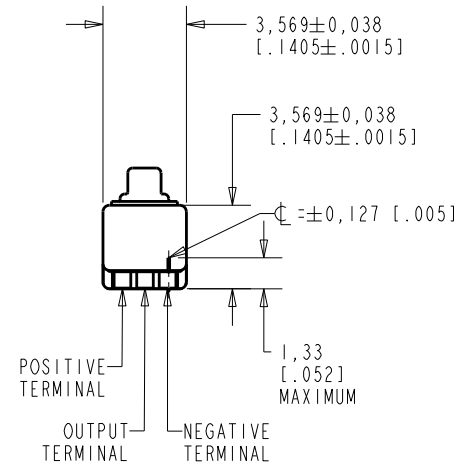
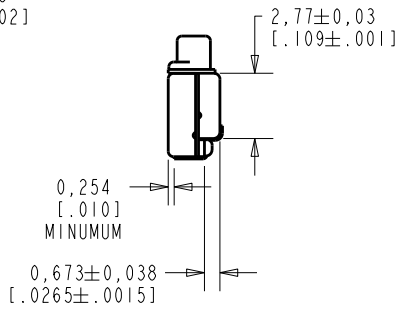
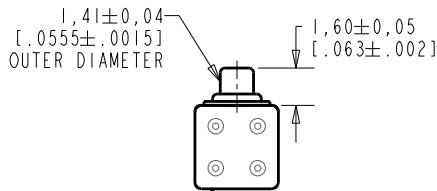
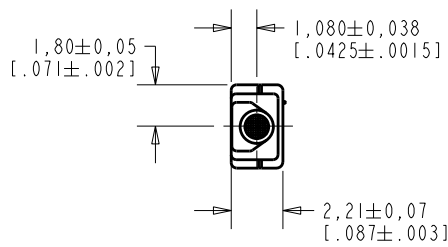


**EM-24046-C64**  
SHT 1.1

NOTE:

1. INCREASED PRESSURE AT SOUND INLET CAUSES A POSITIVE GOING VOLTAGE TO APPEAR AT THE OUTPUT TERMINAL, RELATIVE TO THE NEGATIVE TERMINAL.



NOMINAL WEIGHT  
.08 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

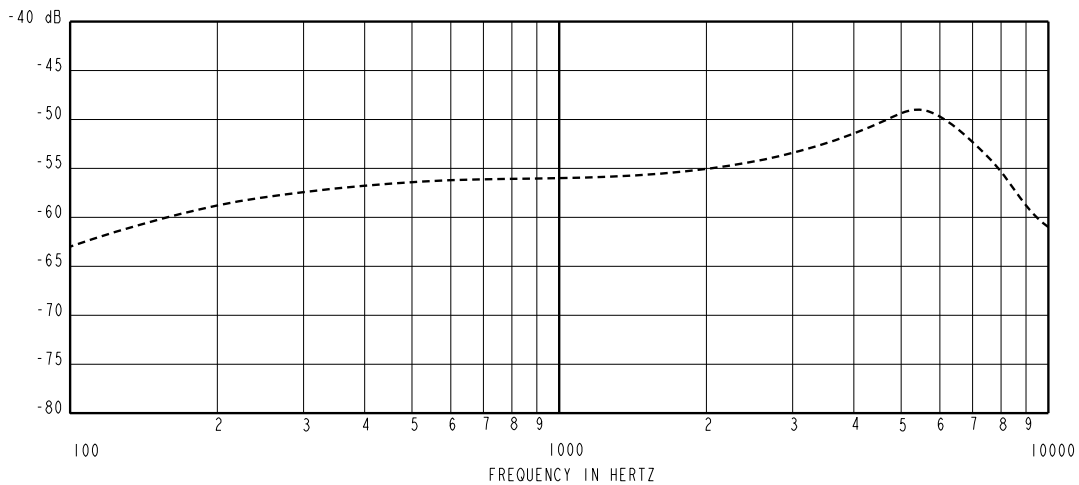
| Revision | C.O. #    | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| C        | M10102034 | 6-18-08             | Active        | C        |
| B        | M10101341 | 12-19-06            |               |          |
| A        | M10101260 | 11-03-06            |               |          |

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|                      |                   |                     |         |         |
|----------------------|-------------------|---------------------|---------|---------|
| SCALE:               | <b>4:1</b>        |                     | DR. BY  | DATE    |
| DO NOT SCALE DRAWING |                   |                     |         |         |
| TITLE:               | <b>MICROPHONE</b> | <b>EM-24046-C64</b> | GJP     | 11-9-06 |
|                      | OUTLINE DRAWING   | SHT 1.1             | APP. BY | DATE    |
|                      |                   |                     | GJP     | 11-9-06 |

RE111AS12E.FRM Rev: B

SENSITIVITY IN dB RELATIVE TO 1.0 VOLT/0.1 Pa (N/M<sup>2</sup>)  
FOR CONDITIONS SHOWN BELOW.



| FREQUENCY | SENSITIVITY |       |       | DEVICE CONFORMITY            |       |
|-----------|-------------|-------|-------|------------------------------|-------|
|           | MIN.        | NOM.  | MAX.  | RANGE OF DEVIATION FROM 1kHz |       |
| 100       | ---         | -63.0 | ---   | -10.0                        | -3.0  |
| 1000      | -59.0       | -56.0 | -53.0 | 0.0                          | 0.0   |
| ~5500     | ---         | -49.0 | ---   | +4.0                         | +10.0 |

NOTES:

- CASE CONNECTED TO NEGATIVE TERMINAL.
- MICROPHONE TO BE FUNCTIONAL WITH 10 VDC SUPPLY.
- TYPICAL SENSITIVITY TO HUMIDITY AT 1000Hz IS 0.03 dB/%RH
- SENSITIVITY AND NOISE VALUES INDICATED ON THIS SPECIFICATION ARE VALID AT 50% HUMIDITY.
- CAPACITANCE MEASUREMENT MADE WITH BOONTON MODEL 7200 OR EQUIVALENT WITH APPLIED AC VOLTAGE OF 15 mVOLTS AT 1MHz AND 0 VDC. INCLUDES CIRCUIT CAPACITANCE IN PARALLEL WITH CAPACITOR.

| PORT LOCATION | DC SUPPLY | AMPLIFIER CURRENT DRAIN | SENSITIVITY CHANGE ON REDUCING SUPPLY TO 0.9VDC | "A" WEIGHTED NOISE (1 kHz EQUIV. SPL) | OUTPUT IMPEDANCE OHMS |      |      | CAPACITANCE ±50% |      |
|---------------|-----------|-------------------------|---|---------------------------------------|-----------------------|------|------|------------------|------|
|               |           |                         |   |                                       | MIN.                  | NOM. | MAX. | 1-2              | 1-3  |
| 12B           | 1.3V      | 50 µA MAX.              | 3 dB MAX.                                       | 31.0 dB MAX.                          | 2800                  | 4400 | 6800 | 75pF             | 75pF |

| Revision | C.O. #    | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| C        | MI0102034 | 6-18-08             | Active        | C        |
| B        | MI0101341 | 12-19-06            |               |          |
| A        | MI0101260 | 11-03-06            |               |          |

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ITASCA, ILLINOIS U.S.A.

|  |  |         |          |
|--|--|---------|----------|
| WHEN TEST LIMITS ARE USED TO ESTABLISH INCOMING INSPECTION ACCEPTANCE/REJECTION CRITERIA, CORRELATION OF TEST EQUIPMENT WITH KNOWLES IS ALSO REQUIRED FOR ELIMINATION OF EQUIPMENT AND TEST METHOD VARIATION |  | DR. BY  | DATE     |
| TITLE: <b>MICROPHONE</b><br>PERFORMANCE SPECIFICATION  |  | LSY     | 11-03-06 |
|  |  | DATE    |          |
| EM-24046-C64<br>SHT 2.1  |  | GJP     | 11-9-06  |
|  |  | APP. BY | DATE     |
|  |  | GJP     | 11-9-06  |