



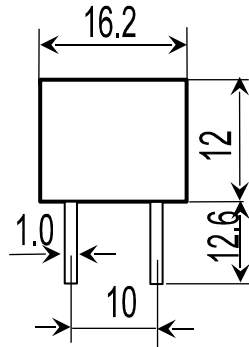
■ APPLICATIONS

- Remote Controller For Home Electric Appliance And Electronic Equipment.
- Ultrasonic Distance Measuring. Ultrasonic Approaching switch
- Ultrasonic Transmitting And Receiving For Burglar Detection
- Disaster Detection

■ Main Features

- High Sensitivity High Reliability And Stability
- High And Low Temp. –Resistance Humidity-Resistance, Vibration-Resistance, Shock-Resistance

Outline Dimension



Normal Temperature Characteristics

Part Number	Frequency (KHZ)	Sensitivity (0dB=10v/Pa) (min)	S.P.L (at.10V.30cm) (0dB=0.02mPa) (min)	Capacitance (±30%PF)
40ST-16	40	—	115dB	2000
40SR-16		-65dB	—	

Test Circuit

Test Circuit For Output Sound Pressure (Transmitter) . Test Circuit For Sensitivity (Receiver)



- |                           |                              |
|---------------------------|------------------------------|
| 1.Oscillator              | 1.Oscillator                 |
| 2.Frequency Meter         | 2.Frequency Meter            |
| 3.Voltage Meter           | 3.Standard Transmitting Unit |
| 4.Transmitting Sensor     | 4.Receiving Sensor           |
| 5.Standard Receiving Unit | 5.Millivolt Meter            |
| 6.Sound Amplifier         |                              |

## ENVIRONMENTAL CHARACTERISTIC

### 1. Temperature characteristic

The variation of the S.P.L and Sensitivity at center frequency are within 6dB compared with initial figures in the temperature range at -30 to +85C.

### 2. Humidity test

The variation of the S.P.L and Sensitivity at center frequency are within 6dB compared with initial figures after being placed in natural condition for 2 hours with following test conditions.

Temperature :60±2C      Humidity :RH90 to 95%      Times: 36 hours

### 3. Shock test

The variation of the S.P. L and Sensitivity at center frequency are within 3dB compared with initial figures with following test conditions.

Acceleration: sine 100G

Direction: 3 directions

Shock times: 3 times/each direction

### 4. Vibration test

The variation of the S.P. L and Sensitivity at center frequency are within 3dB compared with initial figures with following test conditions.

Amplitude/frequency: 1.5mm/10 to 70 Hz

Direction: 3 directions

Times: 3 hours/each direction

Sweep period: 5 min

### 5. High temperature test

The variation of the S.P.L and Sensitivity at center frequency are within 3dB compared with initial figures after being placed in natural condition for 2 hours with following test conditions.      Temperature/times: 100C/36 hours

### 6. Low temperature test

The variation of the S.P.L and Sensitivity at center frequency are within 3dB compared with initial figures after being placed in natural condition for 2 hours with following test conditions.      Temperature/times: -40C/36 hours

### 7. Heat cycle

The variation of the S.P.L and Sensitivity at center frequency are within 6dB compared with initial figures after being placed in natural condition for 2 hours with following test conditions.      Temperature/times/times: +85±3C/1 hour/10cycles      -40±3C/1 hour/10cycles

### 8. Drop test

The variation of the S.P.L and Sensitivity at center frequency are within 6dB compared with initial figures with following test conditions.

Height : 1 meter onto concrete floor

Times: 10 times