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AIR ULTRASONIC TRANSDUCERS

Enclose type EC4010 & EC4012

1. Features

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

2. Applications

- Remote control of electronic appliance.
- Back sensor, Back meter for car use.
- Level meter
- Switch for electronic application.

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)
EC4010	40	>98dB	<-67dB	2000
EC4012	40	>100dB	<-67dB	2000
EC4014	40	>100dB	<-67dB	2000
EC4016	40	>100dB	<-65dB	2000
EC4018	40	>100dB	<-65dB	2000

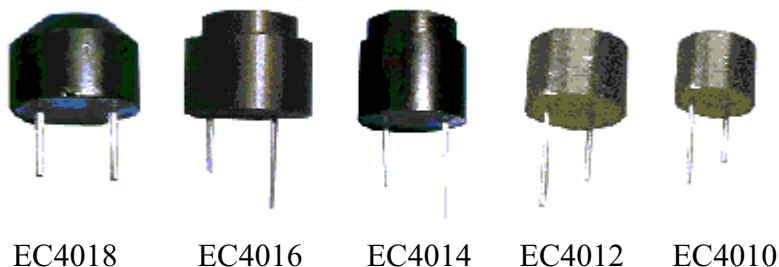
Part number meaning:

EC 40 10
(1) (2) (3)

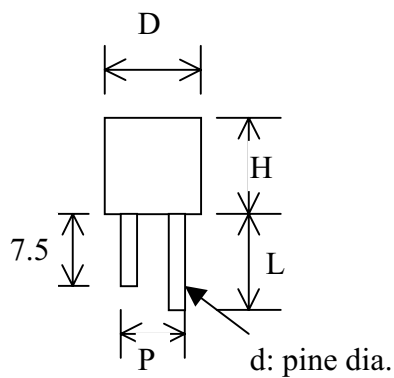
(1) EC: Enclose type (Water resistance) and Combine transmittre & receiver in one unit.

(2) 40: Center Frequency. (KHz)

(3) 10: Transducer diameter. (mm)



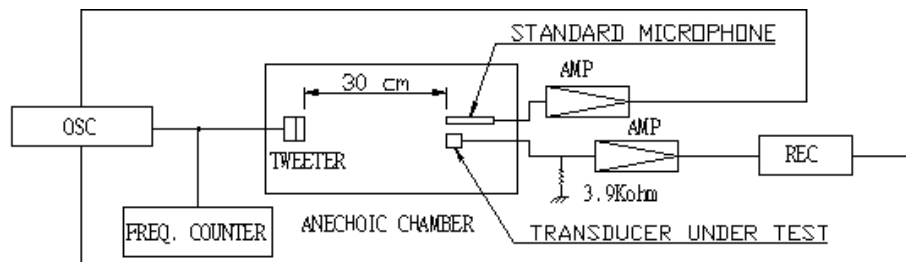
4. dimensions



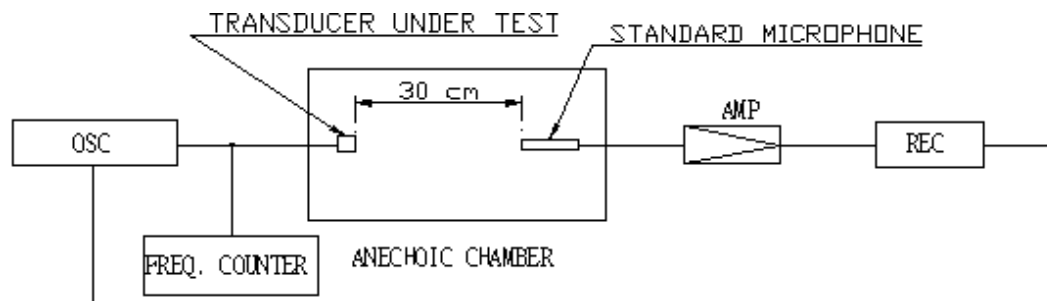
Part number	D (mm)	H (mm)	L (mm)	P (mm)	d (mm)	Case material
EC4010	10.5	8	11.5	5	0.7	Aluminum
EC4012	12	10	11.5	5	0.7	Aluminum

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