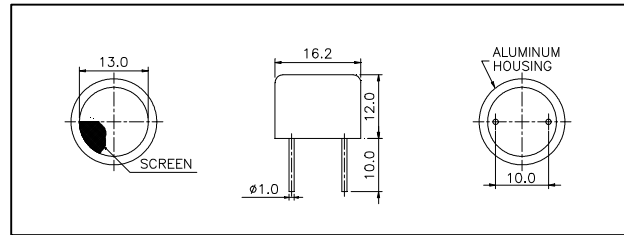


## Air Ultrasonic Ceramic Transducers

400ST/R160



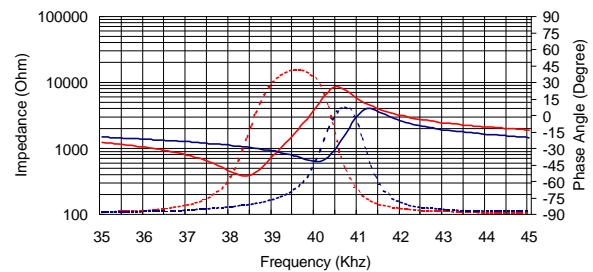
**Dimensions:** dimensions are in mm



### Impedance/Phase Angle vs. Frequency

Tested under 1Vrms Oscillation Level

400SR160 Impedance ————  
400SR160 Phase ————  
400ST160 Impedance ······  
400ST160 Phase ······

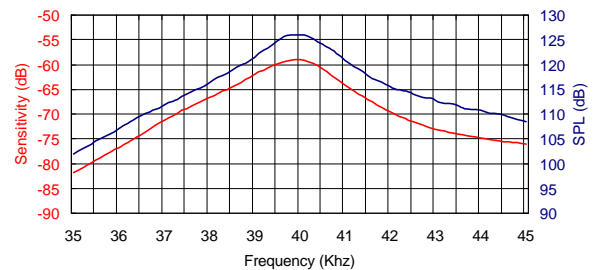


### Specification

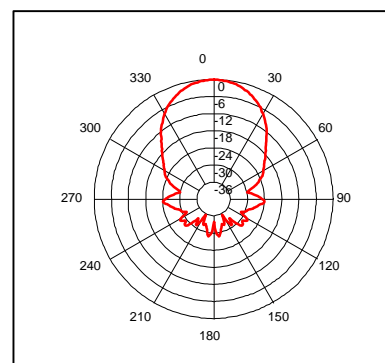
<b>400ST160</b>	Transmitter
<b>400SR160</b>	Receiver
<b>Center Frequency</b>	40.0±1.0Khz
<b>Bandwidth (-6dB)</b>	400ST160 2.0Khz 400SR160 2.5Khz
<b>Transmitting Sound Pressure Level</b>	120dB min.
at 40.0Khz; 0dB re 0.0002μbar per 10Vrms at 30cm	
<b>Receiving Sensitivity</b>	-65dB min.
at 40.0Khz 0dB = 1 volt/μbar	
<b>Capacitance at 1Khz</b>	±20% 2400 pF
<b>Max. Driving Voltage (cont.)</b>	20Vrms
<b>Total Beam Angle</b>	-6dB 55° typical
<b>Operation Temperature</b>	-30 to 80°C
<b>Storage Temperature</b>	-40 to 85°C

### Sensitivity/Sound Pressure Level

Tested under 10Vrms @30cm



**Beam Angle:** Tested at 40.0Khz frequency



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

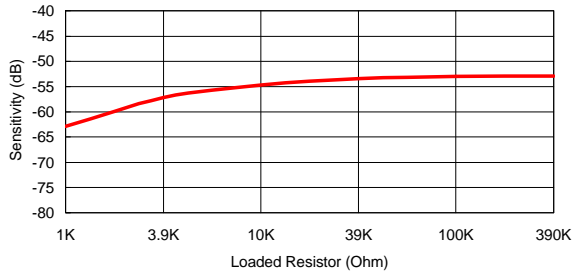
Models available:

1	400ST/R160	Aluminum Housing
2	400ST/R16B	Black Al. Housing
2	400ST/R16P	Plastic Housing
3	400ST/R16F	Al. Housing w/Solid Grid

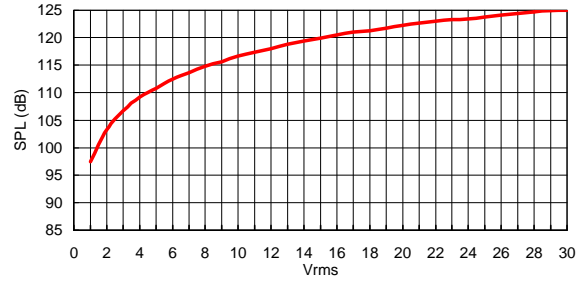
**400SR160 Receiver**

**400ST160 Transmitter**

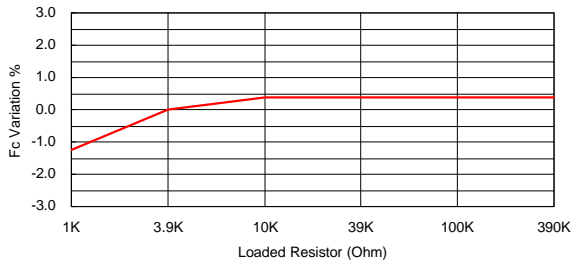
**Sensitivity Variation vs. Loaded Resistor**



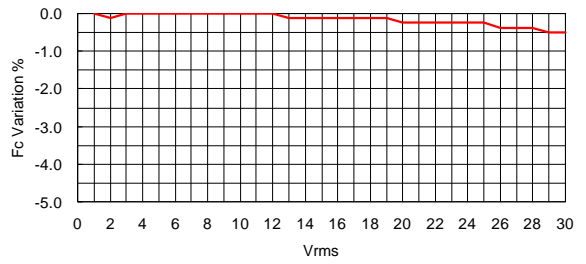
**SPL Variation vs. Driving Voltage**



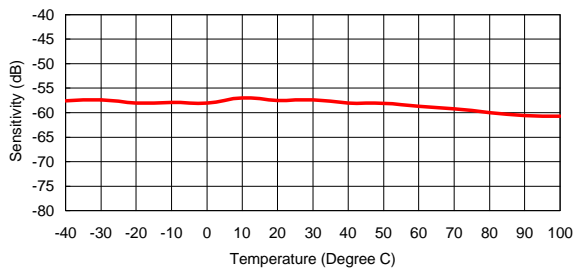
**Center Frequency Shift vs. Loaded Resistor**



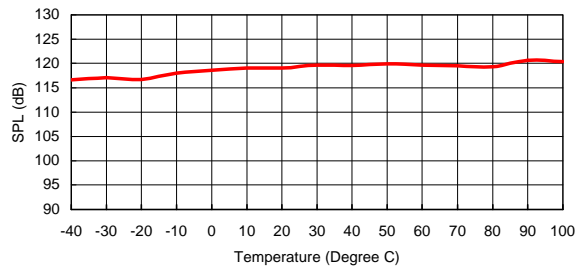
**Center Frequency Shift vs. Driving Voltage**



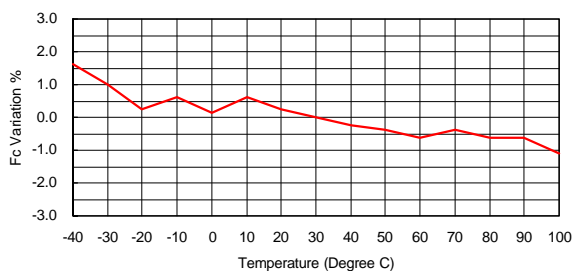
**Sensitivity Variation vs. Temperature**



**SPL Variation vs. Temperature**



**Center Frequency Shift vs. Temperature**



**Center Frequency Shift vs. Temperature**

