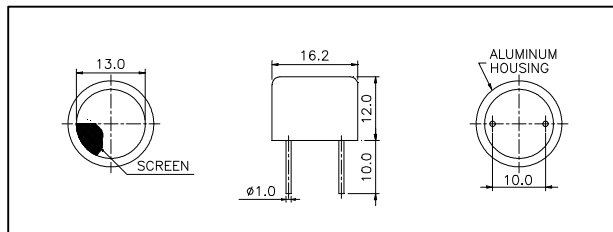


PROWAVE Air Ultrasonic Ceramic Transducers 400ST/R160



Dimensions: dimensions are in mm



Specification

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

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

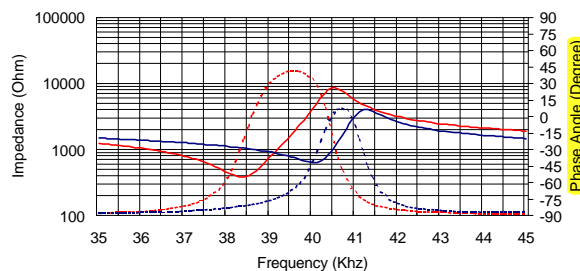
Models available:

1	400ST/R160	Aluminum Housing
2	400ST/R16B	Black Al. Housing
2	400ST/R10P	Plastic Housing
3	400ST/R16F	Al. Housing w/Solid Grid

Impedance/Phase Angle vs. Frequency

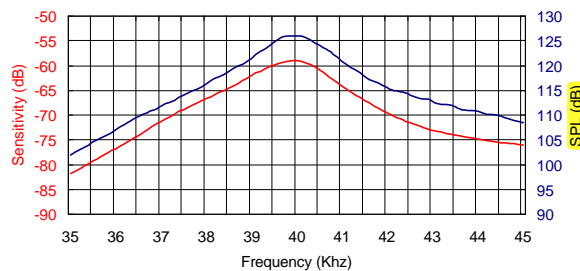
Tested under 1Vrms Oscillation Level

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

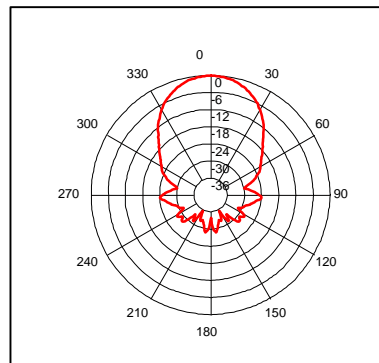


Sensitivity/Sound Pressure Level

Tested under 10Vrms @30cm



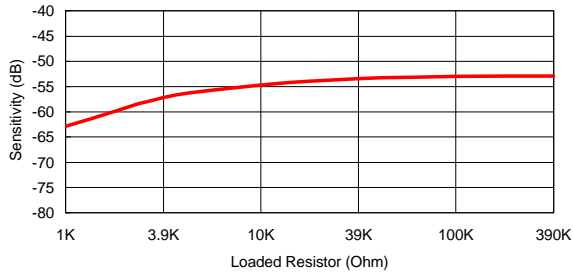
Beam Angle: Tested at 40.0Khz frequency



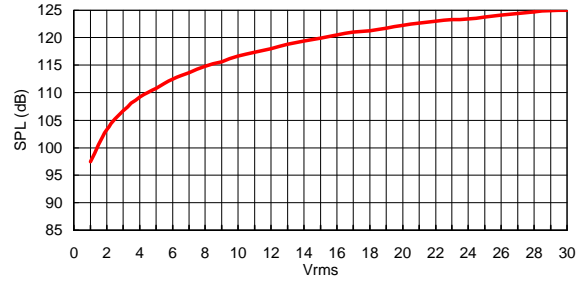
400SR160 Receiver

400ST160 Transmitter

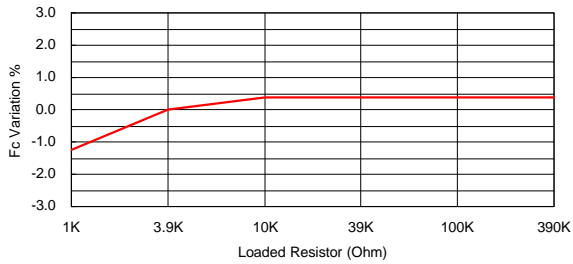
Sensitivity Variation vs. Loaded Resistor



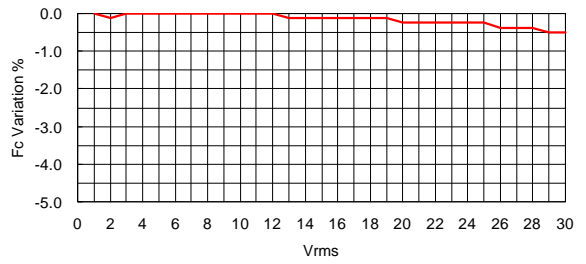
SPL Variation vs. Driving Voltage



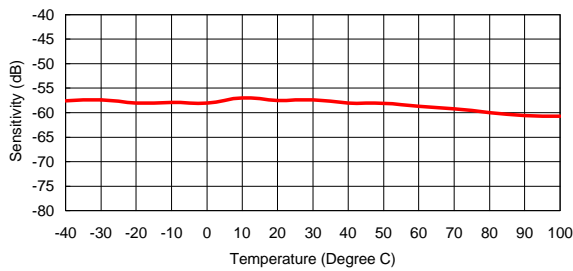
Center Frequency Shift vs. Loaded Resistor



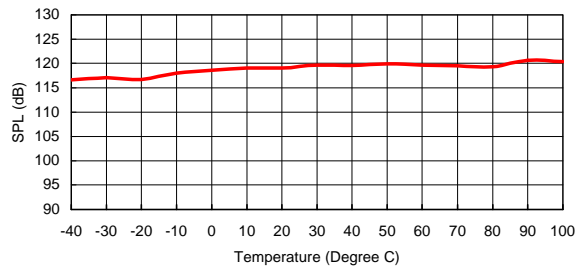
Center Frequency Shift vs. Driving Voltage



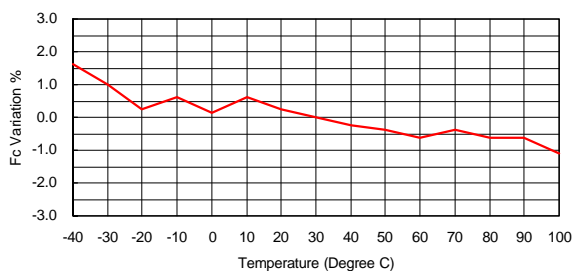
Sensitivity Variation vs. Temperature



SPL Variation vs. Temperature



Center Frequency Shift vs. Temperature



Center Frequency Shift vs. Temperature

