

Ultrasonic Sensor Transceiver 40kHz



Applications:

This specification covers the water proof type ultrasonic ceramic transducer which are used for ultrasonic ranging and parking sensor of automobile.

Features:

- Open structure and dual use
- Compact and light weight
- High sensitivity and sound pressure
- Less power consumption
- High reliability
- IP Rating: IP 67

Technical Terms:

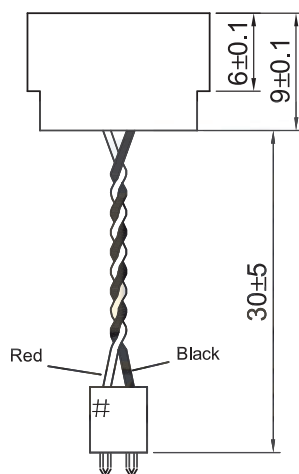
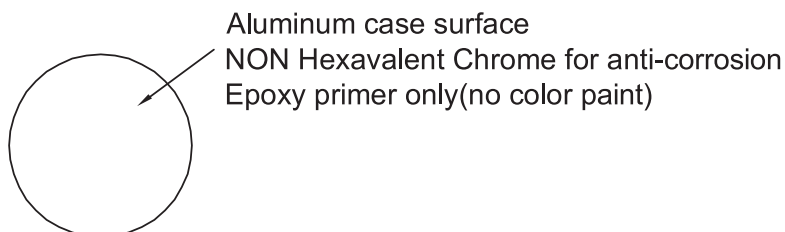
No	Item	Specification
1	Part Number	MCUSD14A40S09RS-30C
2	Construction	Water Proof
3	Using Method	Dual Use
4	Centre Frequency	40 ± 1kHz
5	Sound Pressure Level (dB)	≥97 (30cm/10V rms)
6	Sensitivity (dB)	≥-75dB/V/μbar
7	Beam pattern	110 × 50°
8	Capacitance (pF)	2,500 ± 25% at1kHz
9	Operating Temperature Range	-40°C to 85°C
10	Storage Temperature Range	-40°C to 85°C
11	Allowable Input Voltage (Vp-p)	160V
12	Housing Material	Aluminium



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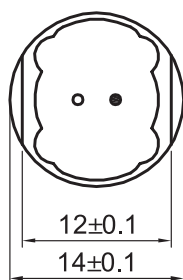


Drawing:



Lead wire
AWG30 Red,Black
connector pitch 2mm

EIAJ code



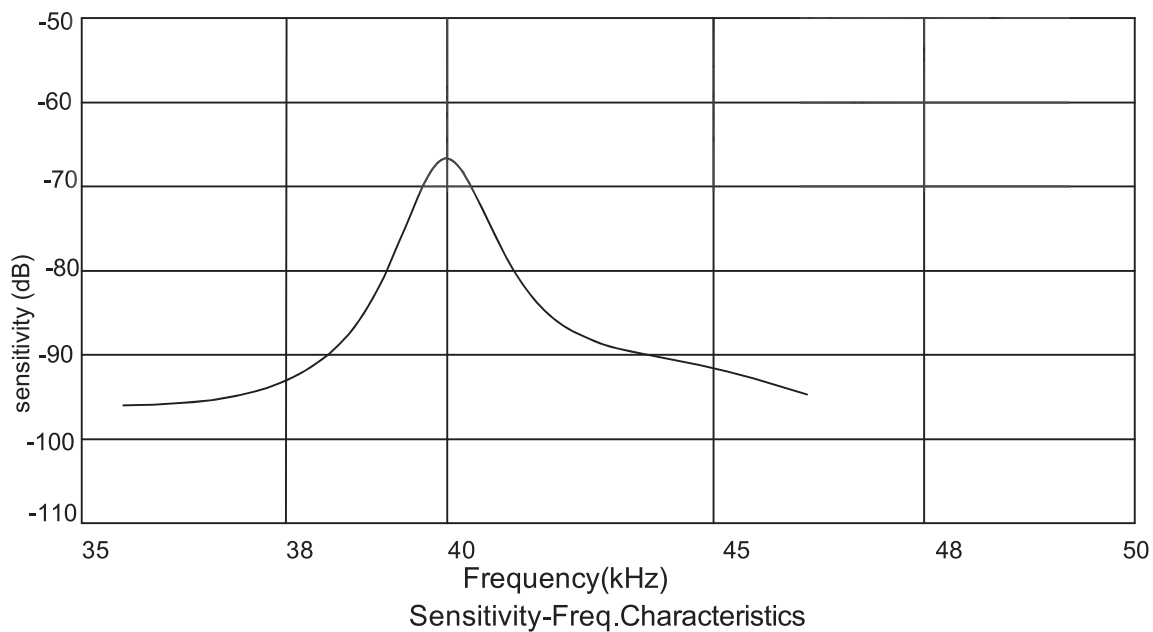
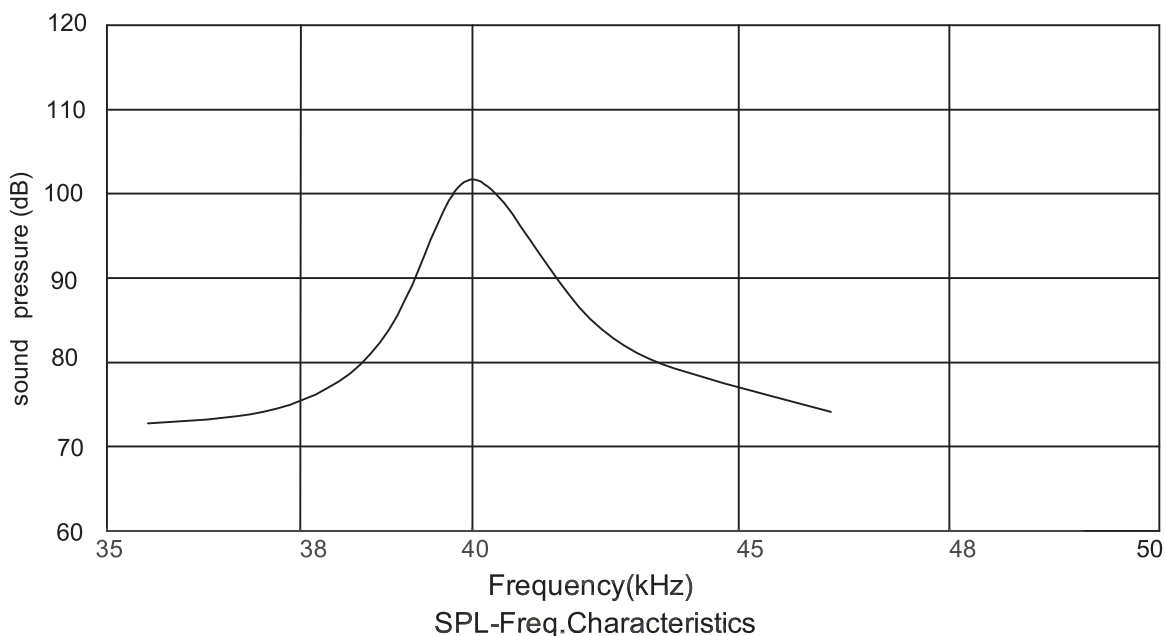
Dimensions : Millimetres



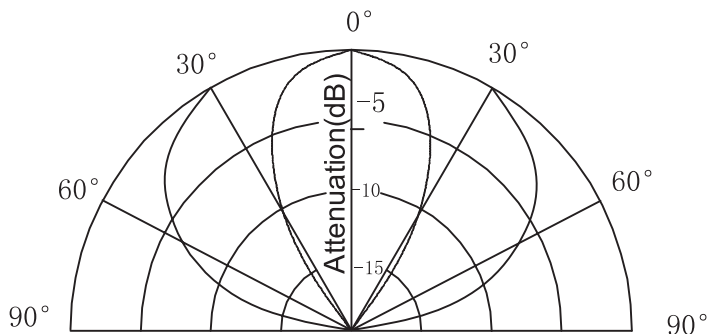
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Beam Pattern:



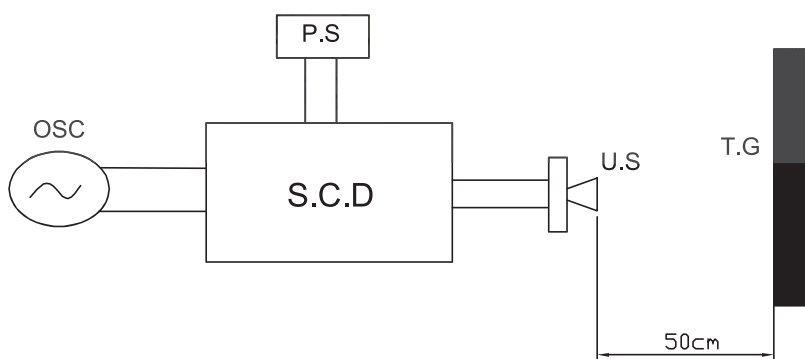
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Directivity in Overall Sensitivity

Test Circuit:

Echo&Rest.Resonant Time test circuit



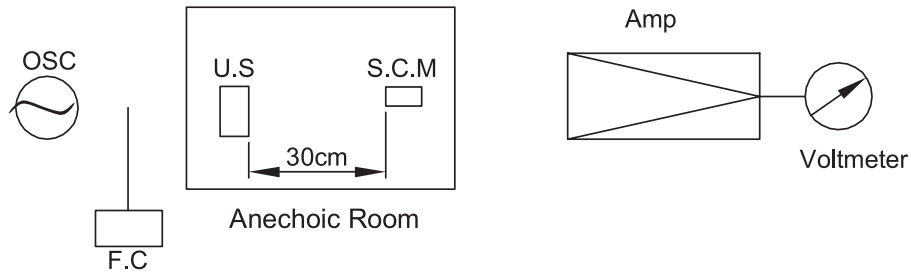
- OSC : Oscillator
- P.S : Power supply
- S.C.D : Special circuit diagram
- U.S : Ultrasonic Sensor
- T.G : Target



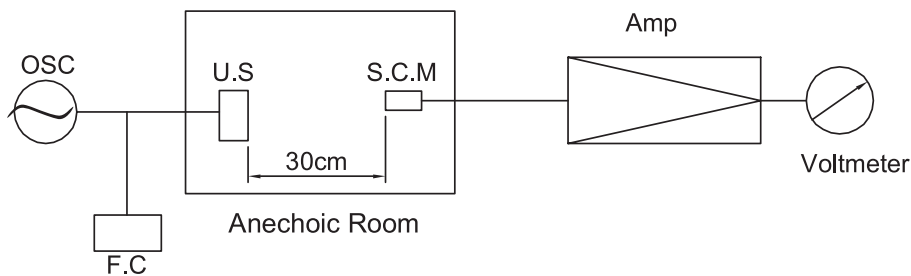
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S.P.L test circuit



S.P.L test circuit



Part Number Table

Description	Part Number
Transceiver, 40kHz, 14mm, Metal	MCUSD14A40S09RS-30C

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