

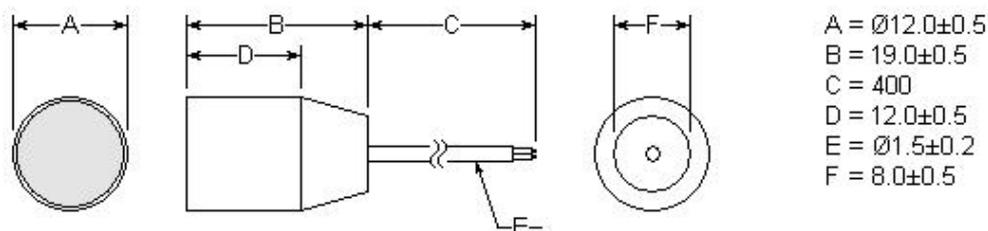
■ SCOPE

This specification includes 200E12TR-1 ultrasonic sensor size, characteristics, performance parameters and precautions, before using this product, please read this specification. 200E12TR-1 has the functions of transmitter and receiver. It generally can be used for ultrasonic wind sensor for ultrasonic anemometer to intelligently measure wind speed and direction, widely be used in meteorological monitoring, bridges, tunnel, mine and mariners, etc. If you have any questions for other applications, please contact us for details.

■ PHOTO



■ OUTLINE DIMENSION

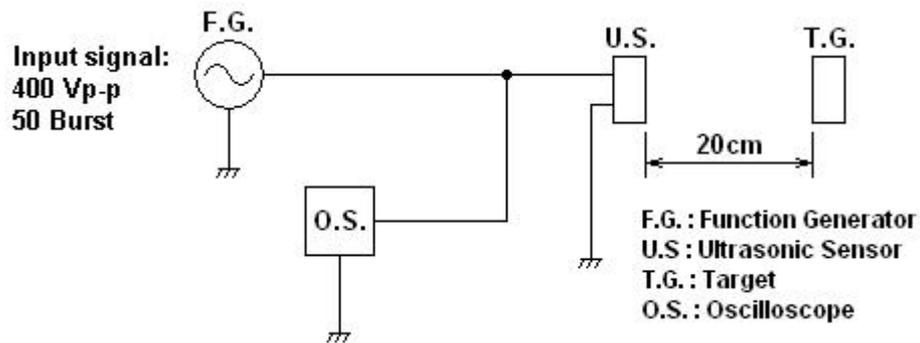


■ CHARACTERISTICS

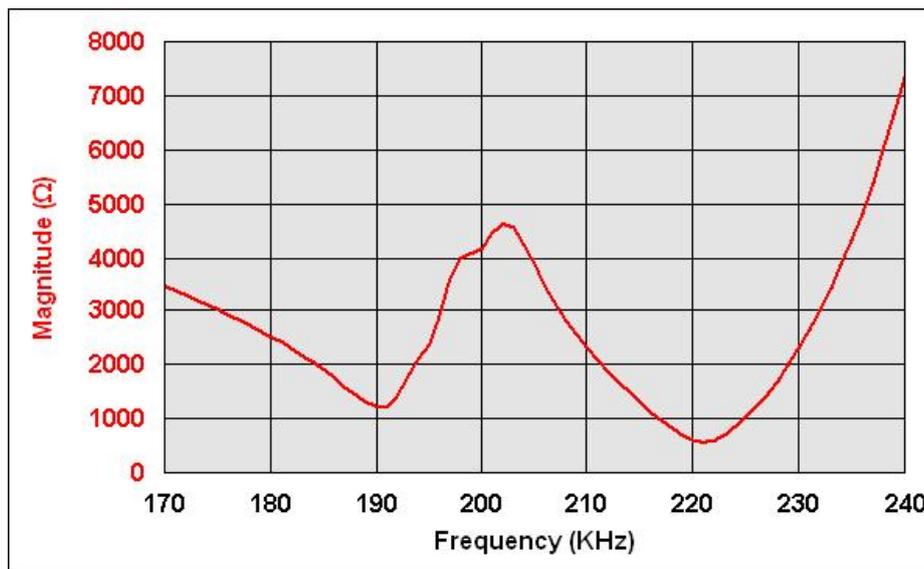
Part Number	200E12TR-1
Construction	High Frequency
Using Method	Receiver and Transmitter (Dual use)
Nominal Frequency	200.0±8.0KHz
Bandwidth	20.0KHz
Sensitivity	-80dB min.
Min. Parallel Resistance	600Ω±30%
Capacitance	400Pf±20%

Max. Input Voltage	500Vp-p
Directivity	30°±2°(-6dB)
Distance of Detection	0.1~1m
Protection Level	IP68
Operating Temperature	-20°C~+80°C
Storage Temperature	-40°C~+85°C
Material of Cover	Stainless steel

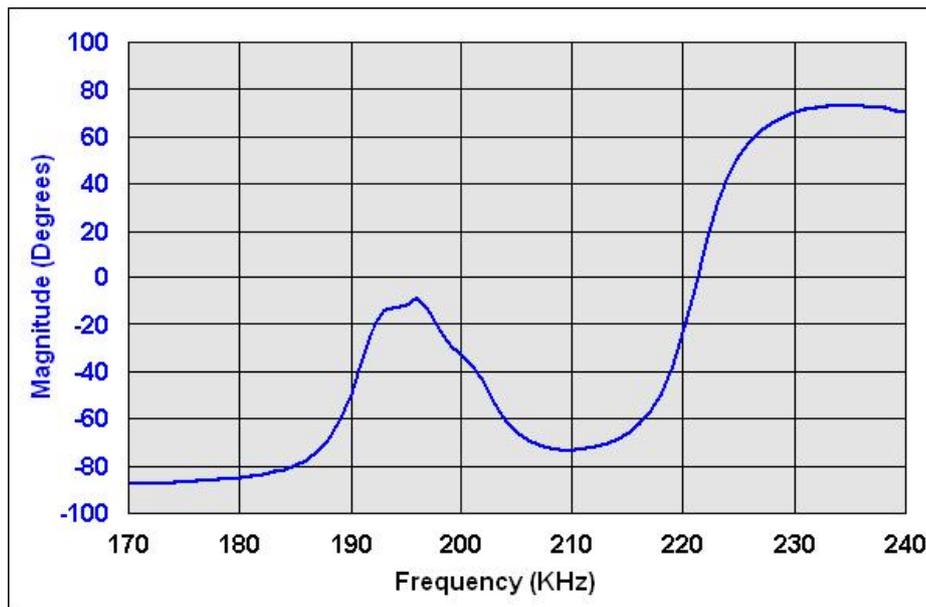
■ TEST CIRCUIT



■ FREQUENCY / IMPEDANCE

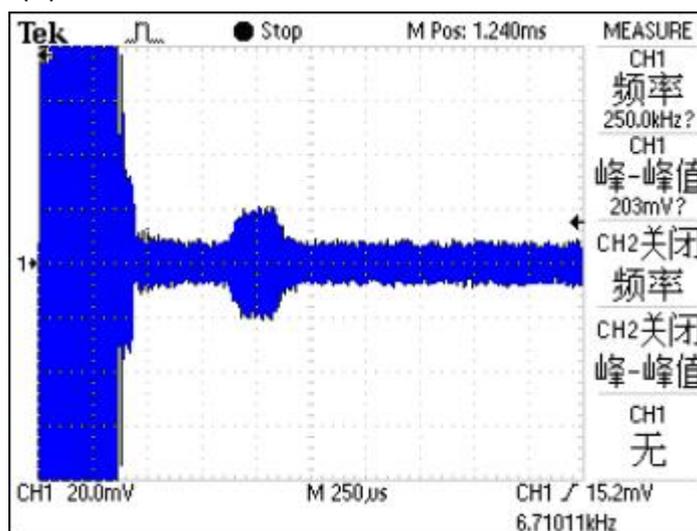


■ FREQUENCY / PHASE ANGLE

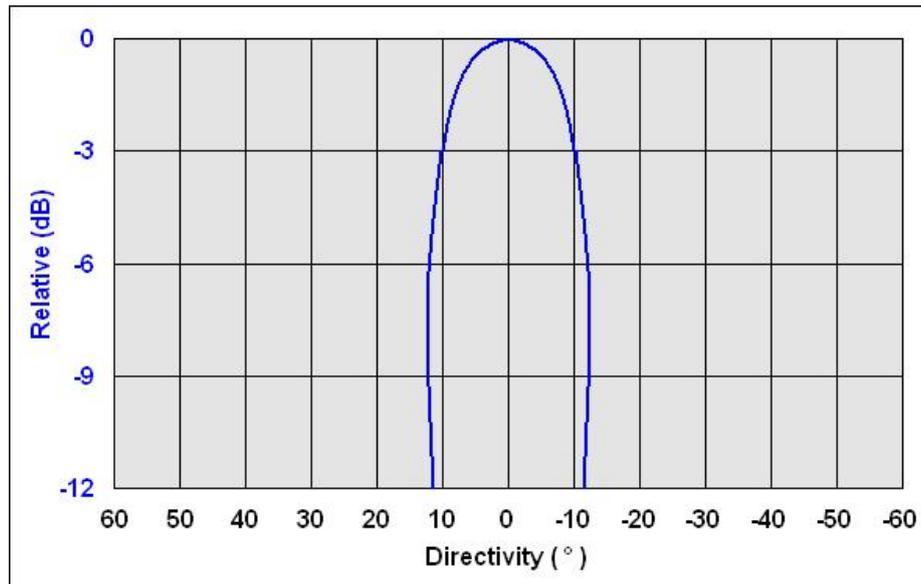


ECHO SENSITIVITY / RINGING

Tested under 400Vp-p, 4508 bursts, 20cm



BEAM ANGLE



■ FEATURES OF OSENON ULTRASONIC SENSOR

- 1, Small size and light-weight
- 2, High sensitivity and high sound pressure
- 3, Low power consumption
- 4, High reliability

■ NOTICE IN USE AND STORAGE

- 1, Please do not apply D.C.voltage for ultrasonic sensors to avoid migration.
- 2, Because the sensors have potential direction, please pay attention to its installation location.
- 3, To ensure reliability and long service life, do not use the sensors where temperature is higher than rated.
- 4, Can not use the sensors in a vacuum zone or hazardous areas.
- 5, Do not use in a steam zone, this area of the atmosphere produce uneven temperature gradient will lead to measurement error.
- 6, The products should not be used or stored in a corrosive atmosphere, especially where chloride gas, sulfide gas, acid, alkali, salt or the like are present. Store the products in the room where is normal temperature and humidity, and avoid the sunlight, sudden changes in temperature and humidity. It may cause of failure or malfunction in such conditions.
- 7, If you will apply to non-standard frequency and other special conditions, please inform us the specific work conditions, the circuit you need, in order to make sensors to meet your specific requirements.

■ STATEMENTS

- 1, No OSENON products should be used or sold for use in the design, utilization, maintenance, operation or contribution to any weapons such as nuclear, chemical or biological weapons or missiles etc.

- 2, Please contact our sales representatives or product engineers before using the product in this catalog for the applications listed below, which require especially high reliability for the prevention of defects which might directly damage a third party's life, body or property:
 - ① Aircraft equipment
 - ② Aerospace equipment
 - ③ Undersea equipment
 - ④ Power plant equipment
 - ⑤ Medical equipment
 - ⑥ Transportation equipment(vehicles, trains, ships, etc.)
 - ⑦ Traffic signal equipment
 - ⑧ Disaster prevention/ crime prevention equipment
 - ⑨ Data-processing equipment
 - ⑩ Application of similar complexity and/or reliability requirements to the applications listed above.

- 3, OSENON technical team constantly improve the technical, we reserve the right to change the appearance or product specifications without notice. Please pay attention to OSENON's website for the latest news.