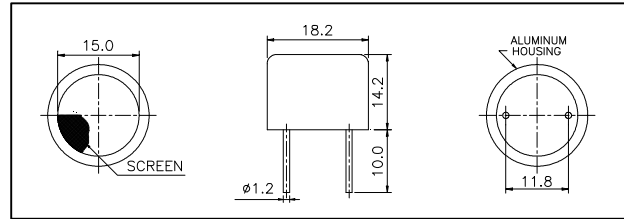


### Air Ultrasonic Ceramic Transducers

**250ST/R180**



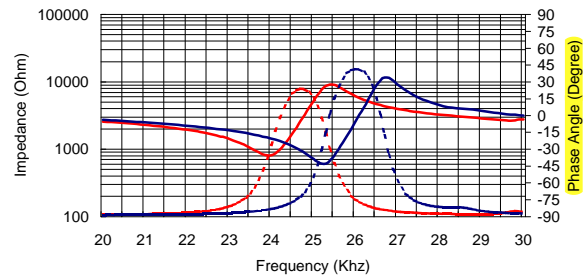
**Dimensions:** dimensions are in mm



### Impedance/Phase Angle vs. Frequency

Tested under 1Vrms Oscillation Level

250SR180 Impedance ————  
 250SR180 Phase .....  
 250ST180 Impedance ————  
 250ST180 Phase .....  
 (Legend: Red lines for SR180, Blue lines for ST180; Solid for Impedance, Dotted 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

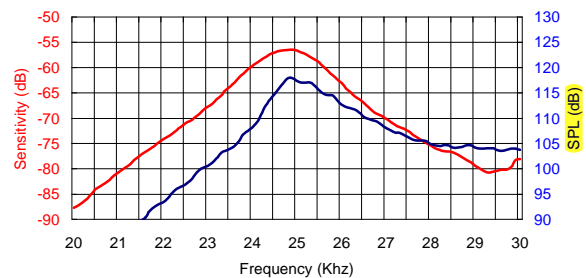
All specification taken typical at 25°C  
Closer frequency tolerance can be supplied upon request.

Model available:

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

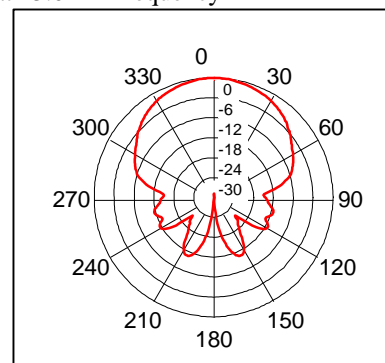
### Sensitivity/Sound Pressure Level

Tested under 10Vrms @30cm



### Beam Angle

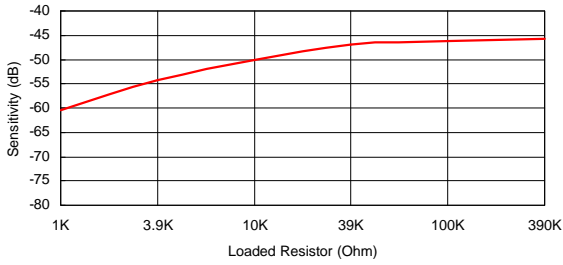
Tested at 25.0Khz frequency



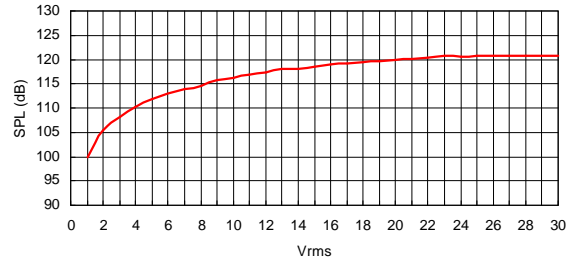
**250SR180 Receiver**

**250ST180 Transmitter**

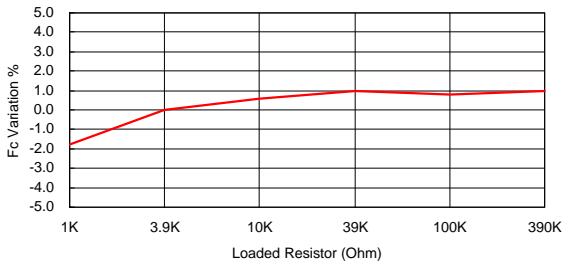
**Sensitivity Variation vs. Loaded Resistor**



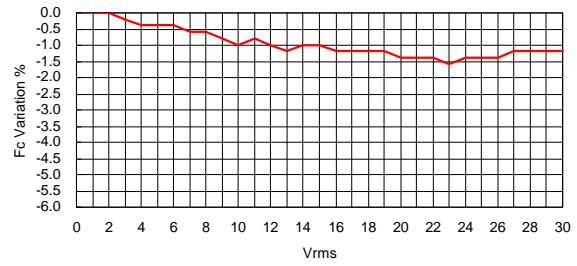
**SPL Variation vs. Driving Voltage**



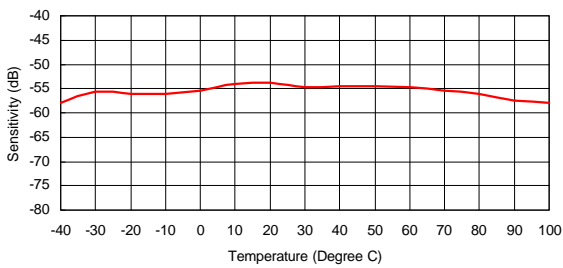
**Center Frequency Shift vs. Loaded Resistor**



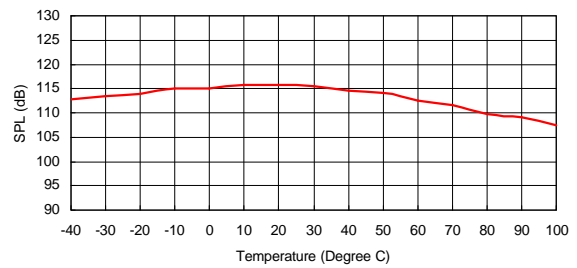
**Center Frequency Shift vs. Driving Voltage**



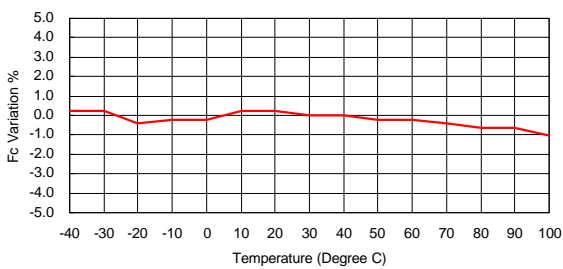
**Sensitivity Variation vs. Temperature**



**SPL Variation vs. Temperature**



**Center Frequency Shift vs. Temperature**



**Center Frequency Shift vs. Temperature**

