

Airmar ultrasonic transducers deliver the highest level of performance in the most challenging environments and they are the key component for our customers success and their applications. Our precision tuned air-ranging transducers are tried and true performers, even when used for difficult tasks. American-made from the highest quality materials, Airmar's ultrasonic transducers provide reliable, long-lasting excellence to any measurement system.

## AT225



### SPECIFICATIONS

**Best Operating Frequency:** 228 kHz,  $\pm 4\%$   
**Minimum Transmit Sensitivity at Best Transmit Frequency:**  
 101 dB re 1  $\mu$ Pa/V at 1 m  
**Minimum Receive Sensitivity at Best Receive Freq.:** -180 dB re 1V/ $\mu$ Pa  
**Minimum Parallel Resistance:** 400  $\Omega$ ,  $\pm 30\%$   
**Minimum and Maximum Sensing Range\*:** 8 cm to 2.5 m  
**Typical Sensing Range:** 10 cm to 1.5 m  
**Free (1 kHz) Capacitance:** 450 pF,  $\pm 20\%$  pF  
**Beamwidth (@ -3 dB Full Angle):** 15°,  $\pm 2^\circ$   
**Maximum Driving Voltage (2% Duty Cycle Tone Burst):** 500 V<sub>pp</sub>  
**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.

Note: Optimally, performance measurements should be taken when the transducer reaches a steady state.

## 228 kHz

### AIRDUCER<sup>®</sup> Ultrasonic Transducer

#### Applications

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

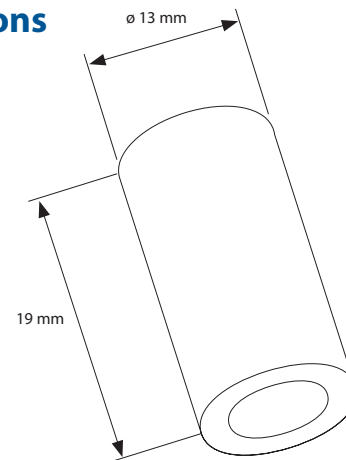
#### Features

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

#### Options

- Optional circuit board mounting pins
- 2 wire version is standard. Also available with coaxial cable.

#### Dimensions



#### Additional Resources

Theory of Operations



Applying Ultrasonic Technology



T1 Developer Board



Airmar's T1 Developer's Transceiver Module can be used for evaluation of AIRDUCER<sup>®</sup> Transducers.

