

AT120

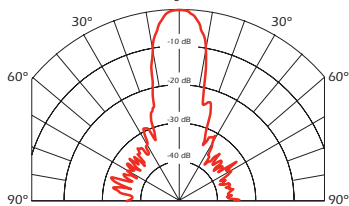


SPECIFICATIONS

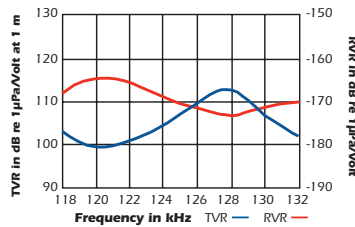
- Best Operating Frequency:** 125 kHz, $\pm 4\%$
- Minimum Transmit Sensitivity at Best Transmit Frequency:** 107 dB, 1 $\mu\text{Pa/V}$ at 1 m
- Minimum Receive Sensitivity at Best Receive Frequency:** -169 dB re 1V/ μPa
- Minimum Parallel Resistance:** 420 Ω , $\pm 30\%$
- Minimum and Maximum Sensing Range*:** 15 cm to 7 m
- Typical Sensing Range:** 20 cm to 3 m
- Free (1 kHz) Capacitance:** 1,000 pF, ± 200 pF
- Beamwidth (@ -3 dB Full Angle):** 12°, $\pm 2^\circ$
- Maximum Driving Voltage (2% Duty Cycle Tone Burst):** 800 V_{pp}
- Operating Temperature:** -40°C to 90°C
- Weight:** 20 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

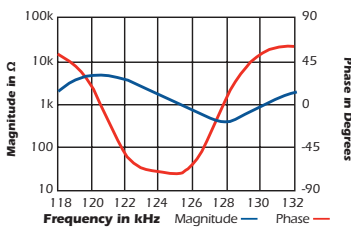
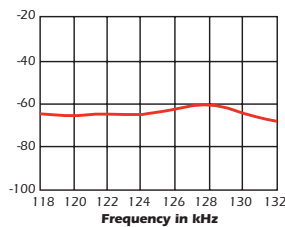


Figure of Merit (Sum of TVR & RVR)



125 kHz

AIRDUCER® Ultrasonic Transducer

Applications

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

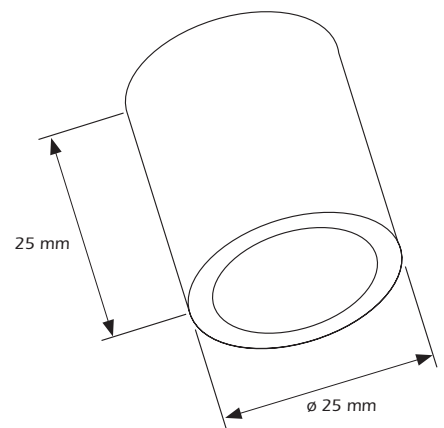
Features

- Rugged sealed construction
- Cylindrical design allows for installation in various applications

Options

- Optional circuit board mounting pins
- Available in PVDF housing for use in chemical aggressive environments

Dimensions



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