

## Air Ultrasonic Ceramic Transducers

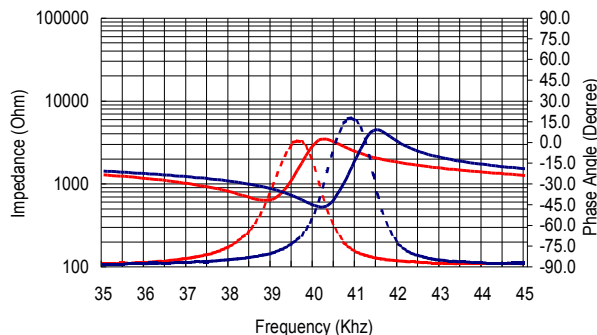
400ST/R120



### Impedance/Phase Angle vs. Frequency

Tested under 1Vrms Oscillation Level

400SR120 Impedance (Red solid line)  
400SR120 Phase (Red dashed line)  
400ST120 Impedance (Blue solid line)  
400ST120 Phase (Blue dashed line)



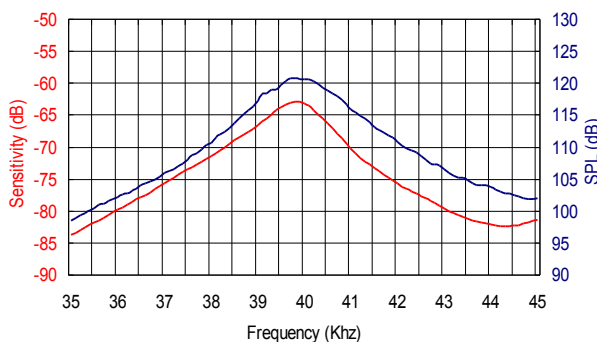
### Specification

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 70°C
Storage Temperature	-40 to 80°C

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

### Sensitivity/Sound Pressure Level

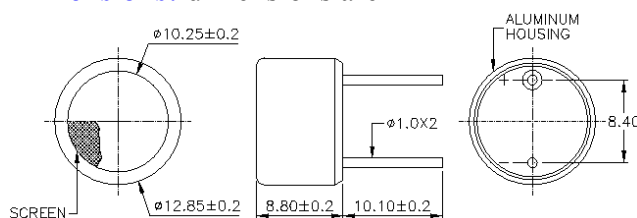
Tested under 10Vrms @30cm



Model available:

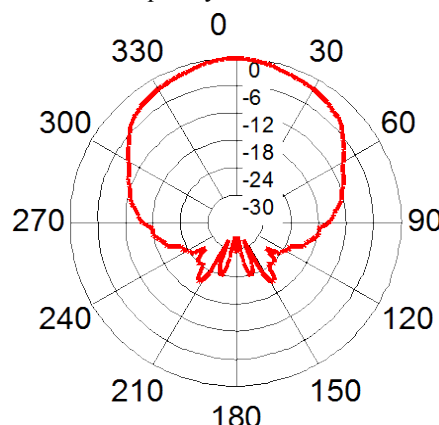
1	400ST/R120	Aluminum Housing
2	400ST/R12B	Black Al. Housing

**Dimensions:** dimensions are in mm



### Beam Angle

Tested at 40.0KHz frequency

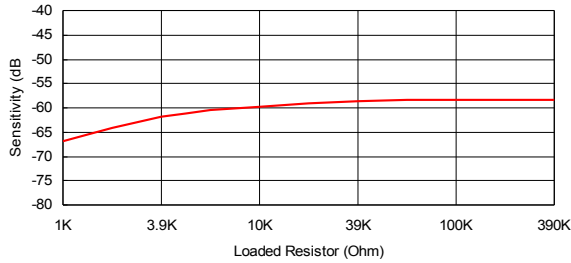


**S. Square Enterprise Company Limited**  
**Pro-Wave Electronics Corporation**

[Http://www.pro-wave.com.tw](http://www.pro-wave.com.tw) ; E-mail: [sales@pro-wave.com.tw](mailto:sales@pro-wave.com.tw) ; Tel: 886-2-22465101 ; Fax: 886-2-22465105

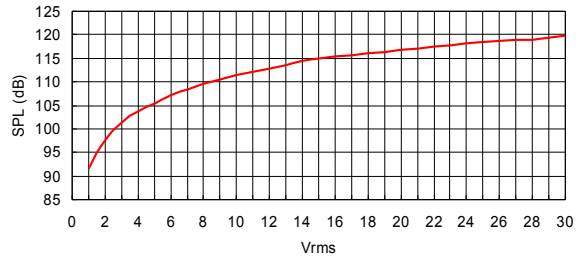
**400SR120 Receiver**

**Sensitivity Variation vs. Loaded Resistor**

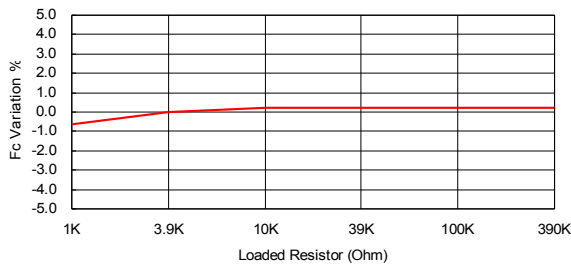


**400ST120 Transmitter**

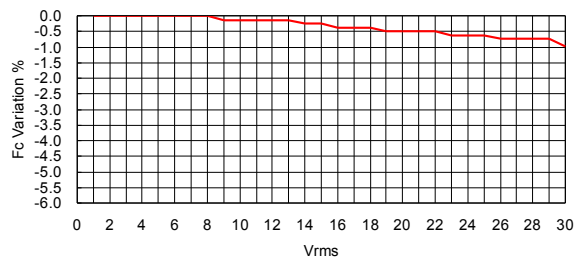
**SPL Variation vs. Driving Voltage**



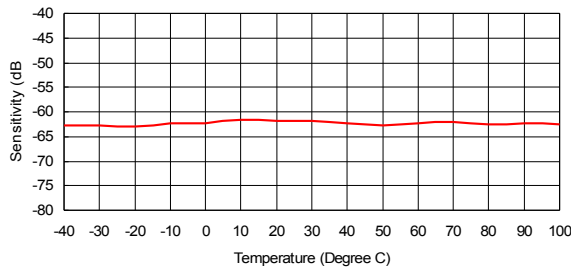
**Center Frequency Shift vs. Loaded Resistor**



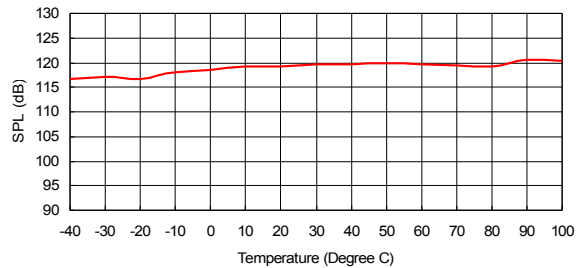
**Center Frequency Shift vs. Driving Voltage**



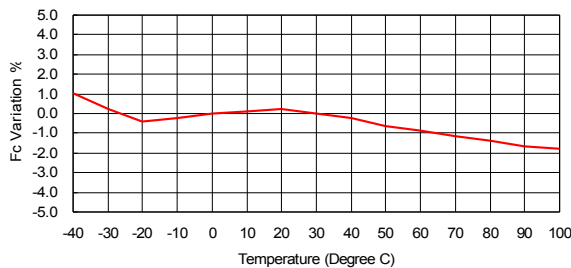
**Sensitivity Variation vs. Temperature**



**SPL Variation vs. Temperature**



**Center Frequency Shift vs. Temperature**



**Center Frequency Shift vs. Temperature**

