

AIR ULTRASONIC TRANSDUCERS

Open type model list

1. Features

- High sensitivity, high sound pressure level, uniform in quality
- Excellent vibration and shock resistance.
- Big operation range.

2. Applications

- Remote control of electronic appliance.
- Burglar alarm
- Level meter
- Sensor for counter



3. Ratings

Part number	Center frequency (KHz)	Sound pressure level At 10V 30cm (0dB=0.02mPa)	Sensitivity at 10V, 30 cm (0dB=10v/Pa)	Capacitnce (±30%PF)
TR4010 T1	40	>110dB		1700
TR4010R1	40		<-70dB	1700
TR4010T2	40	>110dB		1700
TR4010R2	40		<-70dB	1700
TR4012T1	40	>110dB		2000
TR4012R1	40		<-70dB	2000
TR4016T1	40	>120dB		2000
TR4016R1	40		<-63dB	2000
TR2516T1	25	>115dB		2000
TR2516R1	25		<-66dB	2000

Part number meaning:

TR 40 10 T 1
(1) (2) (3) (4) (5)

(1) TR: Transmitter & Receiver Separated type. C: Combine transmittre & receiver in one unit.

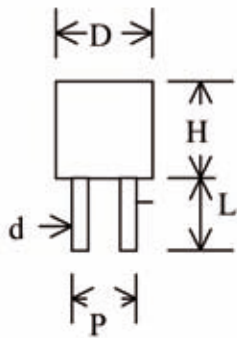
(2) 40: Center Frequency. (KHz)

(3) 10: Transducer diameter. (mm)

(4) T : Transmitter unit. R: Receiver unit.

(5) 1: Part number.

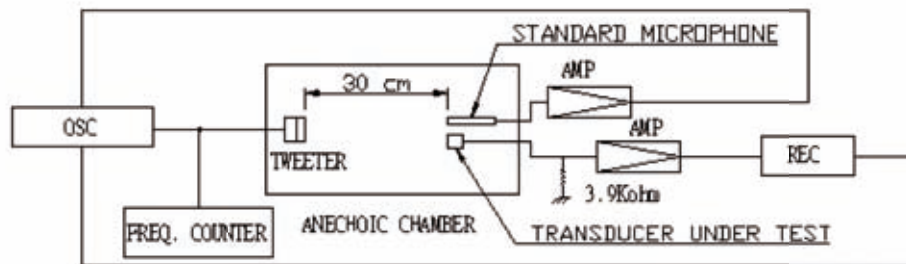
4. dimensions



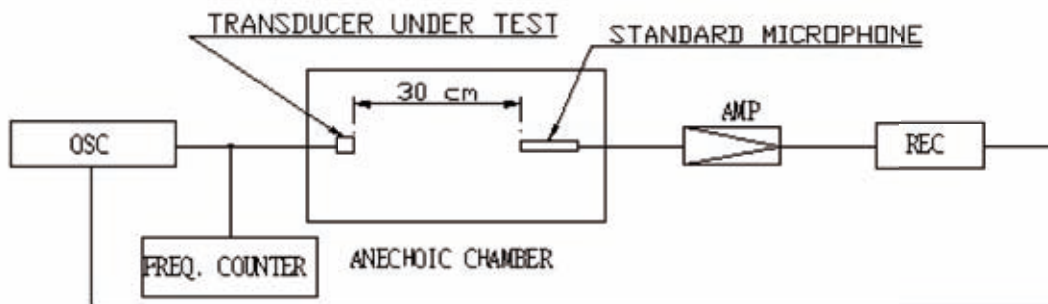
Part number	D (mm)	H (mm)	L (mm)	P (mm)	d (mm)	Case material
TR4010T/R1	9.9	7	7.6	5	0.7	ABS
TR4010T/R2	9.9	7	7.6	5	0.7	Aluminum
TR4012T/R1	12.6	9.5	7.2	8.5	0.7	Aluminum
TR4016T/R1	16.2	12	12.6	10	1.0	Aluminum
TR2516T/R1	16.2	12	12.6	10	1.0	Aluminum

5. Test Circuits Diagram

a) Test Circuit Diagram for Receiving



b) Test Circuit Diagram for Transmitting



6. Environmental Characteristics

Item	Conditions	Variation of Sensitivity
Temperature Characteristics	-20~70°C	Within 10 dB
Humidity	40±2°C, 90 %RH, 2Hrs	Within 4 dB
Shock	50G impact Directions : 3 perpendicular directions Times : 3 times	Within 4 dB
Vibration	Directions : 3 perpendicular Directions Times : 1000 times Single harmonic vibration a) Amplitude: 1.5mm b) Sweep Frequency : 10-50-10Hz with interval of 1 minute	Within 4 dB