscilloscope

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### Echo sensitivity / Ringing





#### **Part Number Table**

Description	Part Number
Transceiver, 400kHz, 11mm, Metal	MCUSD11A400B11RS

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