

AT120

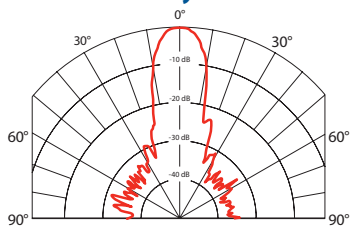


SPECIFICATIONS

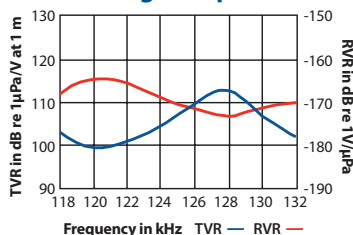
Best Operating Frequency: 125 kHz, $\pm 4\%$
Minimum Transmit Sensitivity at Best Transmit Frequency:
107 dB re 1 $\mu\text{Pa/V}$ at 1 m
Minimum Receive Sensitivity at Best Receive Frequency:
-169 dB re 1V/ μPa
Minimum Parallel Resistance: 420 Ω , $\pm 30\%$
Minimum and Maximum Sensing Range*: 15 cm to 7 m
Typical Sensing Range: 20 cm to 3 m
Free (1 kHz) Capacitance: 1,000 pF, $\pm 20\%$ 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

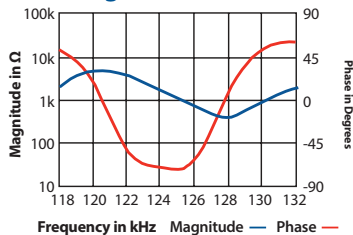
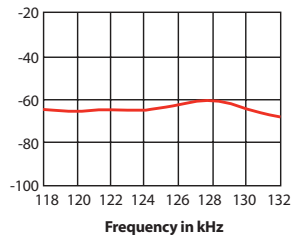


Figure of Merit (Sum of TVR & RVR)



125 kHz

AIRDUCER® Ultrasonic Transducer

Applications

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

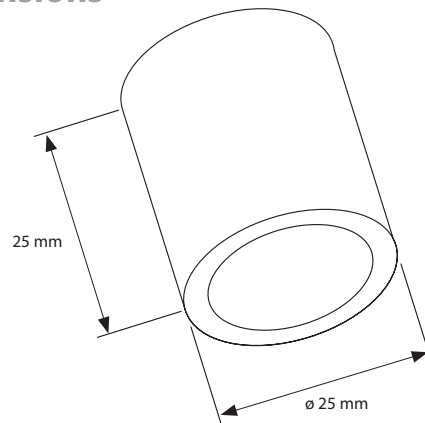
Features

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

Options

- Optional circuit board mounting pins
- Available in PVDF housing for use in chemically aggressive environments
- 10 K Ω thermistor available for temperature compensation

Dimensions



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