

**DESCRIPTION:** Ultrasonic Sensor  
**MODEL:** MSO-P1640H12TR

### FEATURES

Dual Use: Transmitter/Receiver  
 Compact and light weight.  
 High sensitivity and sound pressure  
 Less power consumption  
 High reliability

**PICTURE:**

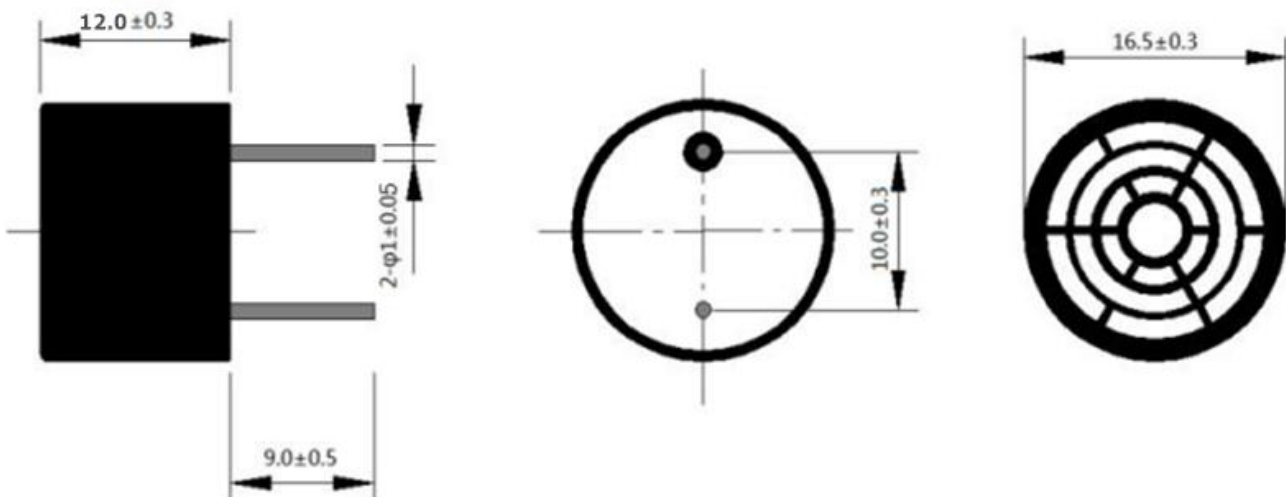


### SPECIFICATIONS

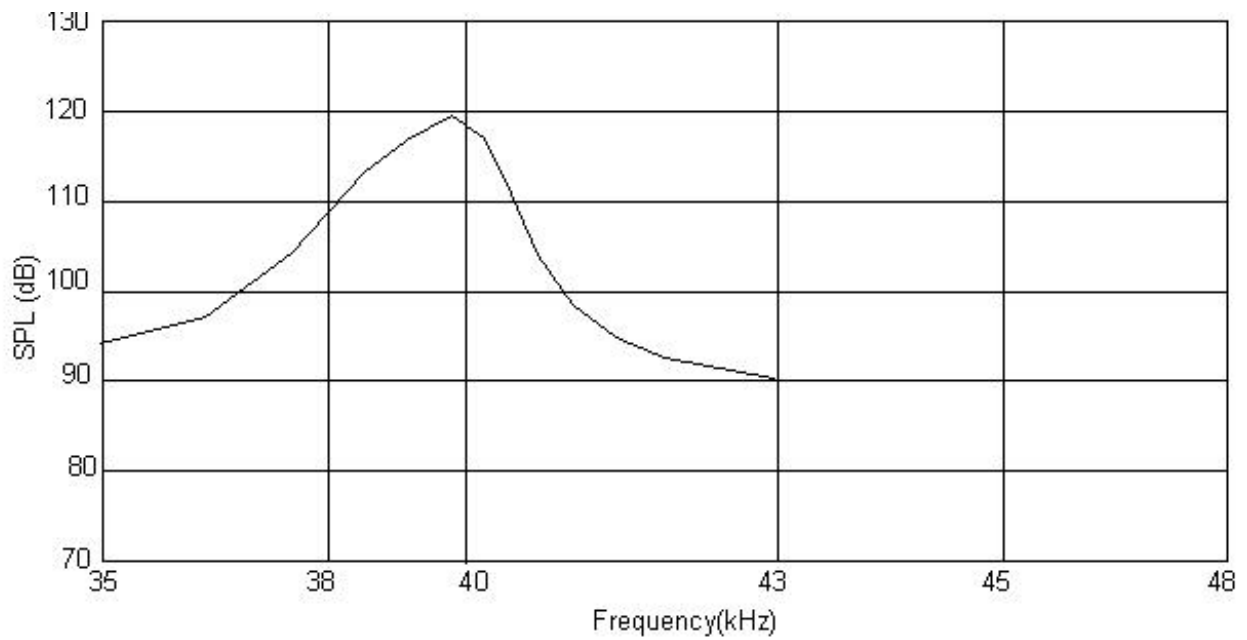
Item	Value
Using method	Transmitter/Receiver
Nominal Frequency	40±1.5KHZ
Sound Pressure Level	≥115dB
Sensitivity	≥-68dBV/μMbar
Capacitance	2200±25%pF at 1KHz
Directivity	80°±15° (-6dB )
Response time for receiver	Max 1.6ms
Maximum input voltage	60Vp-p
Detectable range	30-600cm
Housing material	Plastic
Operating Temperature	-20~+80℃
Storage Temperature	-20~+80℃

### MECHANICAL DRAWING

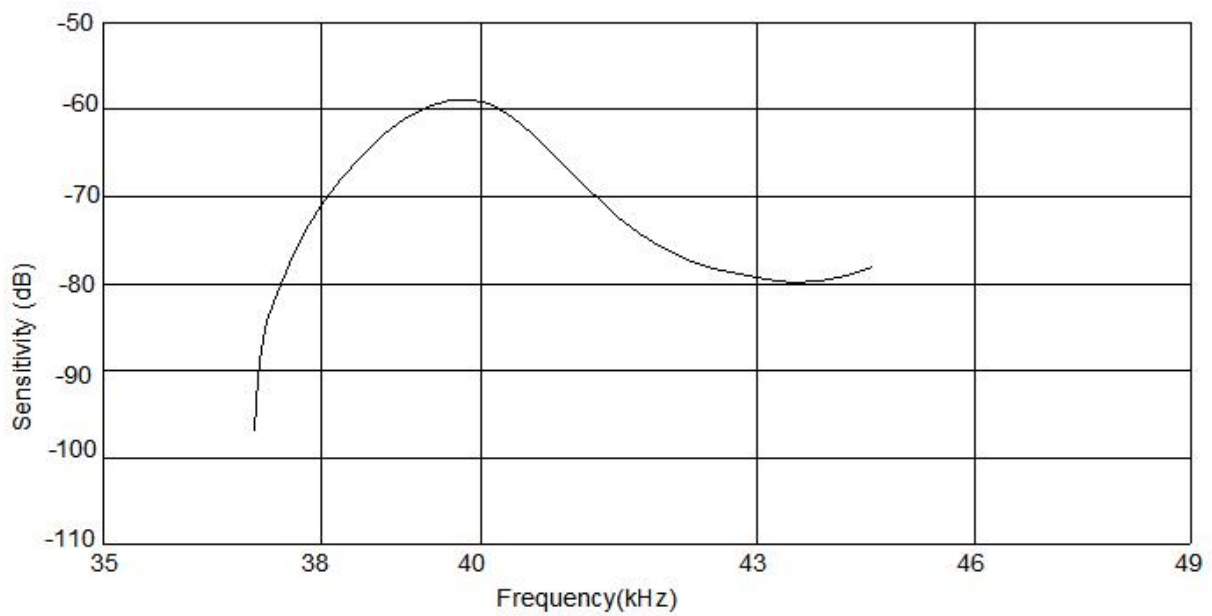
units:mm



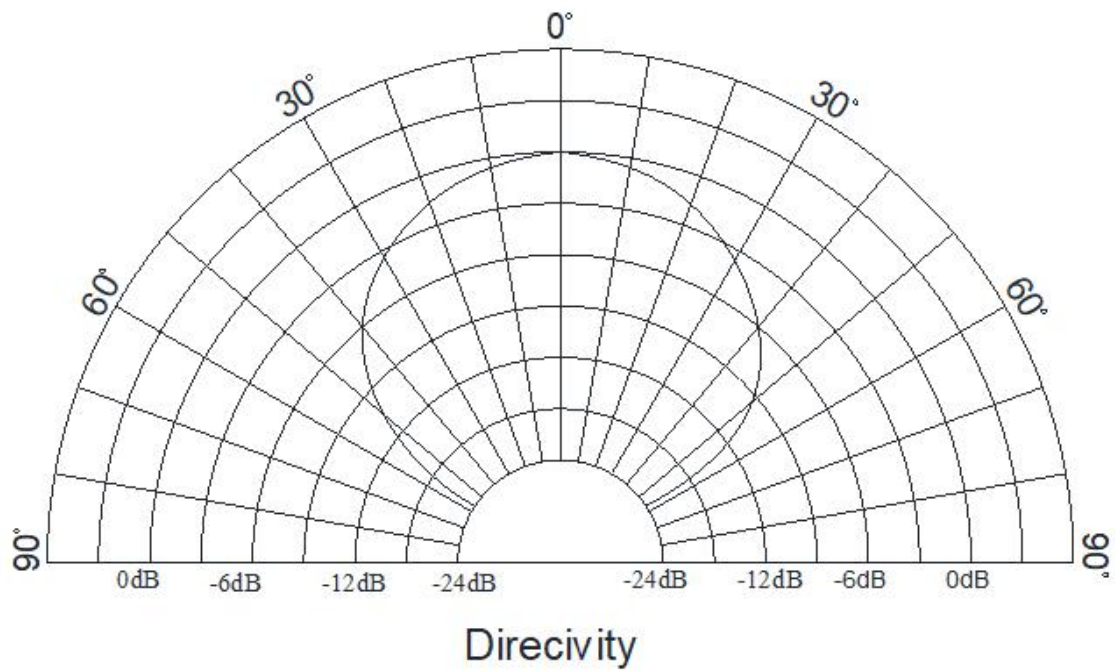
## BEAM PATTERN



SPL-Frequency Characteristics

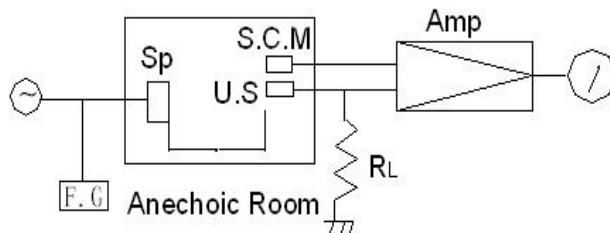


Sensitivity-Freq. Characteristics(receiver)



## TEST CIRCUIT

### Receiver



RL:  $3.9K\Omega$

U.S. :Ultrasonic Sensor

S.C.M:Standard Cappacitor Microphone

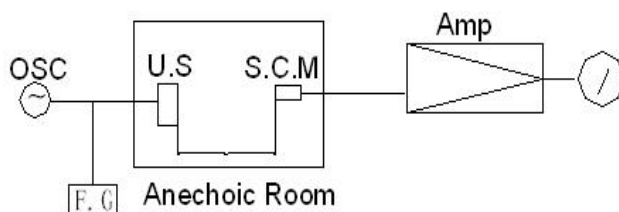
Amp. :Ampifier

OSC. :Oscillator

Sp :Tweeter

F.C :Frequency Counter

### Transmitter



U.S. :Ultrasonic Sensor

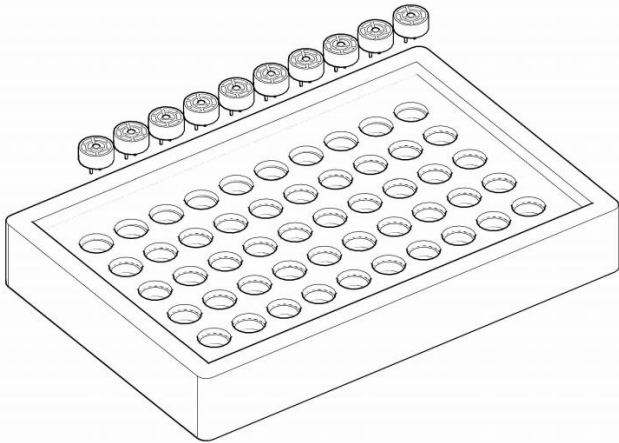
S.C.M:Standard Cappacitor Microphone

Amp. :Ampifier

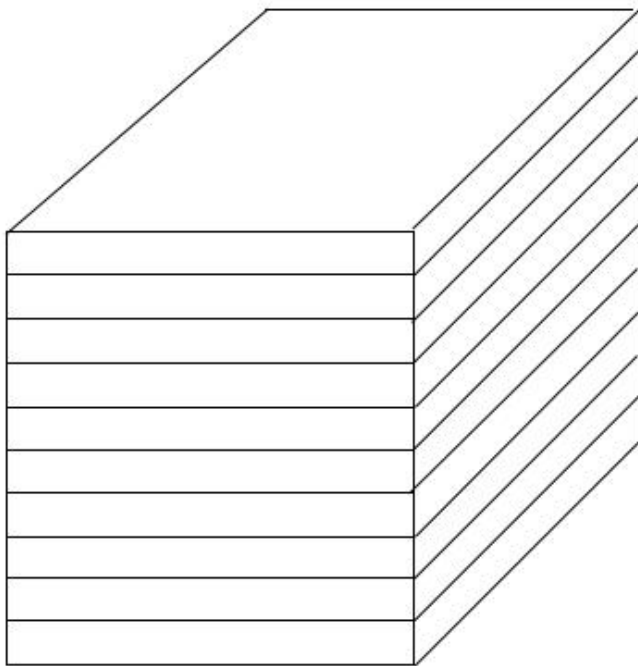
Input voltage: 10Vrms

F.C :Frequency Counter

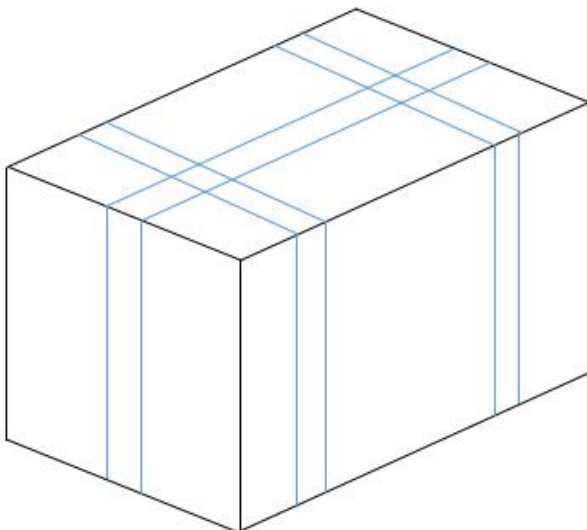
## PACKAGING DETAILS



50PCS/BOX  
BOX SIZE:23.5\*13.5\*3CM



10BOXES/STACK, TOTAL 500PCS  
STACK SIZE:23.5\*13.5\*31CM



1000PCS/CARTON  
CARTON SIZE:28\*28.5\*24CM