

SPECIFICATIONS

Best Operating Frequency: 50 kHz, $\pm 4\%$

Minimum Transmit Sensitivity at Best Transmit Frequency:

106 dB re 1μPa/V at 1 m

Minimum Receive Sensitivity at Best Receive Frequency: -162 dB re 1V/μPa

Minimum Parallel Resistance: 450 Ω , ±30%

Minimum and Maximum Sensing Range*: 25 cm to 15 m

Typical Sensing Range: 30 cm to 10 m Free (1 kHz) Capacitance: 5,700 pF, ±20% pF Beamwidth (@ -3 dB Full Angle): 12°, ±2°

Maximum Driving Voltage (2% Duty Cycle Tone Burst): 1,500 V

Operating Temperature: -40°C to 90°C

Weight: 160 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.

Ε

110 at 110

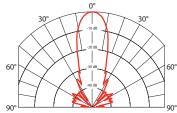
in dB re

₹

100

47 48

Directivity Pattern



Frequency in kHz TVR — RVR — Figure of Merit

49

50 51

Transmit & Receive

Voltage Response

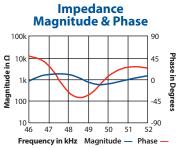
150

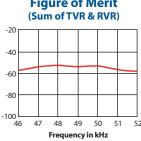
-160 R in

180

-190

170 **dB re 1**





50 kHz

AIRDUCER® Ultrasonic Transducer

Applications

- Level measurement
- Open channel flow
- · Obstacle avoidance
- Proximity
- Robotics

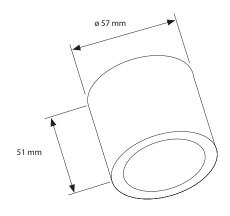
Features

- Improved deadband performance as compared to AT50
- Rugged sealed construction
- Cylindrical design allows for installation in various applications

Options

• 10 K Ω thermistor available for temperature compensation

Dimensions



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