

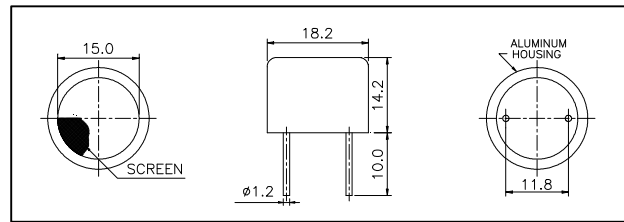
### PROWAVE

### Air Ultrasonic Ceramic Transducers

### 250ST/R180



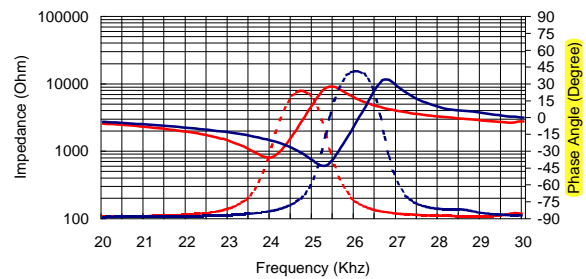
**Dimensions:** dimensions are in mm



### Impedance/Phase Angle vs. Frequency

Tested under 1Vrms Oscillation Level

250SR180 Impedance —————  
 250SR180 Phase .....  
 250ST180 Impedance —————  
 250ST180 Phase .....  
 (Note: The legend in the image uses red for SR180 and blue for ST180, with solid lines for impedance and dotted lines for phase.)



### Specification

<b>250ST180</b>	Transmitter
<b>250SR180</b>	Receiver
<b>Center Frequency</b>	25.0±1.0Khz
<b>Bandwidth (-6dB)</b>	250ST180 1.5Khz 250SR180 1.8Khz
<b>Transmitting Sound Pressure Level</b>	112dB min.
at 25.0Khz; 0dB re 0.0002µbar per 10Vrms at 30cm	
<b>Receiving Sensitivity</b>	-62dB min.
at 25.0Khz 0dB = 1 volt/µbar	
<b>Capacitance at 1Khz</b>	±20% 2400 pF
<b>Max. Driving Voltage (cont.)</b>	20Vrms
<b>Total Beam Angle</b>	-6dB 95° typical
<b>Operation Temperature</b>	-30 to 80°C
<b>Storage Temperature</b>	-40 to 85°C

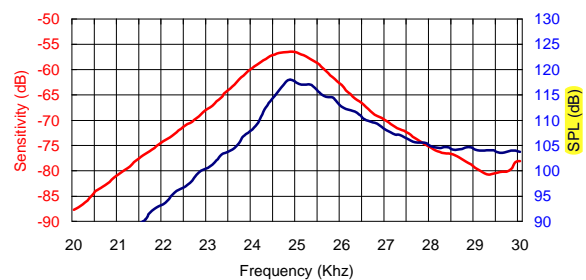
All specification taken typical at 25°C  
Closer frequency tolerance can be supplied upon request.

Model available:

1	250ST/R180	Aluminum Housing
2	250ST/R18B	Black Al. Housing

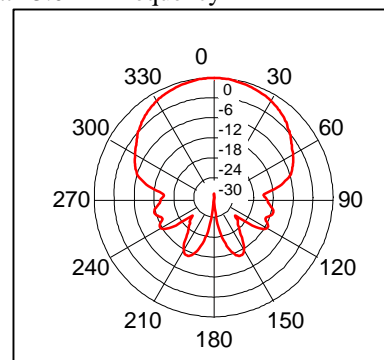
### Sensitivity/Sound Pressure Level

Tested under 10Vrms @30cm



### Beam Angle

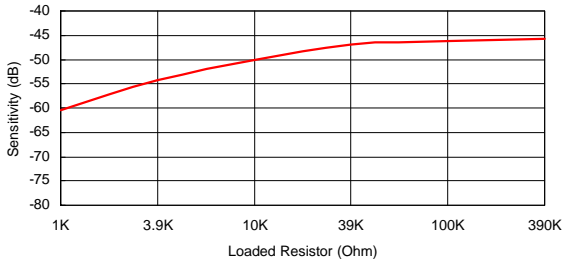
Tested at 25.0Khz frequency



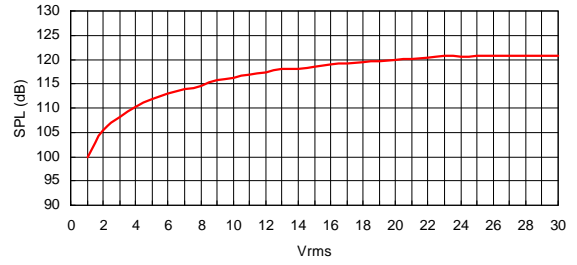
250SR180 Receiver

250ST180 Transmitter

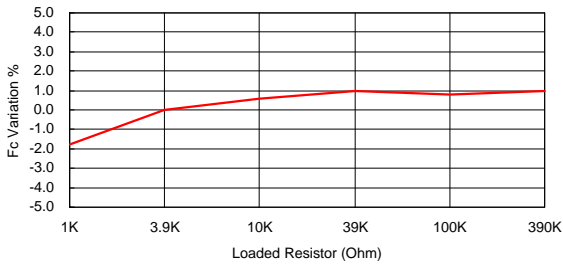
Sensitivity Variation vs. Loaded Resistor



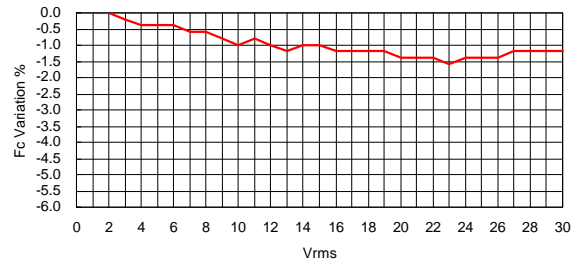
SPL Variation vs. Driving Voltage



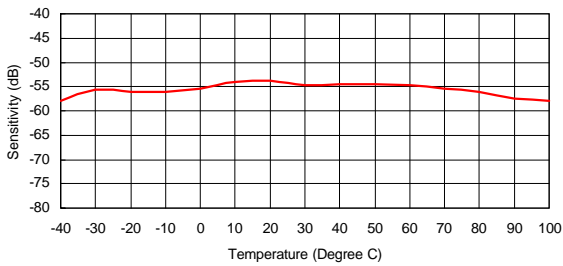
Center Frequency Shift vs. Loaded Resistor



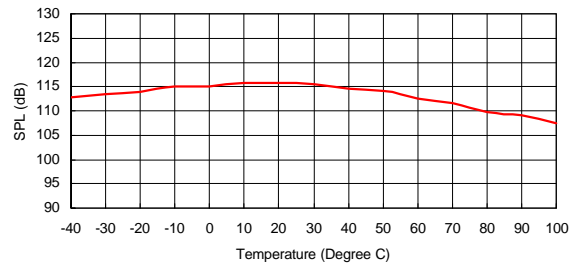
Center Frequency Shift vs. Driving Voltage



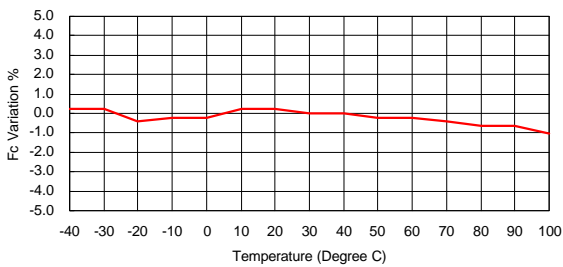
Sensitivity Variation vs. Temperature



SPL Variation vs. Temperature



Center Frequency Shift vs. Temperature



Center Frequency Shift vs. Temperature

