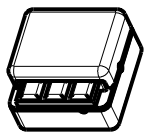
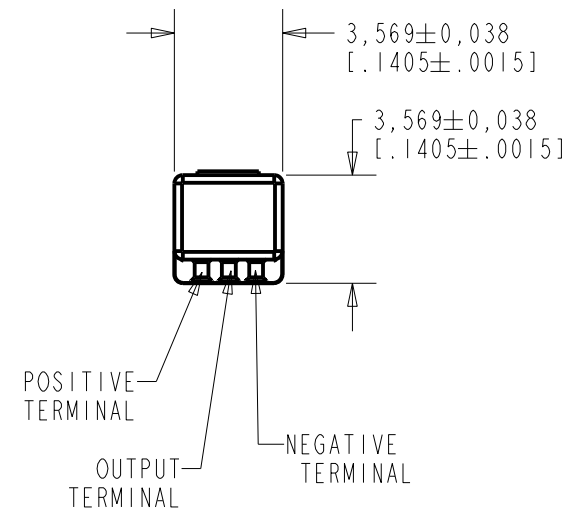
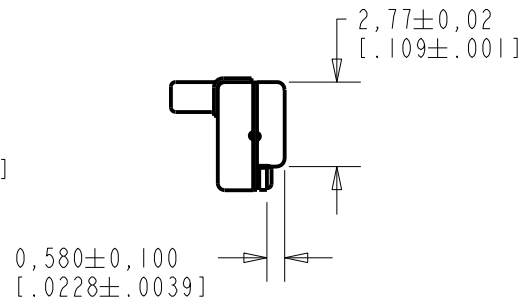
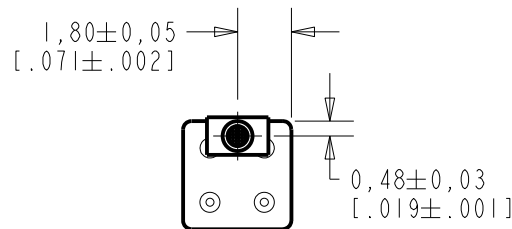
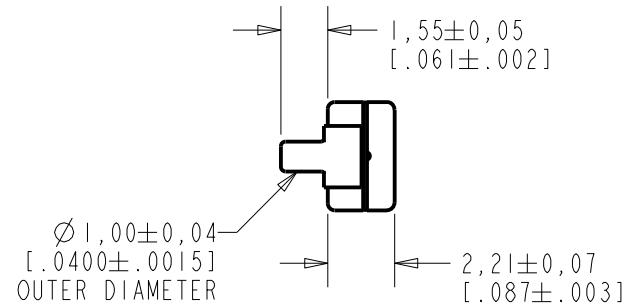


**EM-23456-C36**  
SHT 1.1

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 |
|----------|-----------|---------------------|---------------|----------|
| I        | MI0106036 | 5-22-15             | <b>Active</b> | <b>I</b> |
| H        | MI0105775 | 12-12-14            |               |          |
| G        | MI0105775 | 11-18-14            |               |          |

SCALE: **4:1**

DO NOT SCALE DRAWING

TITLE: **MICROPHONE**

**EM-23456-C36**

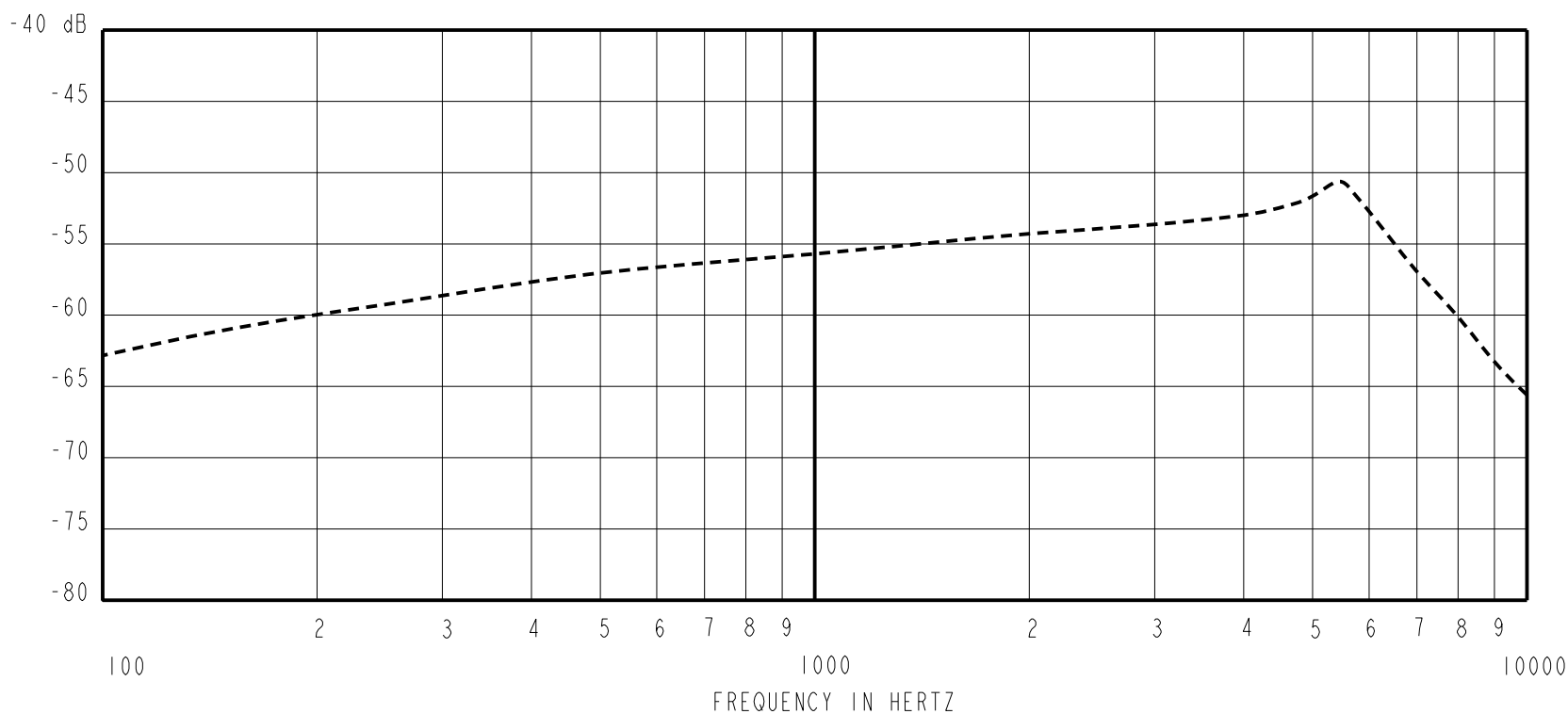
OUTLINE DRAWING

**SHT 1.1**

| DR. BY  | DATE    |
|---------|---------|
| MMM     | 7-14-05 |
| CK. BY  | DATE    |
| GJP     | 7-15-05 |
| APP. BY | DATE    |
| GJP     | 7-15-05 |

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

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       | ---         | -62.5 | ---   | -10.0                        | -3.0 |
| 1000      | -59.0       | -56.0 | -53.0 | 0.0                          | 0.0  |
| ≈ 5400    | ---         | -51.0 | ---   | +1.5                         | +7.5 |

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.
- TYPICAL FEEDTHROUGH ATTENUATION: 70 dB SPL (1 kHz PRODUCED BY 10 mV RMS VARIATION OF BATTERY VOLTAGE).

| 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 |      |      |
|---------------|-----------|-------------------------|---|---------------------------------------|-----------------------|------|------|
|               |           |                         |   |                                       | MIN.                  | NOM. | MAX. |
| 12KP          | 1.3V      | 50 μA MAX.              | 3 dB MAX.                                       | 28.0 dB MAX.                          | 2800                  | 4400 | 6800 |

| Revision | C.O. #    | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| I        | M10106036 | 5-22-15             | <b>Active</b> | <b>I</b> |
| H        | M10105775 | 12-12-14            |               |          |
| G        | M10105775 | 11-18-14            |               |          |

**KNOWLES ELECTRONICS**  
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

TITLE: **MICROPHONE** **EM-23456-C36**  
PERFORMANCE SPECIFICATION **SHT 2.1**

| DR. BY  | DATE    |
|---------|---------|
| MMM     | 7-14-05 |
| CK. BY  | DATE    |
| GJP     | 7-15-05 |
| APP. BY | DATE    |
| GJP     | 7-15-05 |