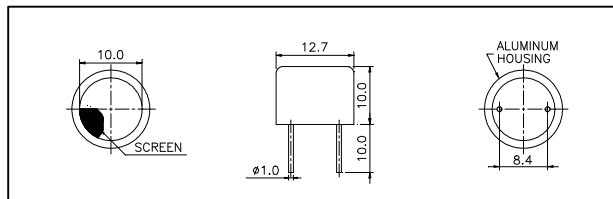


### PROWAVE Air Ultrasonic Ceramic Transducers 400ST/R120



**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.

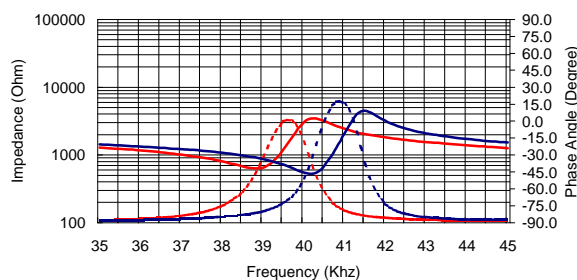
Model available:

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

### Impedance/Phase Angle vs. Frequency

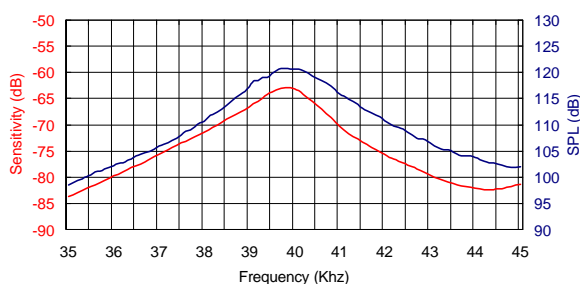
Tested under 1Vrms Oscillation Level

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

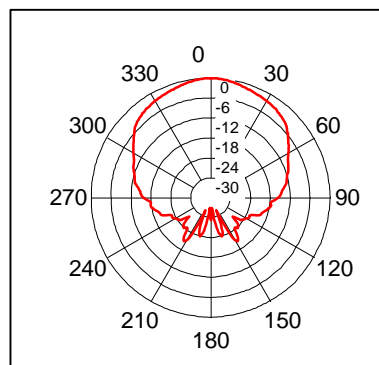


### Sensitivity/Sound Pressure Level

Tested under 10Vrms @30cm



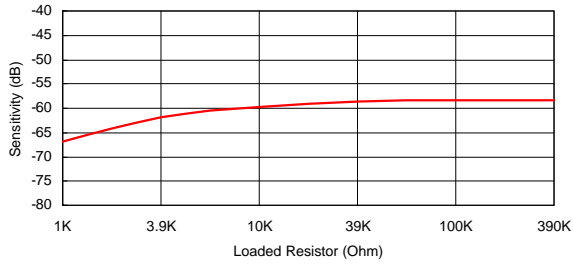
**Beam Angle:** Tested at 40.0Khz frequency



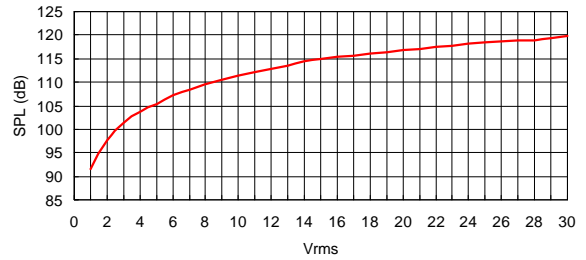
400SR120 Receiver

400ST120 Transmitter

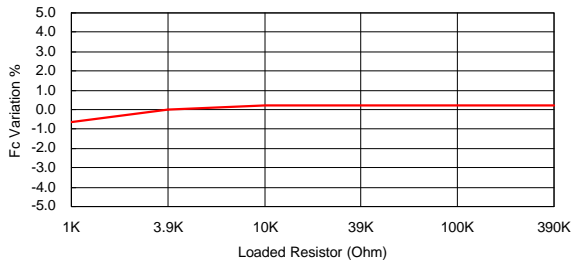
Sensitivity Variation vs. Loaded Resistor



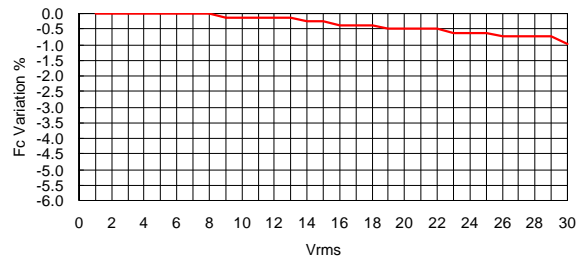
SPL Variation vs. Driving Voltage



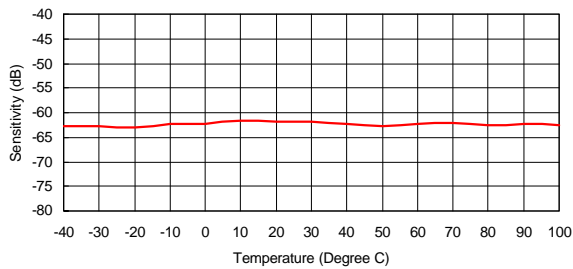
Center Frequency Shift vs. Loaded Resistor



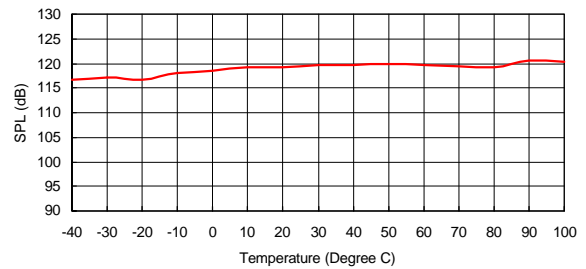
Center Frequency Shift vs. Driving Voltage



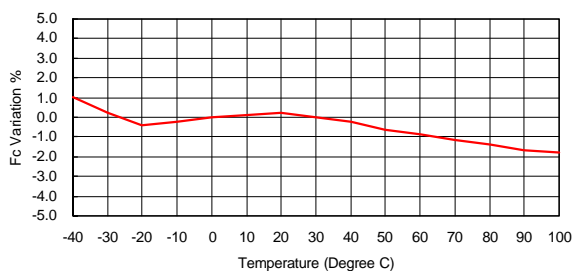
Sensitivity Variation vs. Temperature



SPL Variation vs. Temperature



Center Frequency Shift vs. Temperature



Center Frequency Shift vs. Temperature

