

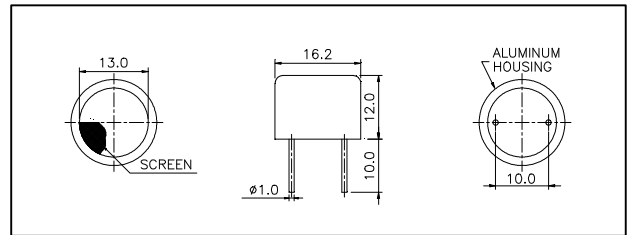
PROWAVE

Air Ultrasonic Ceramic Transducers

250ST/R160



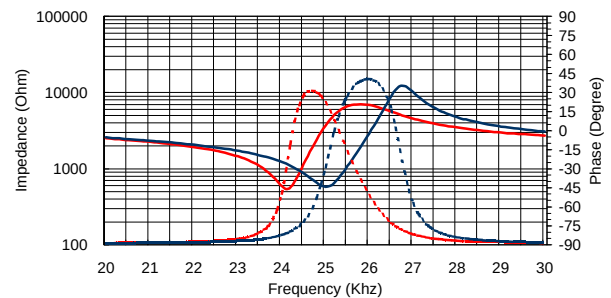
Dimensions: dimensions are in mm



Impedance/Phase Angle vs. Frequency

Tested under 1Vrms Oscillation Level

250SR160 Impedance —————
250SR160 Phase
250ST160 Impedance —————
250ST160 Phase



Specification

250ST160	Transmitter
250SR160	Receiver
Center Frequency	25.0±1.0Khz
Bandwidth (-6dB)	250ST160 2.0Khz
	250SR160 2.0Khz
Transmitting Sound Pressure Level	112dB min.
at 25.0Khz; 0dB re 0.0002μbar per 10Vrms at 30cm	
Receiving Sensitivity	-62dB min.
at 25.0Khz 0dB = 1 volt/μbar	
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

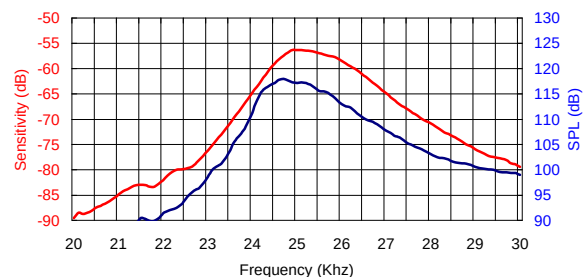
All specification taken typical at 25°C
Closer frequency tolerance can be supplied upon request.

Model available:

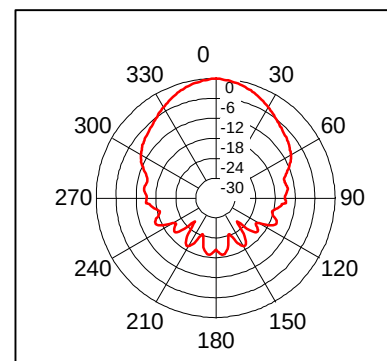
1	250ST/R160	Aluminum Housing
2	250ST/R16B	Black Al. Housing
3	250ST/R16F	Al. Housing w/Solid Grid
4	250ST/R16P	Plastic Housing

Sensitivity/Sound Pressure Level

Tested under 10Vrms @30cm



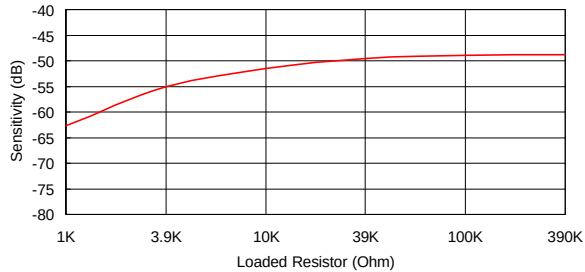
Beam Angle: Tested at 25.0Khz frequency



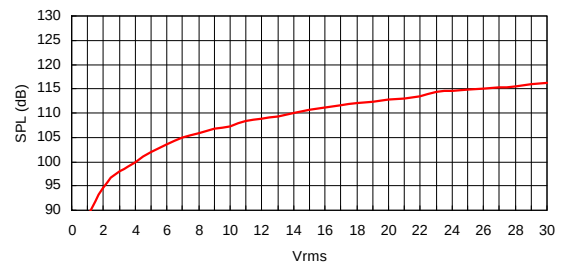
250SR160 Receiver

250ST160 Transmitter

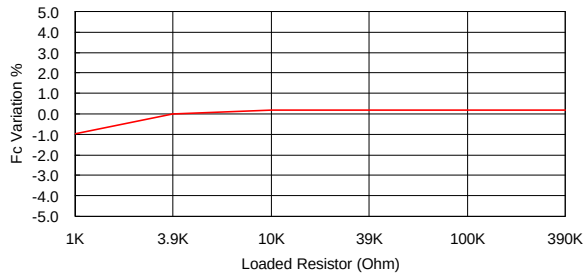
Sensitivity Variation vs. Loaded Resistor



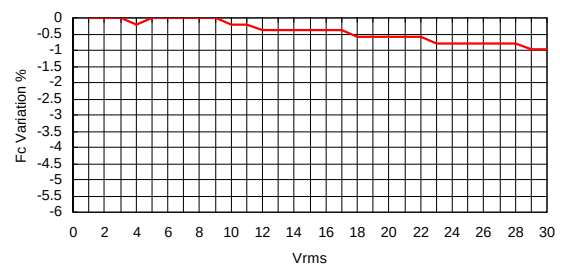
SPL Variation vs. Driving Voltage



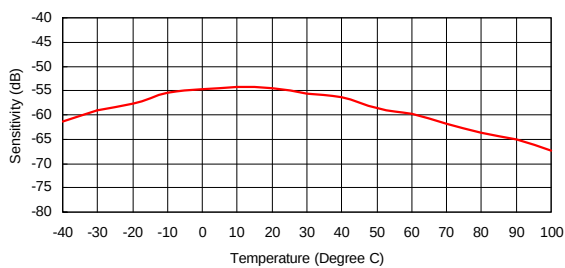
Center Frequency Shift vs. Loaded Resistor



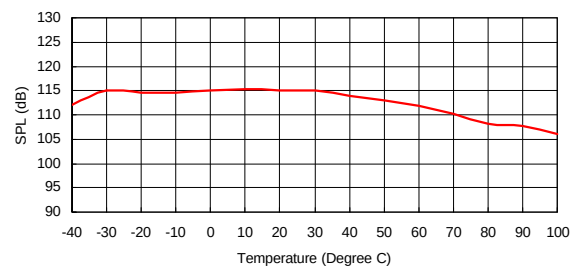
Center Frequency Shift vs. Driving Voltage



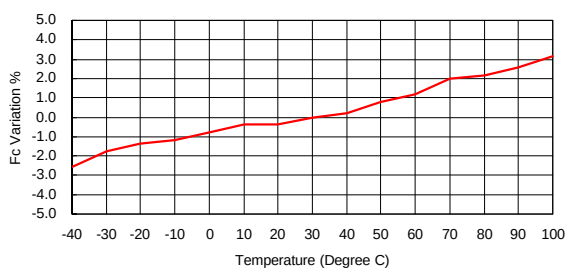
Sensitivity Variation vs. Temperature



SPL Variation vs. Temperature



Center Frequency Shift vs. Temperature



Center Frequency Shift vs. Temperature

