

MODEL EM-9745

OMNI DIRECTIONAL

1. SENSITIVITY

(O dB=1V/ μ bar,1KHz, VCC=2V, RL=2.2K Ω)

-38±2dB

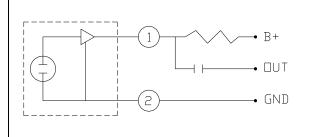
-40±2dB

-42±3dB

-44±3dB

 $-46\pm3dB$

2. CIRCUIT DIAGRAM



3. SPECIFICATIONS

1. IMPEDANCE: LOW

2. STANDARD VOLTAGE: 4.5V

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

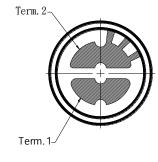
4. CURRENT DRAIN: 0.25mA MAX

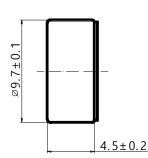
5. S/N RATIO: 40 dB or more

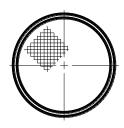
6. MAXIMUM INPUT SOUND PRESSURE: 120 dB SPL

7. RoHS Compliant.

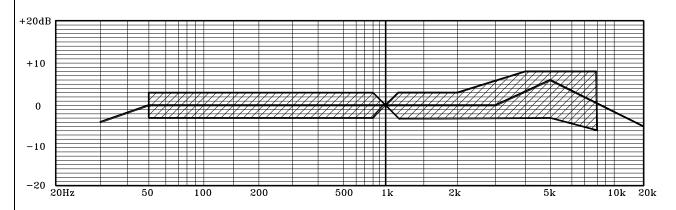
4. DIMENSION







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.)



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