

AT300

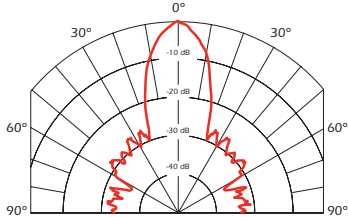


SPECIFICATIONS

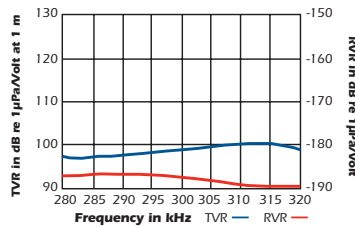
Best Operating Frequency: 300 kHz, $\pm 4\%$
Minimum Transmit Sensitivity at Best Transmit Frequency: 95 dB, 1 $\mu\text{Pa/V}$ at 1 m
Minimum Receive Sensitivity at Best Receive Frequency: -180 dB re 1V/ μPa
Minimum Parallel Resistance: 650 Ω , $\pm 30\%$
Minimum and Maximum Sensing Range*: 4 cm to 1 m
Typical Sensing Range: 5 cm to 50 cm
Free (1 kHz) Capacitance: 450 pF, ± 135 pF
Beamwidth (@ -3 dB Full Angle): 10°, $\pm 2^\circ$
Maximum Driving Voltage (2% Duty Cycle Tone Burst): 400 V_{pp}
Operating Temperature: -40°C to 90°C
Weight: 4 g
Housing Material: Glass filled polyester
Acoustic Window: Glass reinforced epoxy

*Pulse-Echo Mode. Minimum and maximum ranges are best case scenarios. Actual range may vary depending on drive circuitry and signal processing.

Directivity Pattern



Transmit & Receive Voltage Response



Impedance Magnitude & Phase

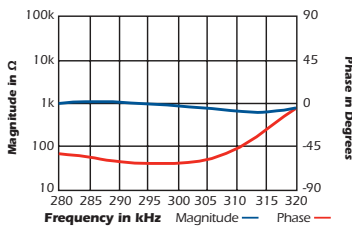
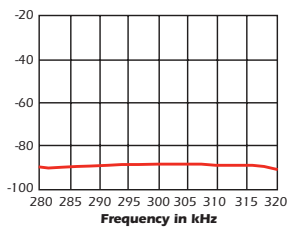


Figure of Merit (Sum of TVR & RVR)



300 kHz

AIRDUCER® Ultrasonic Transducer

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

Dimensions

