### **MODEL ECM-60P**

#### **OMNI DIRECTIONAL**

### 1. SENSITIVITY

(OdB=1V/ $\mu$  bar,1KHz, VCC=4.5V, RL=1K $\Omega$ )

A: -56±3dB

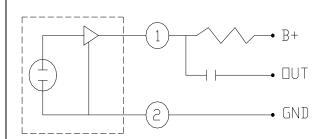
B: -60±3dB

C: -64±3dB

D: -68±3dB

E: -72±3dB

## 2. CIRCUIT DIAGRAM



#### 3. SPECIFICATIONS

1. IMPEDANCE: LOW

2. STANDARD VOLTAGE: 4.5V

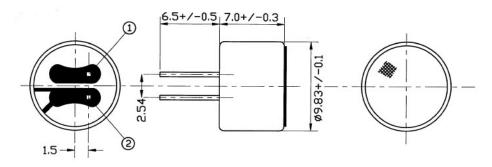
3. RANGE OF OPERATING VOLTAGE: 1.5V TO 10V

4. CURRENT DRAIN: 0.5mA MAX

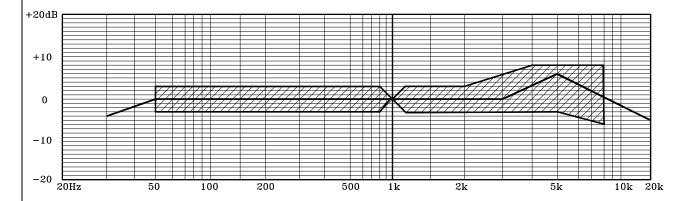
5. S/N RATIO: 40 dB or more

6. MAXIMUM INPUT SOUND PRESSURE: 120 dB SPL

## 4. DIMENSION



# 5. TYPICAL FREQUENCY RESPONSE CURVE



MAIN USAGE OF ECM UNITS: MICROPHONE, CASSETTETAPE RECORDER, SONIC CONTROLLED TOY, INTERCOM SYSTEM, SONIC CONTROLLED SWITCH, TELEPHONE SET, DISCO LIGHT & ANSWERING MACHINE, ETC.

# 6. RELIABILITY TEST

VIBRATION TEST	TO BE NO INTERFERENCE IN OPERATION AFTER VIBRATION 12Hz TO 50Hz FOR 1 MINUTE FULL AMPLITUDE, FOR 1.5 HOUR AT 3 AXISES.
DROP TEST	TO BE NO INTERFERENCE IN OPERATION AFTER DROPPED TO CONCERTET FLOOR EACH ONE TIME FROM 1 METER HEIGHT AT 3 DIRECTONS IN STATE OF PACKING.
TEMPERATURE TEST	a) AFTER EXPOSURE AT 55° FOR 1 HOUR, SENSITIVITY TO BE WITHIN +/-3dB FROM INITIAL. b) AFTER EXPOSURE AT -10° FOR 1 HOUR, SENSITIVITY TO BE WITHIN +/-3dB FROM INITIAL. (THE MEASUREMENT TO BE DONE AFTER 2 HOURS OF CONDITIONING AT 25°C.)
HUMIDITY TEST	AFTER EXPOSURE AT 40°C AND 95% RH FOR 48 HOURS, SENSITIVITY TO BE WITHIN +/-3dB FROM INITIAL.  (AFTER 1 HOUR OF CONDITIONING AT 25°C.)
TEMPERATURE CYCLE TEST	AFTER EXPOSURE AT -10°C FOR 1HOUR, AT 25°C FOR 1 HOUR, AT 50°C FOR 1 HOUR, ATO 25°C FOR 2 HOURS, 4 CYCLES ,SENSITIVITY TO BE WITHIN +/-3dB.  (AFTER 2 HOURS OF CONDITIONING AT 25°C)

#### \*REGARDING THE SOLDERING OPERATION:

EACH CONDENSER MICROPHONE CONTAINS A FET WITHIN ITS CASE.

GENERALLY, OVER-HEATING, OVER-CHARGE OF VOLTAGE IS EASY TO DESTROY SEMICONDUCTORS.

- 1. USE 30W (OR UNDER) SOLDERING IRON AND MAINTAIN 230°~260°C IN OPERATION.
- 2. SOLDERING SHOULD BE ACCOMPLISHED WITHIN TWO SECONDS AT EACH TERMINAL SO AS NOT TO BE OVERHEATED.
- 3. DO NOT MAKE A CAVITY AT THE SERFACE OF LEAD ON THE PATTERN PLATE. (A CAVITY MAY CHANGE THE CHARACTERISTICE OF CONDENSER MICROPHONE.)