

541-0001011

ULTRASONIC TRANSDUCERS

400ET180/400ER180



THIS ENCLOSED TYPE TRANSDUCER CAN BE USED FOR OUTDOOR INSTALLATION OR IN A DUSTY ATMOSPHERE. IT IS NOT RECOMMENDED TO BE USED UNDER WATER

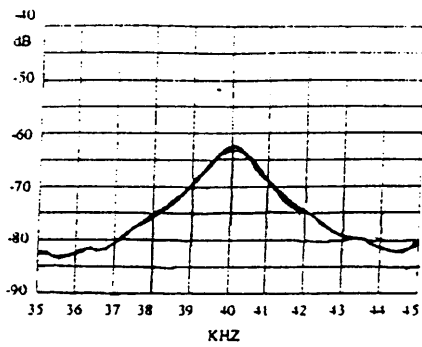
APPLICATIONS

- REMOTE CONTROL DEVICES
- PROXIMITY SENSORS
- ENERGY SAVING EQUIPMENT
- INTRUSION ALARMS
- AUTODOORS
- LEVEL CONTROLS

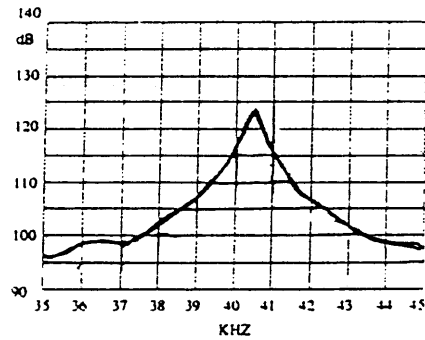
SPECIFICATION

	400ET180	400ER180
TRANSMITTING SENSITIVITY	118dB	-
RECEIVING SENSITIVITY	-	(-) 68dB
RESONANT FREQUENCY	40kHz +/- 1	
DIRECTIONAL ANGLE	30°C approx	
MAX INPUT VOLTAGE	20V rms	-
CAPACITANCE pF	3000 +/- 20%	
TEMPERATURE RANGE	-20°C TO +60°C	

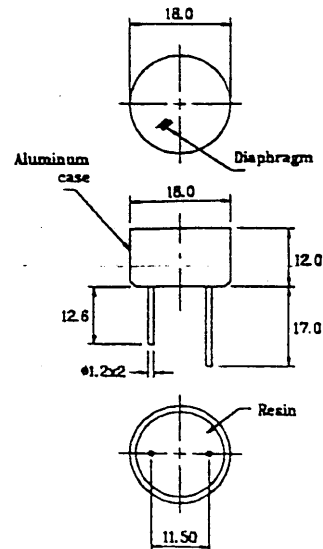
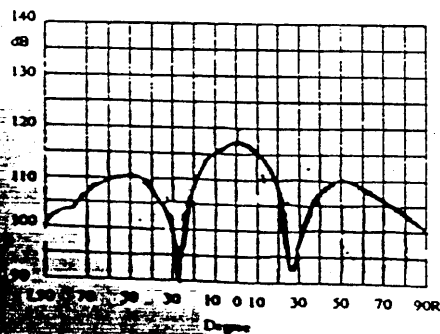
RECEIVER SENSITIVITY



TRANSMITTER SOUND PRESSURE LEVEL

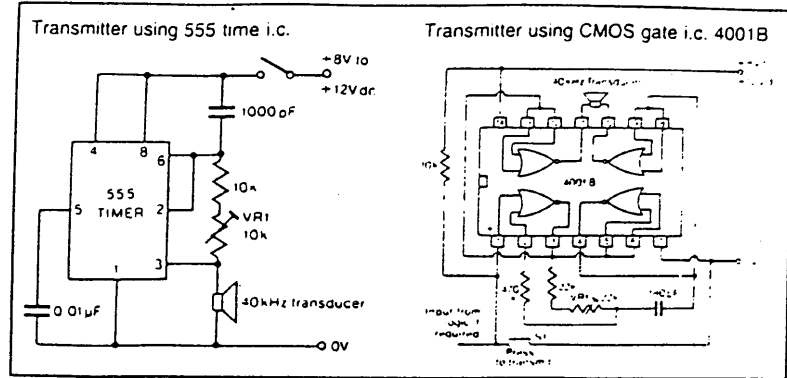


DIRECTIVITY

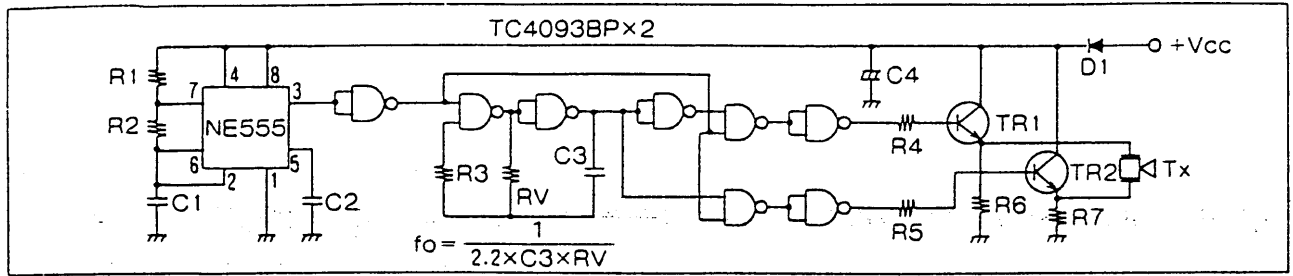


APPLICATION CIRCUITS

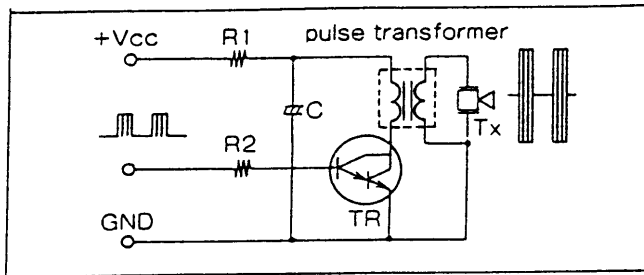
1) THE FOLLOWING CIRCUITS SHOW HOW THE TRANSDUCERS MAY BE USED IN REMOTE CONTROL APPLICATION. EITHER OF THE TRANSMITTER CIRCUITS MAY BE USED WITH THE RECEIVER. THE FREQUENCY OF OSCILLATION IS ADJUSTED BY MEANS OF VR1 FOR MAXIMUM SENSITIVITY. THE CMOS CIRCUIT ALLOWS DIRECT INTERFACING WITH LOGIC CIRCUITRY. IN THE RECEIVER VR2 IS ADJUSTED FOR MAXIMUM SENSITIVITY. NOTE: THE RELAY ENERGISES WHEN A SIGNAL IS RECEIVED FROM THE TRANSMITTER.



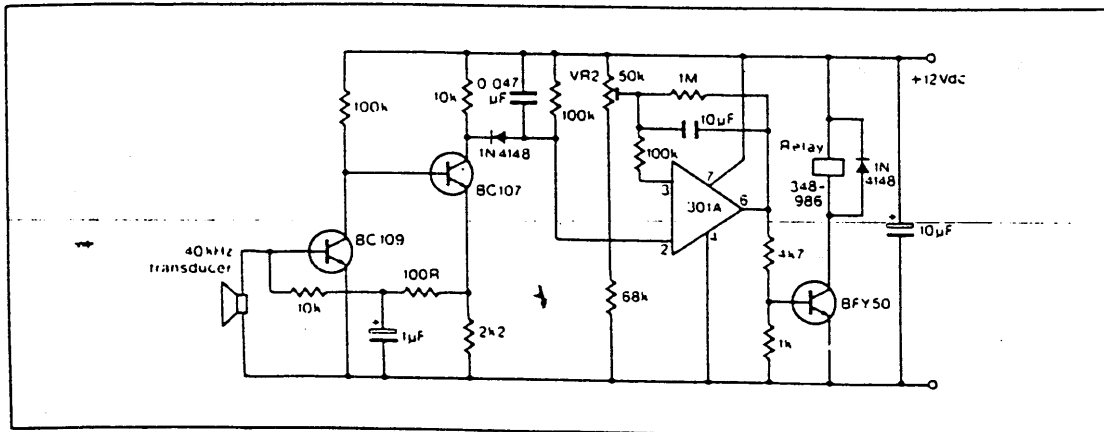
2) PULSE WAVE TRANSMIT



3) VOLTAGE MULTIPLIER CIRCUIT



4) RECEIVER CIRCUIT



5) CONTINUOUS WAVE TRANSMITTER/RECEIVER CIRCUIT

