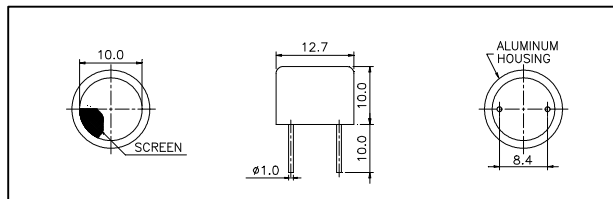


## Air Ultrasonic Ceramic Transducers

400ST/R120



**Dimensions:** dimensions are in mm



### Specification

<b>400ST120</b>	Transmitter
<b>400SR120</b>	Receiver
<b>Center Frequency</b>	40.0±1.0Khz
<b>Bandwidth (-6dB)</b>	400ST120 2.0Khz 400SR120 2.0Khz
<b>Transmitting Sound Pressure Level</b>	115dB min.
at 40.0Khz; 0dB re 0.0002μbar per 10Vrms at 30cm	
<b>Receiving Sensitivity</b>	-67dB 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 85° 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.

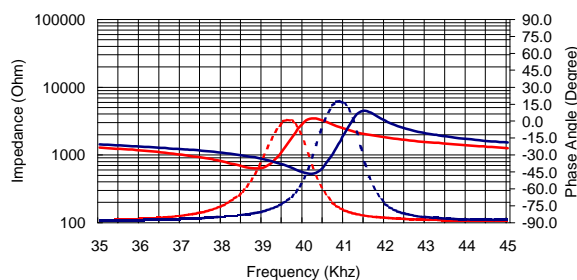
Model available:

1	400ST/R120	Aluminum Housing
2	400ST/R12B	Black Al. Housing

### Impedance/Phase Angle vs. Frequency

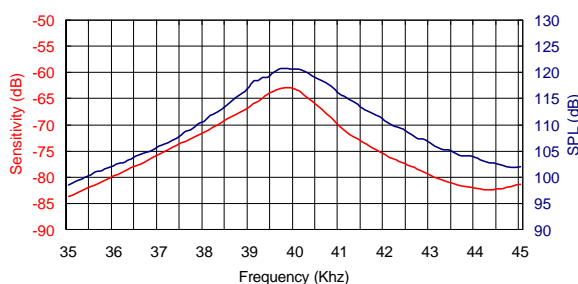
Tested under 1Vrms Oscillation Level

400SR120 Impedance ————  
400SR120 Phase ————  
400ST120 Impedance ······  
400ST120 Phase ······

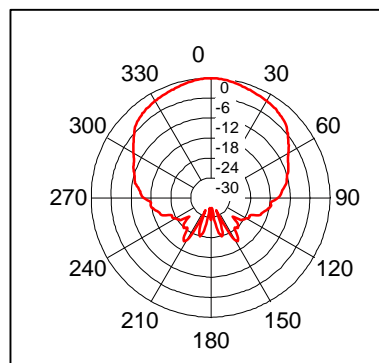


### Sensitivity/Sound Pressure Level

Tested under 10Vrms @30cm



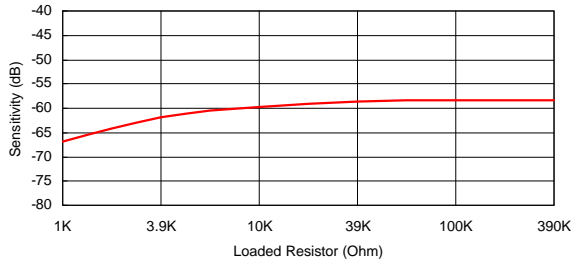
**Beam Angle:** Tested at 40.0Khz frequency



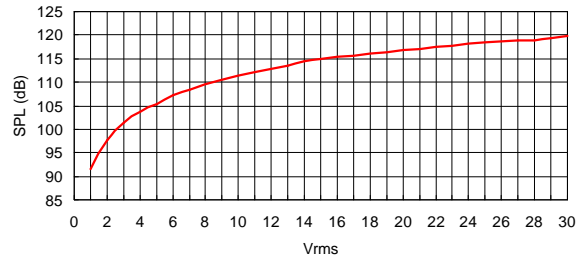
**400SR120 Receiver**

**400ST120 Transmitter**

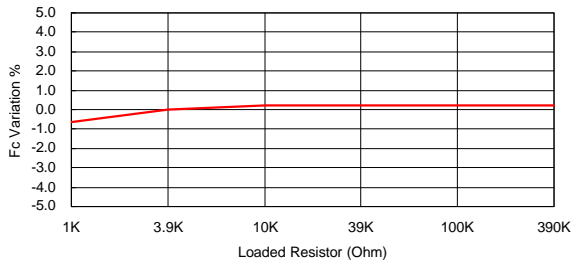
**Sensitivity Variation vs. Loaded Resistor**



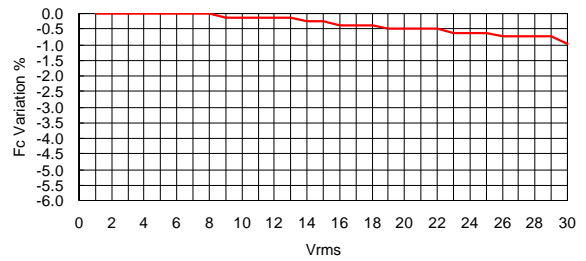
**SPL Variation vs. Driving Voltage**



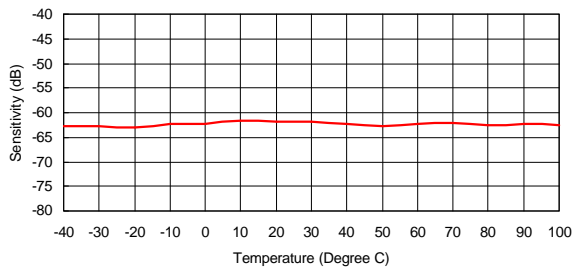
**Center Frequency Shift vs. Loaded Resistor**



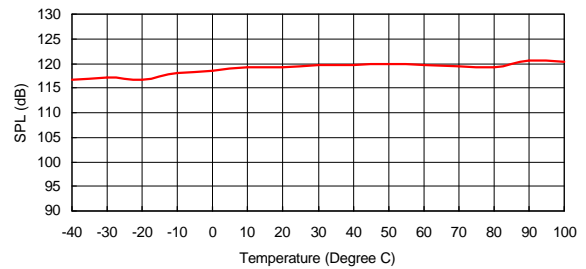
**Center Frequency Shift vs. Driving Voltage**



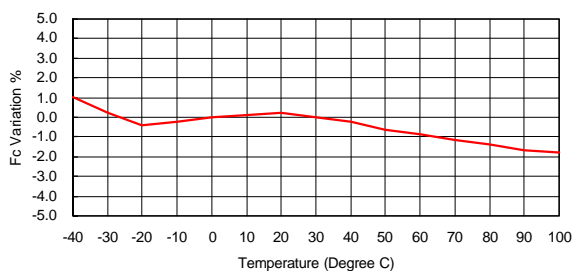
**Sensitivity Variation vs. Temperature**



**SPL Variation vs. Temperature**



**Center Frequency Shift vs. Temperature**



**Center Frequency Shift vs. Temperature**

