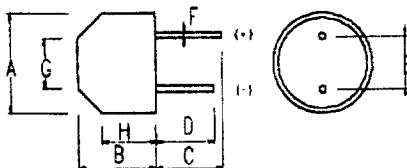


Air Ultrasonic Sensor

1.Part Number: TC40-18D

2.Dimensions:



$$A=18.0\pm0.5$$

$$B=12.0\pm0.5$$

$$C=9.0\pm0.5$$

$$D=7.0\pm0.5$$

$$E=10.0\pm0.5$$

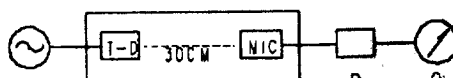
$$F=0.8\pm0.1$$

$$G=10.0\pm0.5$$

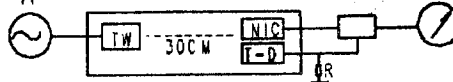
$$H=7.7\pm0.5$$

3.Measuring Circuit:

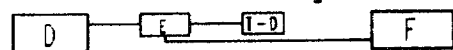
Sound Pressure Level



Sensitivity



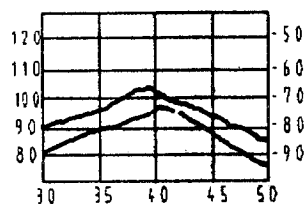
Ringig



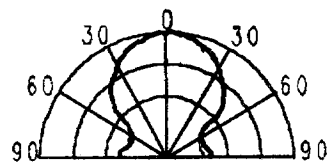
A: Oscillator B: Amplifier; C: Voltmeter; D: Pulse Generator
E: Control circuit; F: Oscilloscope; MIC: Microphone; TW: Tweeter;
T-DO: Ultrasonic sensor; R: 3.9KΩ;

4.Specification:

Part number	TC40-18D
Center frequency	$40.0\pm1.0\text{kHz}$
Sound pressure	$\geq 100\text{dB}$
Sensitivity	$\geq -80\text{dB}$
Capacitance	$2100\text{Pf}\pm 20\%$
Ringig	$\leq 1.2\text{ms}$
Directivity	$55^\circ (-6\text{dB})$
Operating temperature	$-20\sim+70^\circ\text{C}$



Sensitivity and Pressure



Radiation Characteristics

All specification taken at 25°C