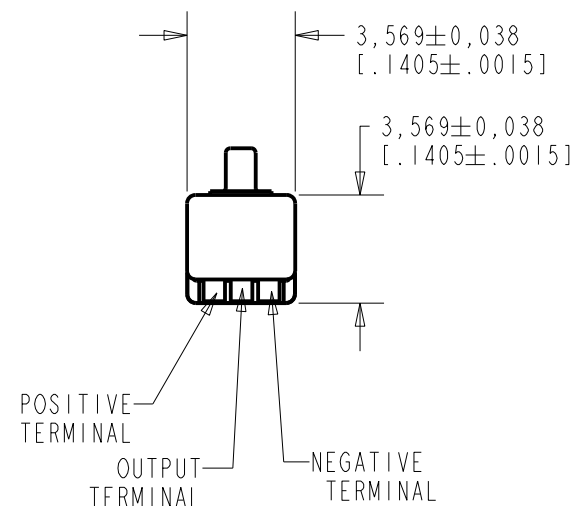
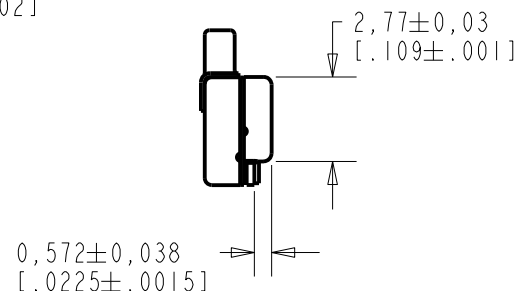
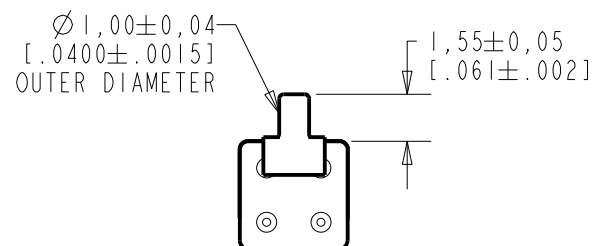
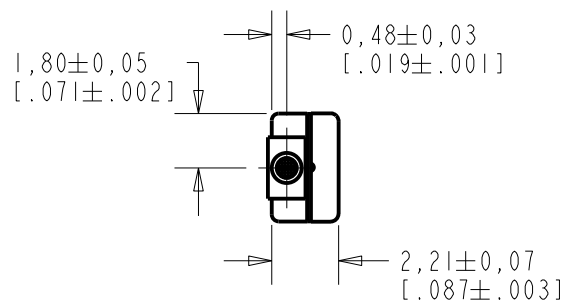


# EM-23800-C36

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.

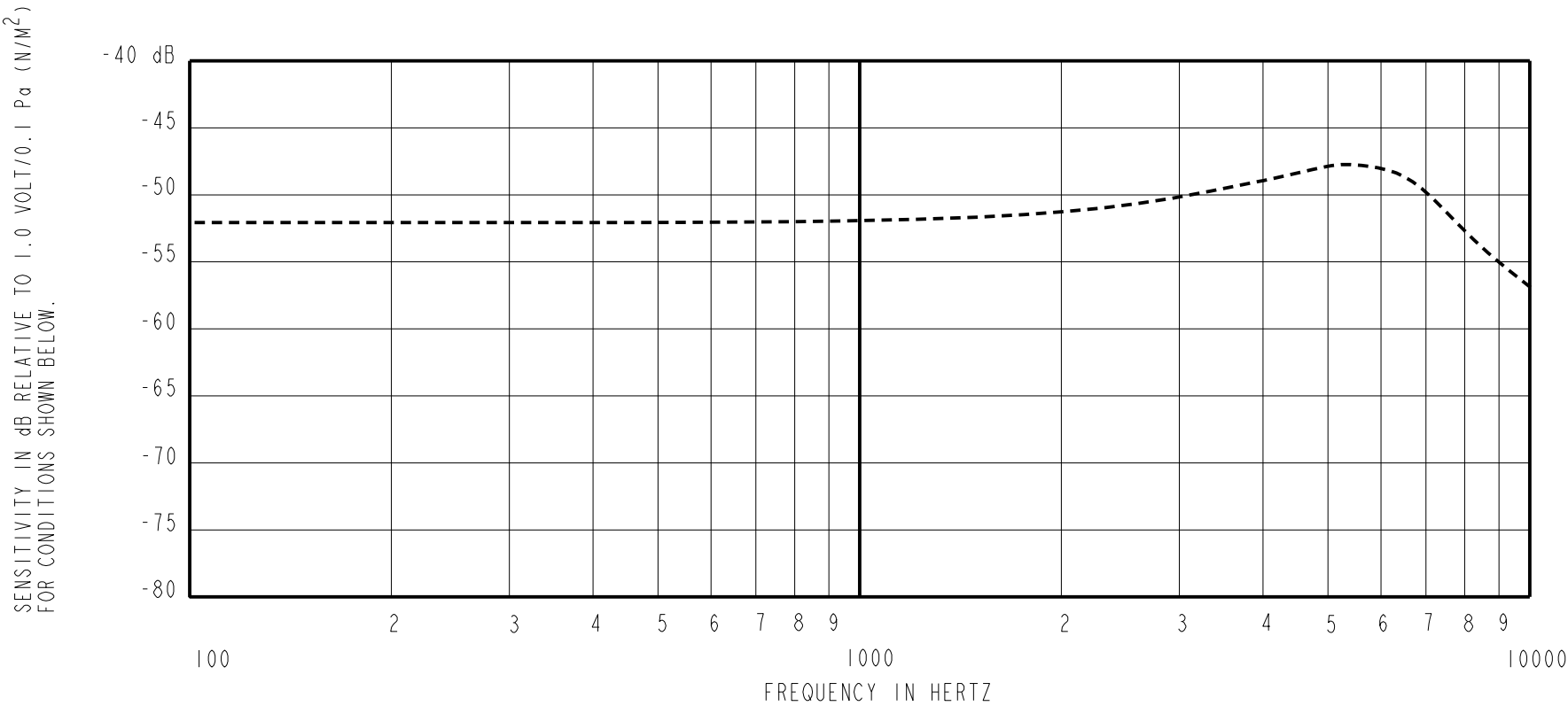


NOMINAL WEIGHT  
.08 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

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

| Revision                             | C.O. #    | Implementation Date | RELEASE LEVEL | REVISION |
|--------------------------------------|-----------|---------------------|---------------|----------|
| H                                    | MI0104054 | 4-19-11             | Active        | H        |
| G                                    | MI0102912 | 7-30-09             |               |          |
| SCALE: 4:1                           |           |                     | DR. BY        | DATE     |
| DO NOT SCALE DRAWING                 |           |                     | MMM           | 7-18-05  |
| TITLE: MICROPHONE<br>OUTLINE DRAWING |           |                     | CK. BY        | DATE     |
|                                      |           |                     | GJP           | 7-18-05  |
|                                      |           |                     | APP. BY       | DATE     |
|                                      |           |                     | GJP           | 7-18-05  |
|                                      |           |                     |               |          |



| FREQUENCY | SENSITIVITY |       |       | DEVICE CONFORMITY            |      |
|-----------|-------------|-------|-------|------------------------------|------|
|           | MIN.        | NOM.  | MAX.  | RANGE OF DEVIATION FROM 1KHz |      |
| 100       | ---         | -52.0 | ---   | -3.0                         | +3.0 |
| 1000      | -55.0       | -52.0 | -49.0 | 0.0                          | 0.0  |
| ≈ 5000    | ---         | -47.5 | ---   | +1.5                         | +7.5 |

NOTES:

- CASE CONNECTED TO NEGATIVE TERMINAL.
- MICROPHONE TO BE FUNCTIONAL WITH 1.6 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.

| 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. |
| 12B           | 1.3V      | 50 μA MAX.              | 3 dB MAX.                                       | 28.0 dB MAX.                          | 2800                  | 4400 | 6800 |

KNOWLES ELECTRONICS  
ITASCA, ILLINOIS U.S.A.

| Revision                                                                                                                                                                                                     | C.O. #    | Implementation Date | RELEASE LEVEL |         | REVISION |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------|---------------|---------|----------|
|                                                                                                                                                                                                              |           |                     | Active        |         | H        |
| H                                                                                                                                                                                                            | M10104054 | 4-19-11             |               |         |          |
| G                                                                                                                                                                                                            | M10102912 | 7-30-09             |               |         |          |
| 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     |
|                                                                                                                                                                                                              |           |                     |               | MMM     | 7-18-05  |
|                                                                                                                                                                                                              |           |                     |               | CK. BY  | DATE     |
|                                                                                                                                                                                                              |           |                     |               | GJP     | 7-18-05  |
| TITLE: MICROPHONE                                                                                                                                                                                            |           | EM-23800-C36        |               | APP. BY | DATE     |
|                                                                                                                                                                                                              |           |                     |               | GJP     | 7-18-05  |
| PERFORMANCE SPECIFICATION                                                                                                                                                                                    |           | SHT 2.1             |               |         |          |