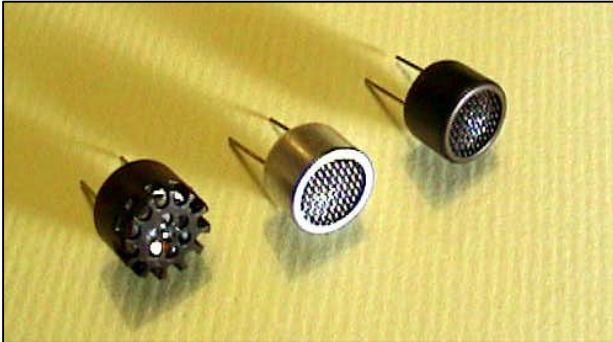


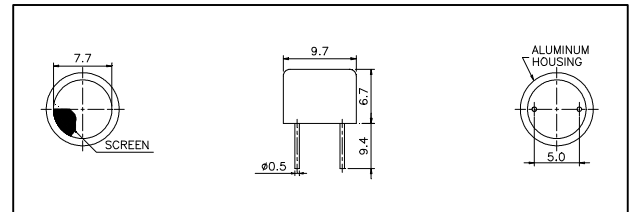
PROWAVE

Air Ultrasonic Ceramic Transducers

400ST/R100



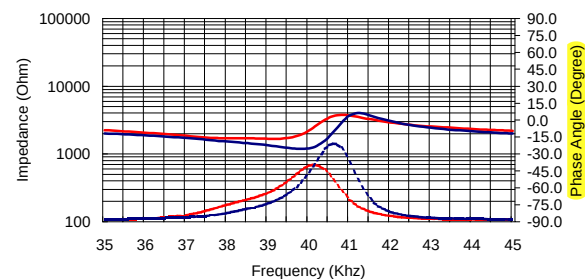
Dimensions: Dimensions are in mm



Impedance/Phase Angle vs. Frequency

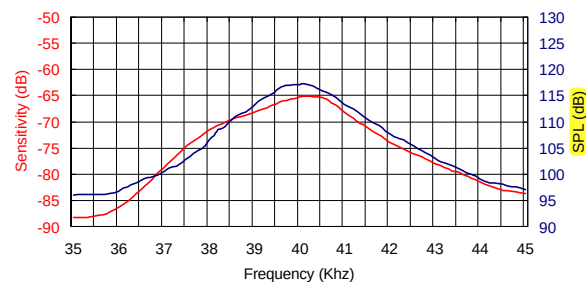
Tested under 1Vrms Oscillation Level

400SR100 Impedance (Red solid line)
400SR100 Phase (Blue solid line)
400ST100 Impedance (Red dotted line)
400ST100 Phase (Blue dotted line)

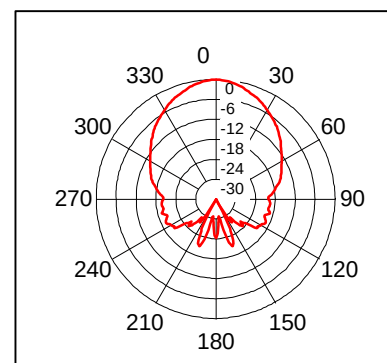


Sensitivity/Sound Pressure Level

Tested under 10Vrms @30cm



Beam Angle: Tested at 40.0KHz frequency



Specification

400ST100	Transmitter
400SR100	Receiver
Center Frequency	40.0±1.0KHz
Bandwidth (-6dB)	400ST100 2.5KHz
	400SR100 3.0KHz
Transmitting Sound Pressure Level	112dB min.
at 40.0KHz; 0dB re 0.0002μbar per 10Vrms at 30cm	
Receiving Sensitivity	-70dB min.
at 40.0KHz 0dB = 1 volt/μbar	
Capacitance at 1KHz	±20% 1900 pF
Max. Driving Voltage (cont.)	10Vrms
Total Beam Angle	-6dB 72° 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.

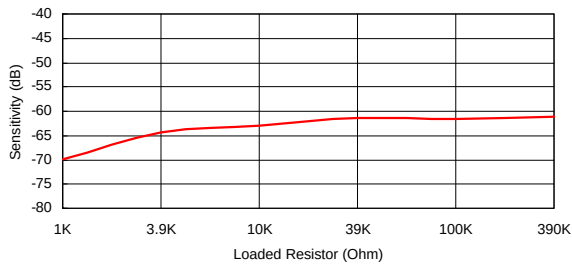
Model available:

1	400ST/R100	Aluminum Housing
2	400ST/R10B	Black Al. Housing
3	400ST/R10P	Plastic Housing

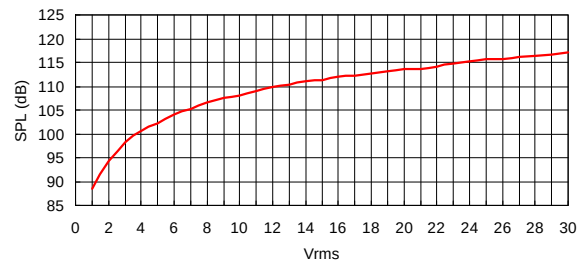
400SR100 Receiver

400ST100 Transmitter

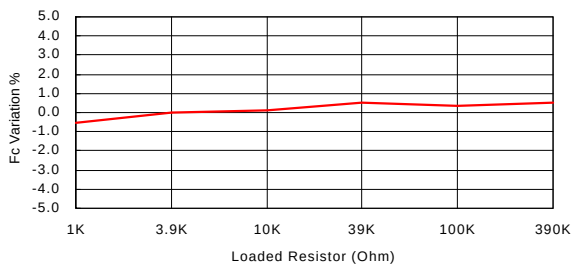
Sensitivity Variation vs. Loaded Resistor



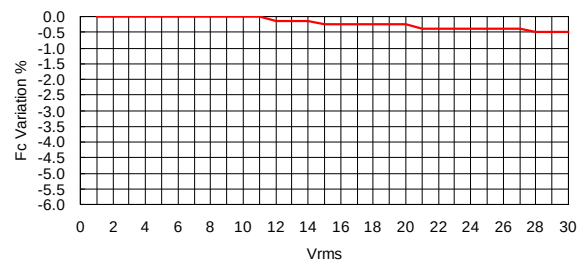
SPL Variation vs. Driving Voltage



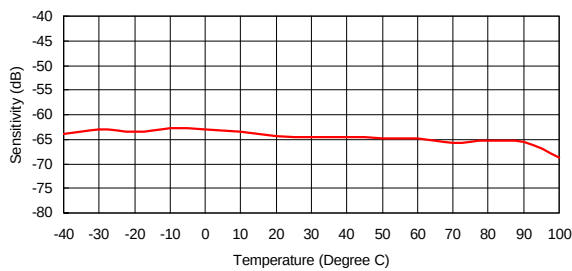
Center Frequency Shift vs. Loaded Resistor



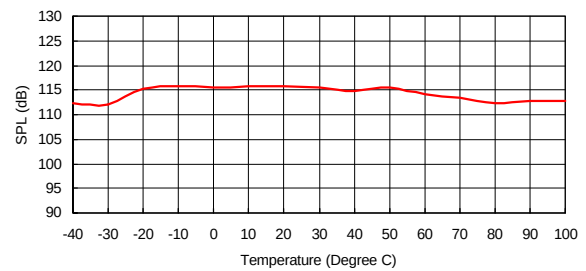
Center Frequency Shift vs. Driving Voltage



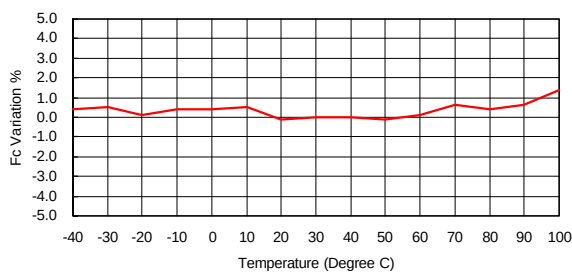
Sensitivity Variation vs. Temperature



SPL Variation vs. Temperature



Center Frequency Shift vs. Temperature



Center Frequency Shift vs. Temperature

