

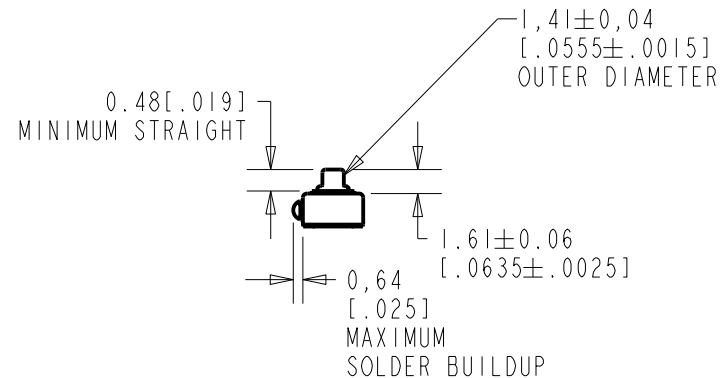
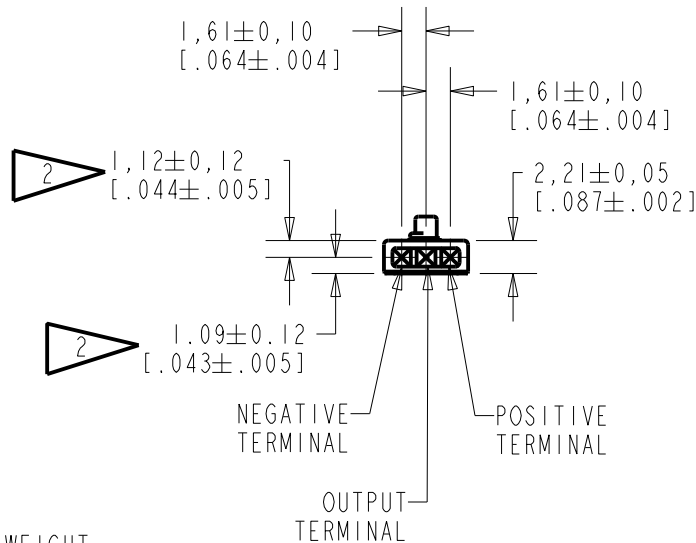
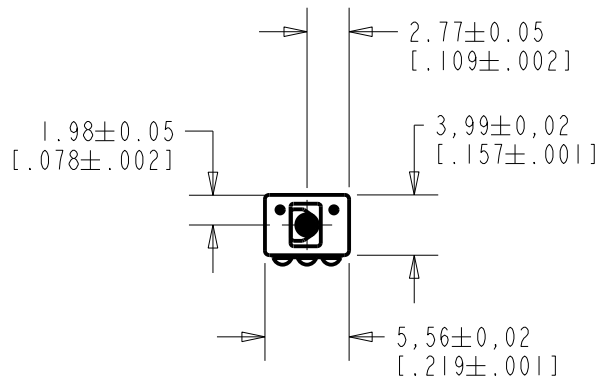
EK-27404-000

SHT 1.1

NOTE

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

2 LOCATED FROM TWO SURFACES FOR CUSTOMER CONVENIENCE. ONLY APPLICABLE FROM ONE SURFACE, NOT TO BE USED TOGETHER. HORIZONTAL LOCATION FOR TERMINAL CENTERED TO  $\pm 0,17$  [.007].



NOMINAL WEIGHT  
.13 GRAM

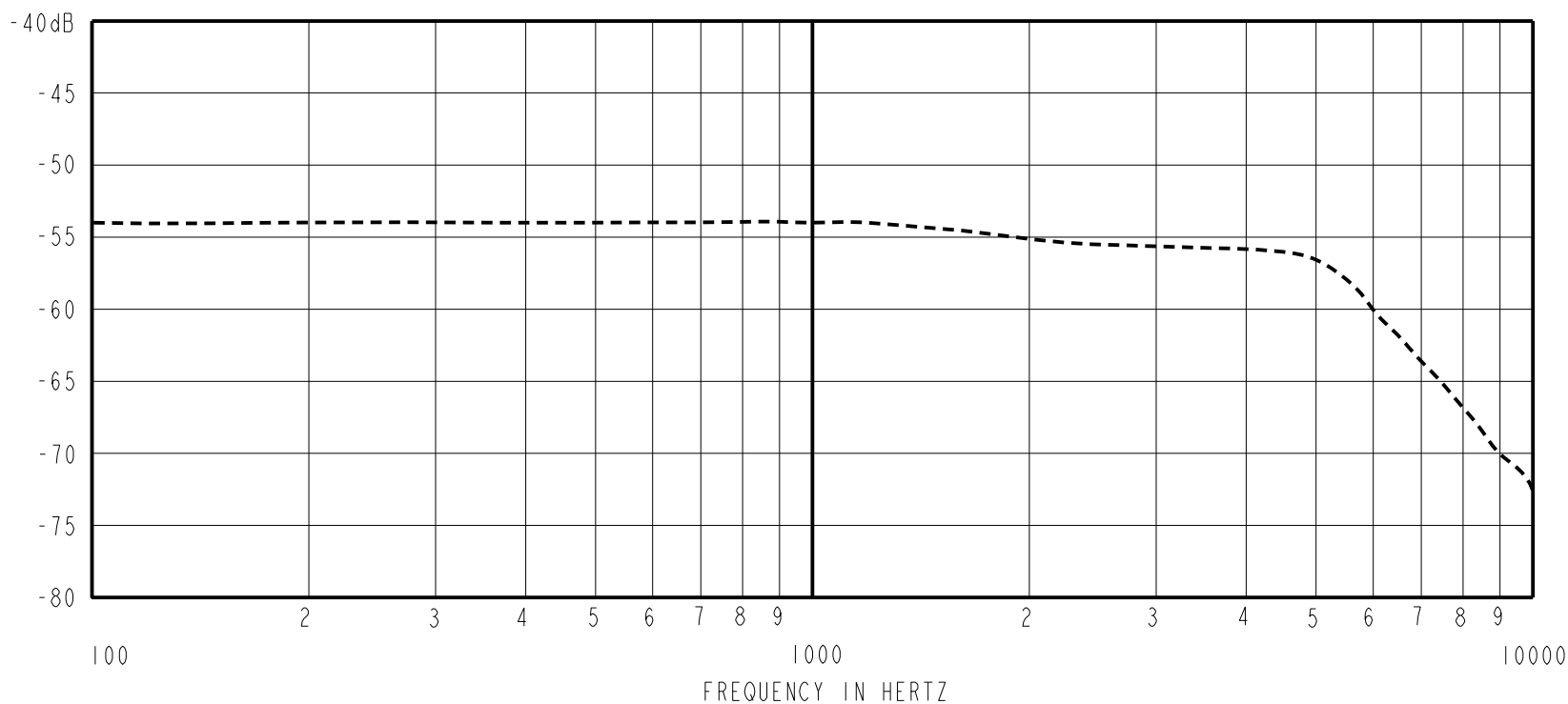
DIMENSIONS IN MILLIMETERS [INCHES]

**KNOWLES ELECTRONICS**  
ITASCA, ILLINOIS U.S.A.

| Revision | C.O. #    | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| B        | MI0105324 | 2-12-14             | Active        | B        |
| A        | MI0100730 | 7-25-05             |               |          |

|                      |            |              |         |         |
|----------------------|------------|--------------|---------|---------|
| SCALE:               | 2:1        |              | DR. BY  | DATE    |
| DO NOT SCALE DRAWING |            |              | AB      | 7-25-05 |
| TITLE:               | MICROPHONE | EK-27404-000 | CK. BY  | DATE    |
| OUTLINE DRAWING      |            | SHT 1.1      | GJP     | 7-29-05 |
|                      |            |              | APP. BY | DATE    |
|                      |            |              | GJP     | 7-29-05 |

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       | ---         | -54.0 | ---   | -1.0                         | +1.0 |
| 1000      | -54.0       | -54.0 | -52.0 | 0.0                          | 0.0  |
| 4000-6000 | ---         | -56.5 | ---   | -5.0                         | +0.5 |

NOTES:

1. CASE CONNECTED TO NEGATIVE TERMINAL.
2. MICROPHONE TO BE FUNCTIONAL WITH 10 VDC SUPPLY.
3. CONFORMS TO REQUIREMENTS SHOWN ON 'ELECTRET MICROPHONE ENVIRONMENTAL QUALIFICATIONS TEST, EK-PA SHEET 2.2' WITH REF. FREQ. OF 1000 Hz.
4. TYPICAL SENSITIVITY TO HUMIDITY AT 1000 Hz IS 0.02 dB/%RH.
5. SENSITIVITY AND NOISE VALUES INDICATED ON THIS SPECIFICATION ARE VALID AT 50% HUMIDITY.

| DC SUPPLY | AMPLIFIER CURRENT DRAIN | SENSITIVITY CHANGE ON REDUCING SUPPLY TO 0.9VDC | "A" WEIGHTED NOISE (1 kHz EQUIV. SPL) | OUTPUT IMPEDANCE OHMS |      |      |
|-----------|-------------------------|---|---------------------------------------|-----------------------|------|------|
|           |                         |   |                                       | MIN.                  | NOM. | MAX. |
| 1.3V      | 50 μA MAX.              | 3 dB MAX.                                       | 26.0 dB MAX.                          | 2800                  | 4400 | 6800 |

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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

TITLE: **MICROPHONE**  
PERFORMANCE SPECIFICATION

**EK-27404-000**  
SHT 2.1

| DR. BY  | DATE    |
|---------|---------|
| AB      | 7-25-05 |
| CK. BY  | DATE    |
| GJP     | 7-29-05 |
| APP. BY | DATE    |
| GJP     | 7-29-05 |