

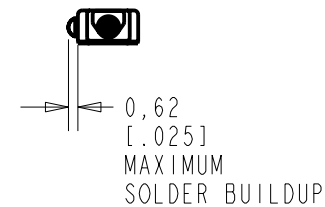
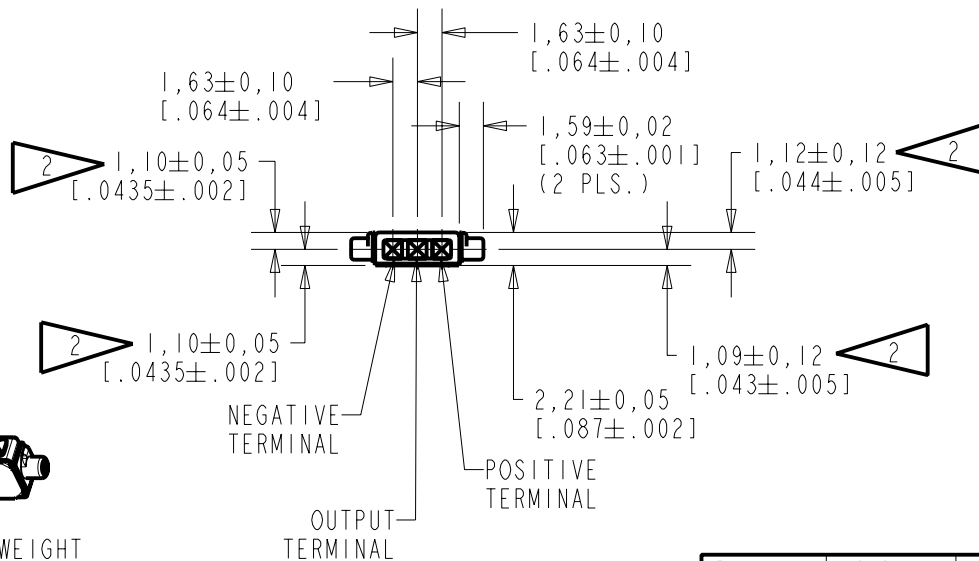
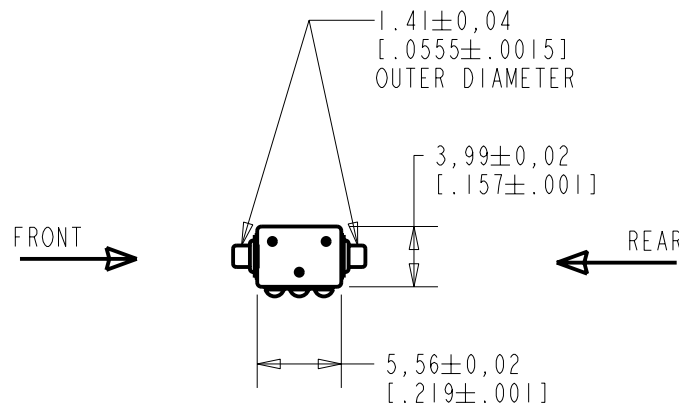
EL-23077-000

SHT 1.1

NOTES:

1. INCREASED PRESSURE AT THE SOUND INLET CAUSE 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]

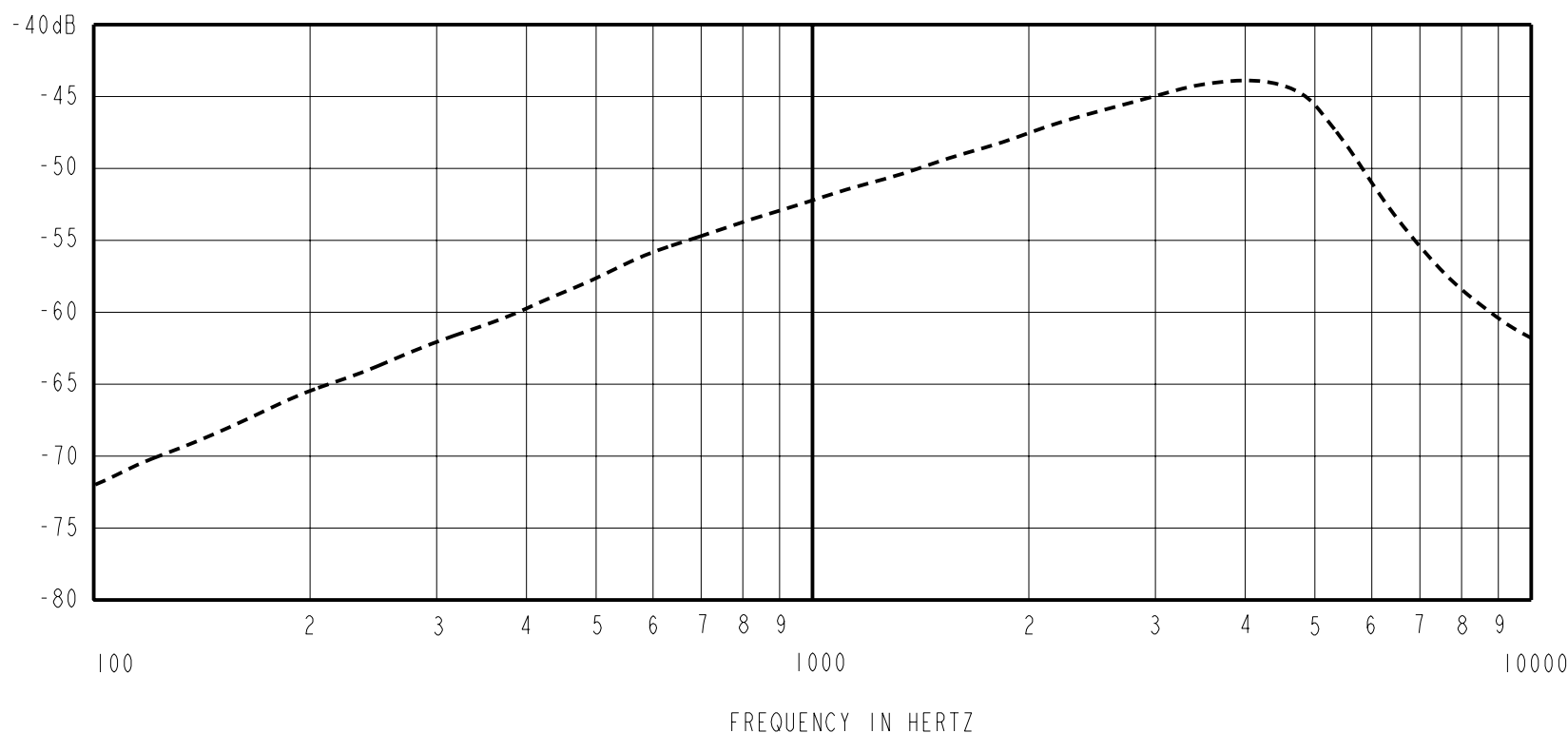
| Revision | C.O. # | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| A | MI0101526 | 8-3-07 | Released | A |

| | | |
|----------------------|-----------------|--------------|
| SCALE: | 2:1 | |
| DO NOT SCALE DRAWING | | |
| TITLE: | MICROPHONE | EL-23077-000 |
| | OUTLINE DRAWING | SHT 1.1 |

| | |
|---------|--------|
| DR. BY | DATE |
| LSY | 8-3-07 |
| CK. BY | DATE |
| GJP | 8-8-07 |
| APP. BY | DATE |
| GJP | 8-8-07 |

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SENSITIVITY IN dB RELATIVE TO 1.0 VOLT/MICROBAR (0.1 N/m²). UNDER THE TEST CONDITIONS SHOWN BELOW



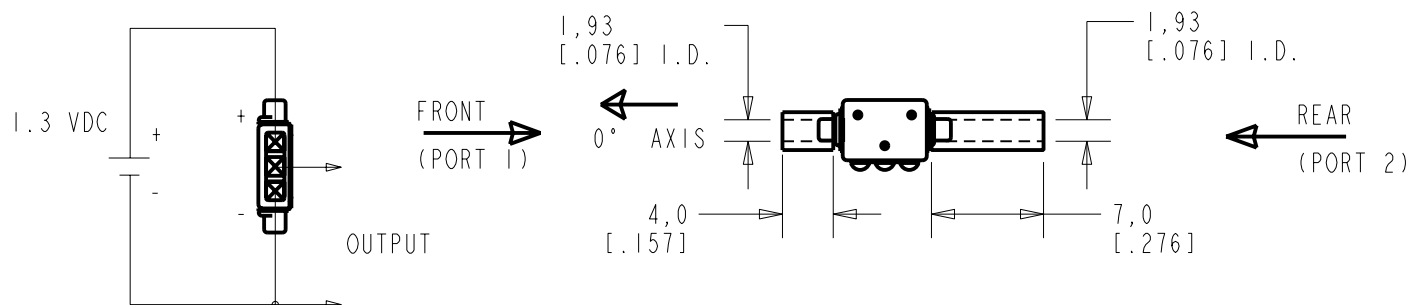
| SENSITIVITY (0° ON AXIS) | | | | DEVICE CONFORMITY | |
|--------------------------|-------|-------|-------|-------------------------------|-------|
| FREQUENCY | MIN. | NOM. | MAX. | RANGE OF DEVIATION FROM 1 kHz | |
| 300 | --- | -62.0 | --- | -8.5 | -11.5 |
| 1000 | -54.0 | -52.0 | -50.0 | 0.0 | 0.0 |
| 3100-5100 | --- | -43.5 | --- | +3.5 | +13.5 |

INTERNAL DELAY AT 1000Hz 54μS 62μS 70μS

NOTES:

- CASE CONNECTED TO NEGATIVE TERMINAL.
- MICROPHONE TO BE FUNCTIONAL WITH 10 VDC SUPPLY.
- CONFORMS TO REQUIREMENTS SHOWN ON 'ELECTRET MICROPHONE ENVIRONMENTAL QUALIFICATIONS TEST, EK-PA SHEET 2.2' WITH REF. FREQ. OF 1000 Hz.
- TYPICAL SENSITIVITY TO HUMIDITY AT 1000 Hz 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 15m VOLTS AT 1 KHz AND 0 VDC INCLUDES CIRCUIT CAPACITANCE IN PARALLEL WITH CAPACITOR.
- TEST CONDITIONS WITH TUBING DESCRIBED BELOW
DIMENSIONS IN MILLIMETERS (INCHES)

| PORT LOCATION | DC SUPPLY | AMPLIFIER CURRENT DRAIN | SENSITIVITY CHANGE ON REDUCING SUPPLY TO 0.9VDC | "A" WEIGHTED NOISE (RE 1.0 VOLT) | OUTPUT IMPEDANCE OHMS | | | CAPACITANCE ±50% | | |
|---------------|-----------|-------------------------|---|----------------------------------|-----------------------|------|------|--------------------|--------------------|------------------|
| | | | | | MIN. | NOM. | MAX. | OUTPUT TO NEGATIVE | OUTPUT TO POSITIVE | POS. TO NEGATIVE |
| 3S, 9S | 1.3V | 50 uA MAX | 3 dB MAX. | -100.0 dB MAX. | 2800 | 4400 | 6800 | N/A | N/A | N/A |



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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** **EL-23077-000**
PERFORMANCE SPECIFICATION **SHT 2.1**

| DR. BY | DATE |
|---------|--------|
| LSY | 8-3-07 |
| CK. BY | DATE |
| GJP | 8-8-07 |
| APP. BY | DATE |
| GJP | 8-8-07 |