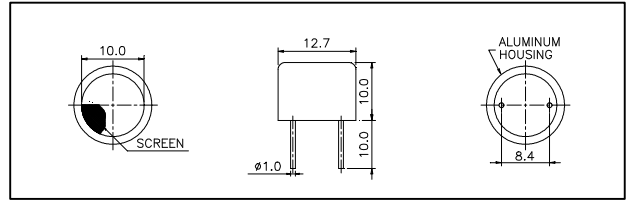


PROWAVE Air Ultrasonic Ceramic Transducers 400ST/R120



Dimensions: dimensions are in mm



Specification

400ST120	Transmitter
400SR120	Receiver
Center Frequency	40.0±1.0Khz
Bandwidth (-6dB)	400ST120 2.0Khz 400SR120 2.0Khz
Transmitting Sound Pressure Level at 40.0Khz; 0dB re 0.0002µbar per 10Vrms at 30cm	115dB min.
Receiving Sensitivity at 40.0Khz 0dB = 1 volt/µbar	-67dB min.
Capacitance at 1Khz ±20%	2400 pF
Max. Driving Voltage (cont.)	20Vrms
Total Beam Angle -6dB	85° 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.

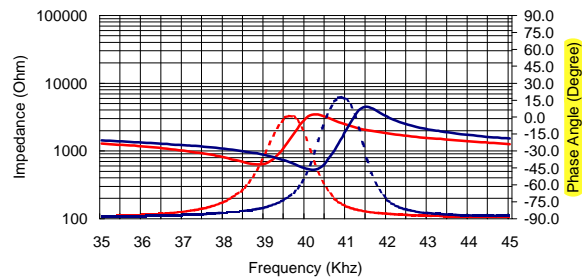
Model available:

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

Impedance/Phase Angle vs. Frequency

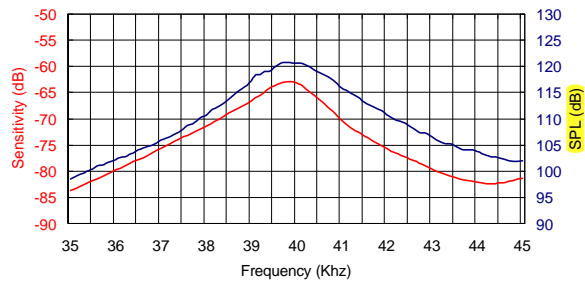
Tested under 1Vrms Oscillation Level

400SR120 Impedance ——— (Red)
400SR120 Phase ——— (Blue)
400ST120 Impedance ····· (Red)
400ST120 Phase ····· (Blue)

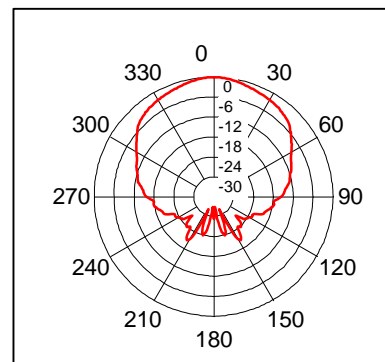


Sensitivity/Sound Pressure Level

Tested under 10Vrms @ 30cm



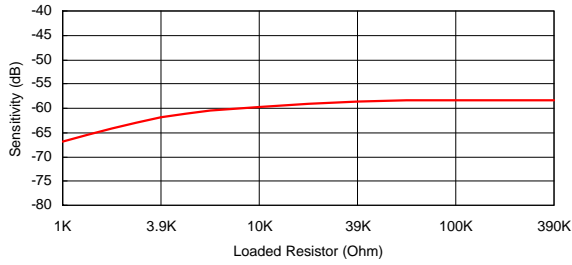
Beam Angle: Tested at 40.0Khz frequency



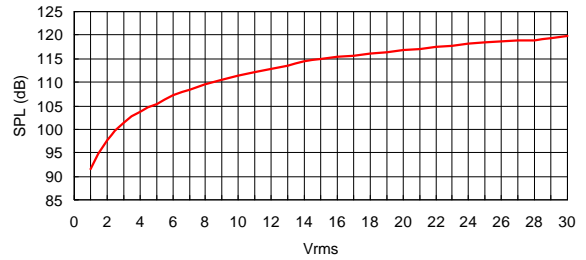
400SR120 Receiver

400ST120 Transmitter

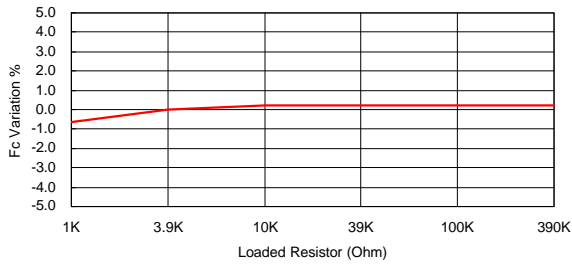
Sensitivity Variation vs. Loaded Resistor



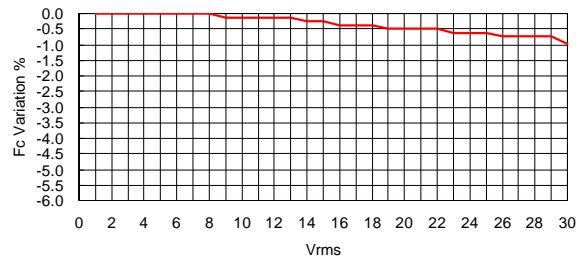
SPL Variation vs. Driving Voltage



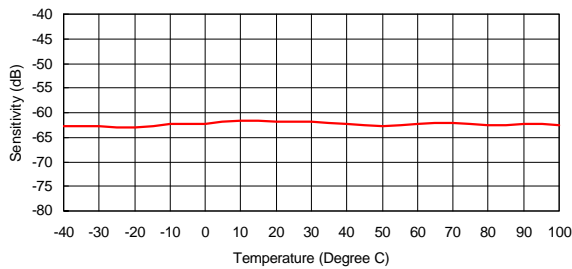
Center Frequency Shift vs. Loaded Resistor



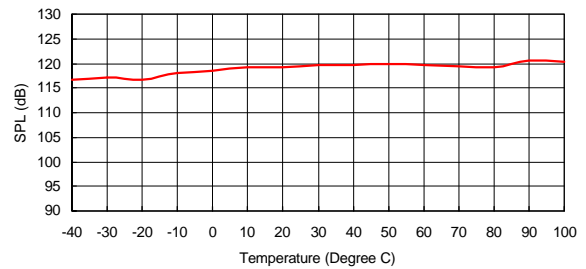
Center Frequency Shift vs. Driving Voltage



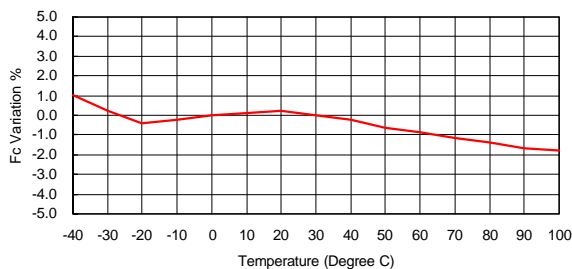
Sensitivity Variation vs. Temperature



SPL Variation vs. Temperature



Center Frequency Shift vs. Temperature



Center Frequency Shift vs. Temperature

