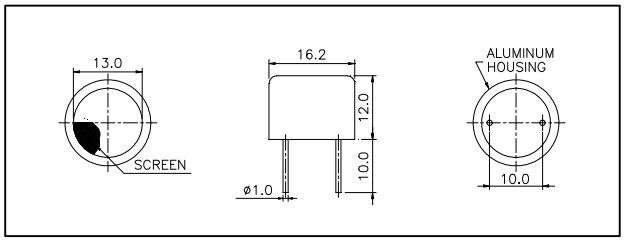
Sauls Wharf House
Crittens Road
Great Yarmouth
Norfolk, NR31 0AG

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www.midasdisplays.com

Air Ultrasonic Ceramic Transducers 400ST/R160



Dimensions: dimensions are in mm



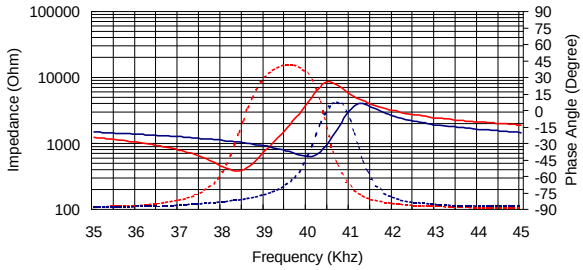
Specification

400ST160		Transmitter
400SR160		Receiver
Center Frequency		40.0±1.0Khz
Bandwidth (-6dB)	400ST160	2.0Khz
	400SR160	2.5Khz
Transmitting Sound Pressure Level at 40.0Khz; 0dB re 0.0002µbar per 10Vrms at 30cm		120dB min.
Receiving Sensitivity at 40.0Khz 0dB = 1 volt/µbar		-65dB min.
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.

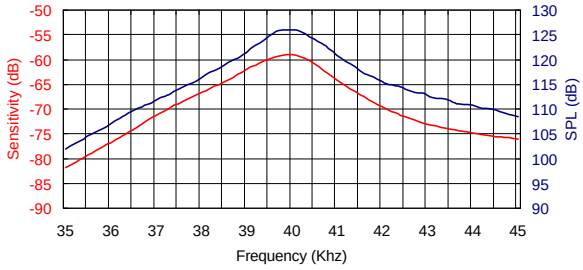
Impedance/Phase Angle vs. Frequency

Tested under 1Vrms Oscillation Level
400SR160 Impedance
400SR160 Phase
400ST160 Impedance
400ST160 Phase

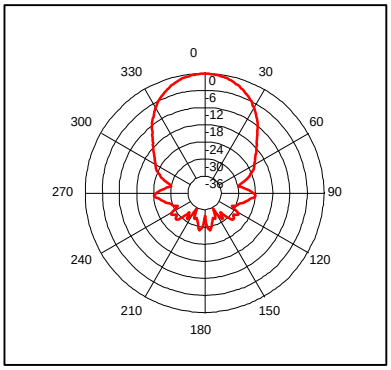


Sensitivity/Sound Pressure Level

Tested under 10Vrms @30cm



Beam Angle: Tested at 40.0Khz frequency

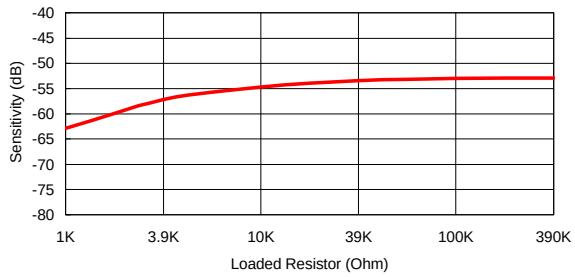


Models available:

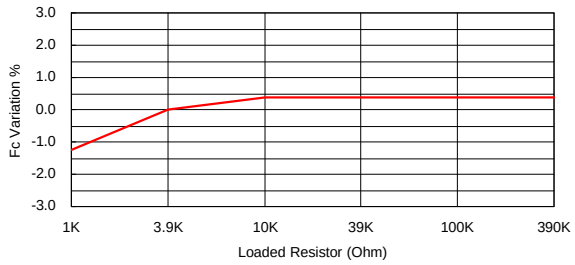
1	400ST/R160	Aluminum Housing
2	400ST/R16B	Black Al. Housing
2	400ST/R16P	Plastic Housing
3	400ST/R16F	Al. Housing w/Solid Grid

400SR160 Receiver

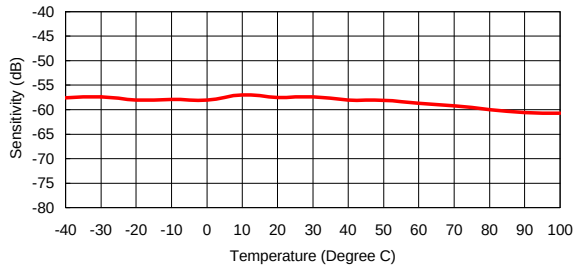
Sensitivity Variation vs. Loaded Resistor



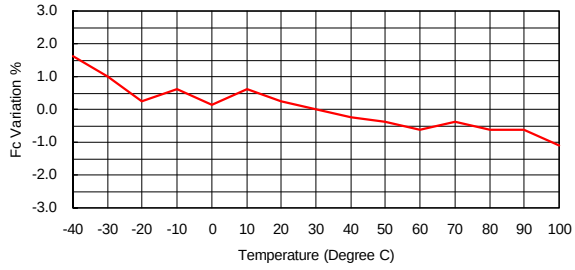
Center Frequency Shift vs. Loaded Resistor



Sensitivity Variation vs. Temperature

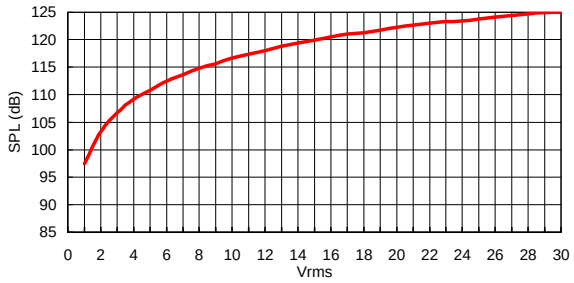


Center Frequency Shift vs. Temperature

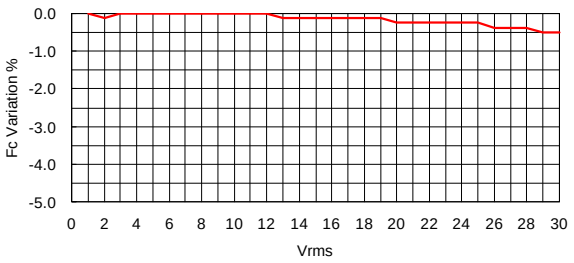


400ST160 Transmitter

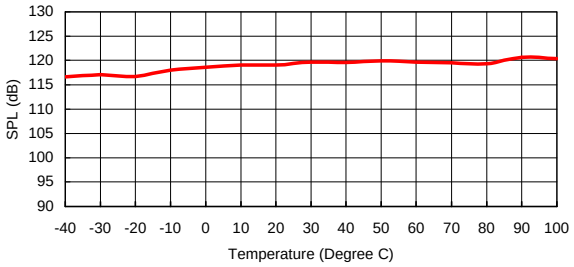
SPL Variation vs. Driving Voltage



Center Frequency Shift vs. Driving Voltage



SPL Variation vs. Temperature



Center Frequency Shift vs. Temperature

