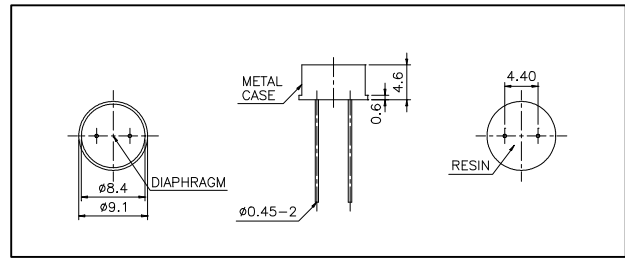


Air Ultrasonic Ceramic Transducers

400ET/R080



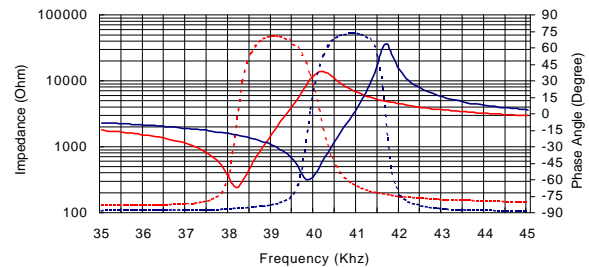
Dimensions: dimensions are in mm



Impedance/Phase Angle vs. Frequency

Tested under 1Vrms Oscillation Level

400ER080 Impedance (Red solid line)
400ER080 Phase (Blue solid line)
400ET080 Impedance (Red dotted line)
400ET080 Phase (Blue dotted line)



Specification

| | |
|--|------------------------------------|
| 400ET080 | Transmitter |
| 400ER080 | Receiver |
| Center Frequency | 40.0±3.0Khz |
| Bandwidth (-6dB) | 400ET080 1.5Khz 400ER080 2.0Khz |
| Transmitting Sound Pressure Level | 100dB min. |
| at 40.0Khz; 0dB re 0.0002µbar per 10Vrms at 30cm | |
| Receiving Sensitivity | -80dB min. |
| at 40.0Khz 0dB = 1 volt/µbar | |
| Capacitance at 1Khz | ±20% 1700 pF |
| Max. Driving Voltage (cont.) | 15Vrms |
| Total Beam Angle | -6dB 125° typical |
| Operation Temperature | -30 to 80°C |
| Storage Temperature | -40 to 85°C |

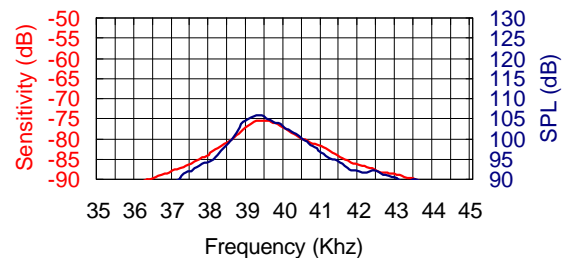
All specification taken typical at 25°C
Closer frequency tolerance can be supplied upon request.

Model available:

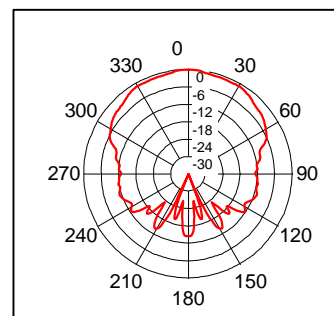
| | | |
|---|------------|----------------------|
| 1 | 400ET/R080 | Plated Metal Housing |
|---|------------|----------------------|

Sensitivity/Sound Pressure Level

Tested under 10Vrms @30cm



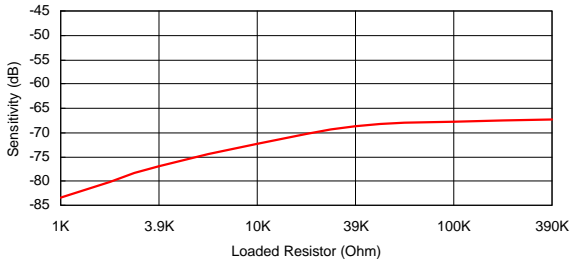
Beam Angle: Tested at 40.0Khz frequency



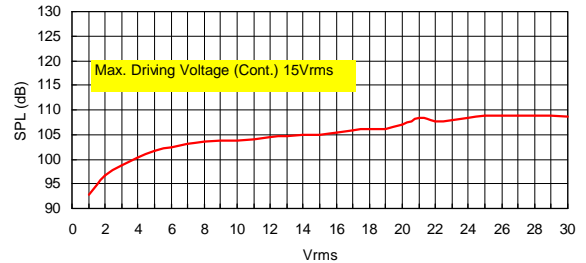
400ER080 Receiver

400ET080 Transmitter

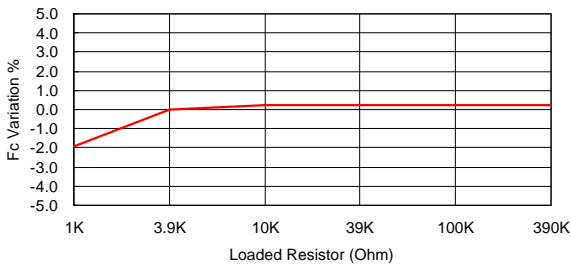
Sensitivity Variation vs. Loaded Resistor



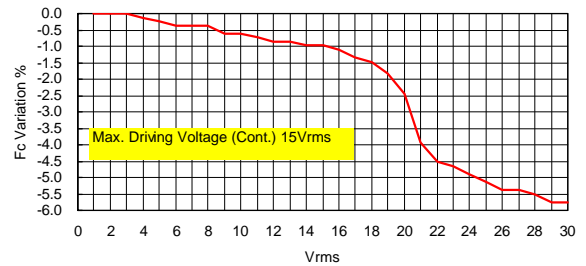
SPL Variation vs. Driving Voltage



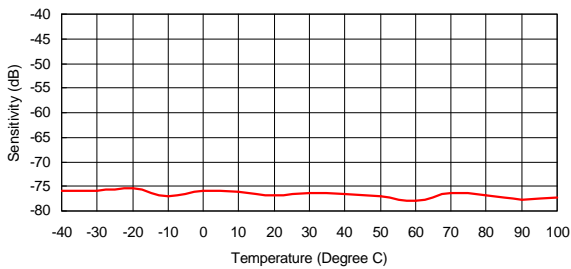
Center Frequency Shift vs. Loaded Resistor



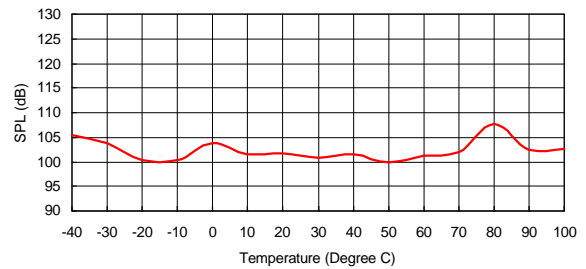
Center Frequency Shift vs. Driving Voltage



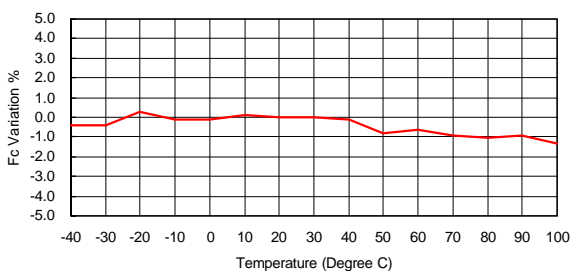
Sensitivity Variation vs. Temperature



SPL Variation vs. Temperature



Center Frequency Shift vs. Temperature



Center Frequency Shift vs. Temperature

