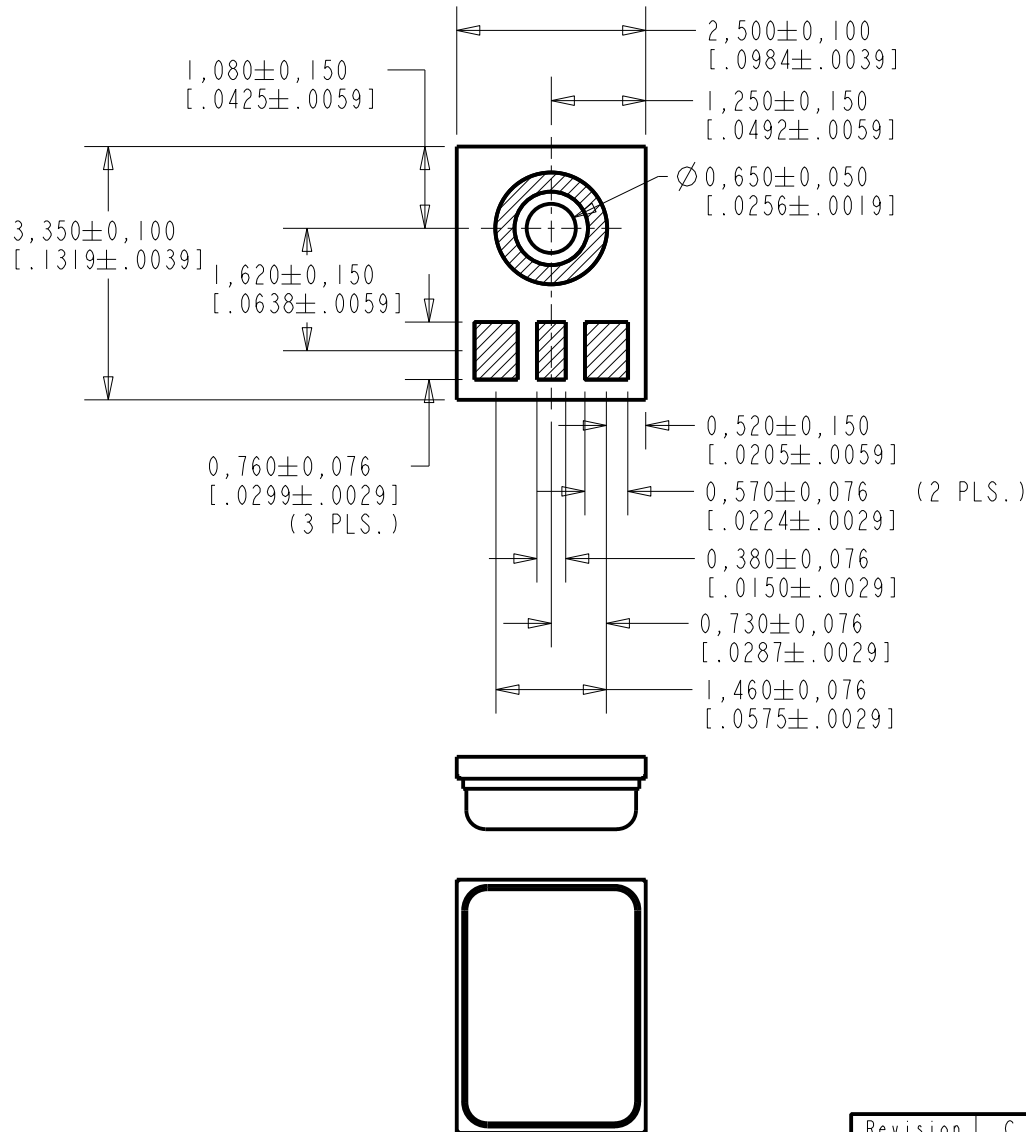


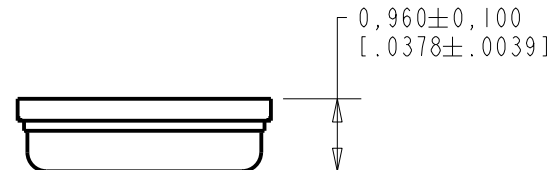
MM-31692-000

SHT 1.1



NOTES:

- DO NOT PULL A VACUUM OR APPLY AIR PRESSURE OVER THE PORT HOLE OF THE MICROPHONE. PULLING A VACUUM OR APPLYING AIR PRESSURE OVER THE PORT HOLE CAN DAMAGE THE DEVICE.
- DO NOT INSERT ANY OBJECT IN PORT HOLE OF DEVICE AT ANY TIME AS THIS CAN DAMAGE THE DEVICE.
- RECOMMEND NO MORE THAN 3 REFLOW CYCLES.

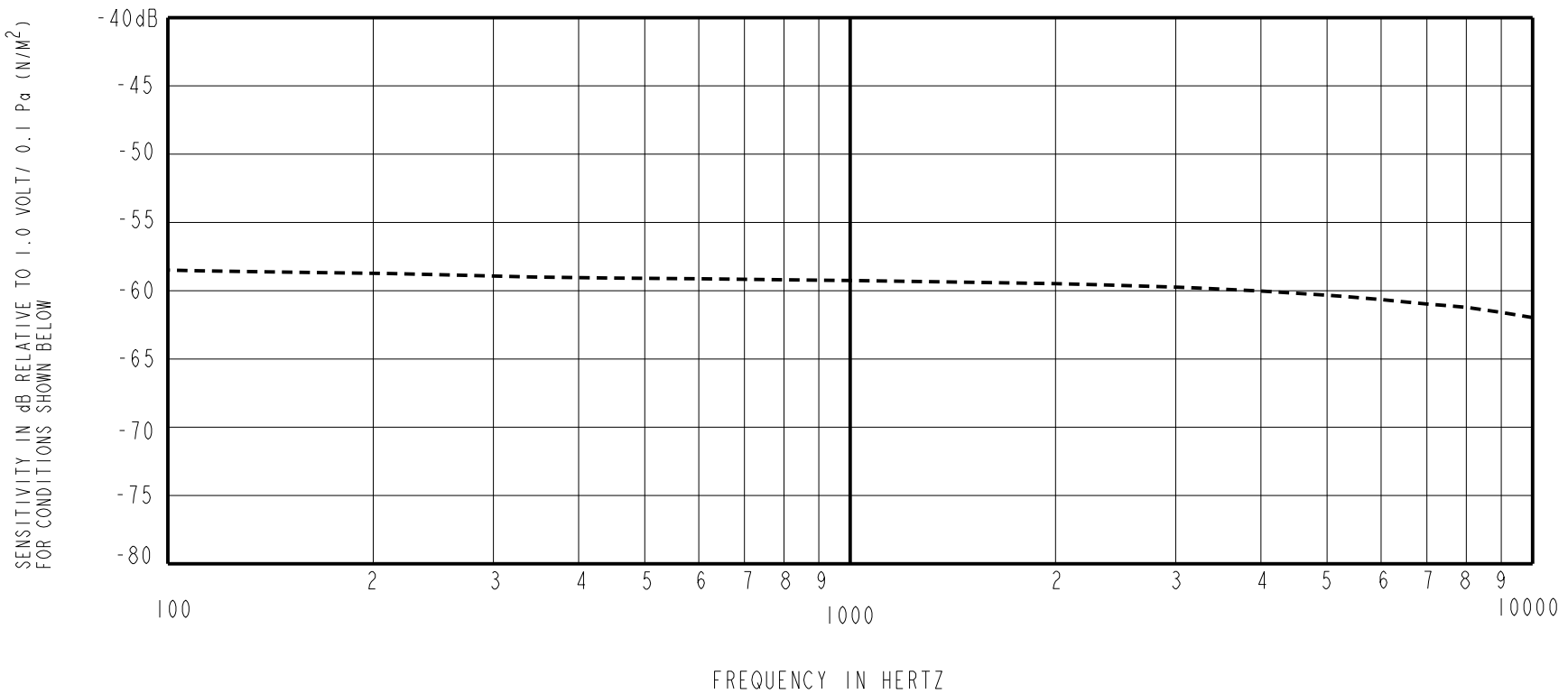


DIMENSIONS IN MILLIMETERS [INCHES]

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.

| Revision | C.O. # | Implementation Date | RELEASE LEVEL | REVISION |
|----------------------|-----------|---------------------|---------------|----------|
| A | MI0104868 | 12-5-12 | Active | A |
| SCALE: 10:1 | | | DR. BY | DATE |
| DO NOT SCALE DRAWING | | | LSY | 12-5-12 |
| TITLE: MICROPHONE | | | CK. BY | DATE |
| OUTLINE DRAWING | | | GJP | 12-12-12 |
| MM-31692-000 | | | APP. BY | DATE |
| SHT 1.1 | | | GJP | 12-12-12 |

TYPICAL SENSITIVITY

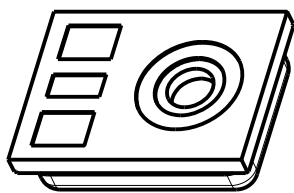


SENSITIVITY MEASURED IN A PRESSURE CAVITY UNDER THE NOMINAL CONDITIONS SHOWN BELOW

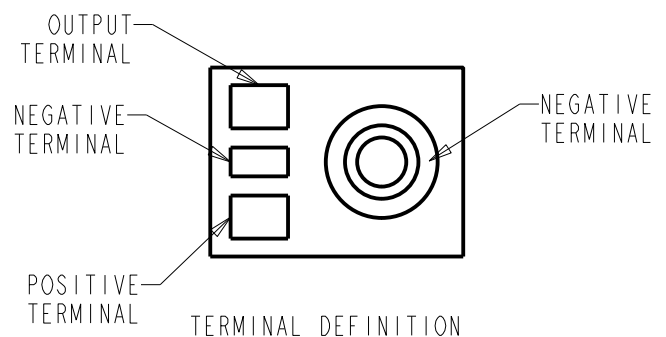
| POWER REQUIREMENT | | | | | |
|----------------------|------|---------|---------|---------|-----------|
| PARAMETER | UNIT | MINIMUM | NOMINAL | MAXIMUM | REMARKS |
| SUPPLY VOLTAGE RANGE | VDC | 0.9 | 0.9 | 1.3 | OPERATING |

| PERFORMANCE | | | | | | |
|------------------|---------|---------|---------|---------|--|-------------------------|
| PARAMETERS | UNIT | MINIMUM | NOMINAL | MAXIMUM | REMARKS | |
| SENSITIVITY | 100 Hz | dB | -1.5 | 0.5 | +2.5 | re SENSITIVITY AT 1 kHz |
| | 1000 Hz | dB | -61.5 | -58.5 | -55.5 | dB re 1V/0.1Pa |
| | 10 kHz | dB | -5.0 | -2.0 | +1.0 | re SENSITIVITY AT 1 kHz |
| CURRENT DRAIN | μA | - | 28 | 39 | - | |
| A-WEIGHTED NOISE | dB SPL | - | 26.5 | 30 | INPUT REFERRED NOISE re SENSITIVITY AT 1kHz | |
| OUTPUT IMPEDANCE | Ohms | 3200 | 4450 | 5700 | - | |

- NOTES: 1. REFLOWED CUP CONNECTED TO NEGATIVE TERMINAL.
2. PERFORMANCE PARAMETERS ARE VALID AT 0.9 VDC. TYPICAL TEST ENVIRONMENT: 50% RH, 21°C (70°F)
3. SETTLE VL SPEC RANGES FROM 0.53 TO 0.67 AT 0.9 VDC BY DESIGN.



PORT LOCATION: 12JPn



| Revision | C.O. # | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| A | MI0104868 | 12-5-12 | Active | A |

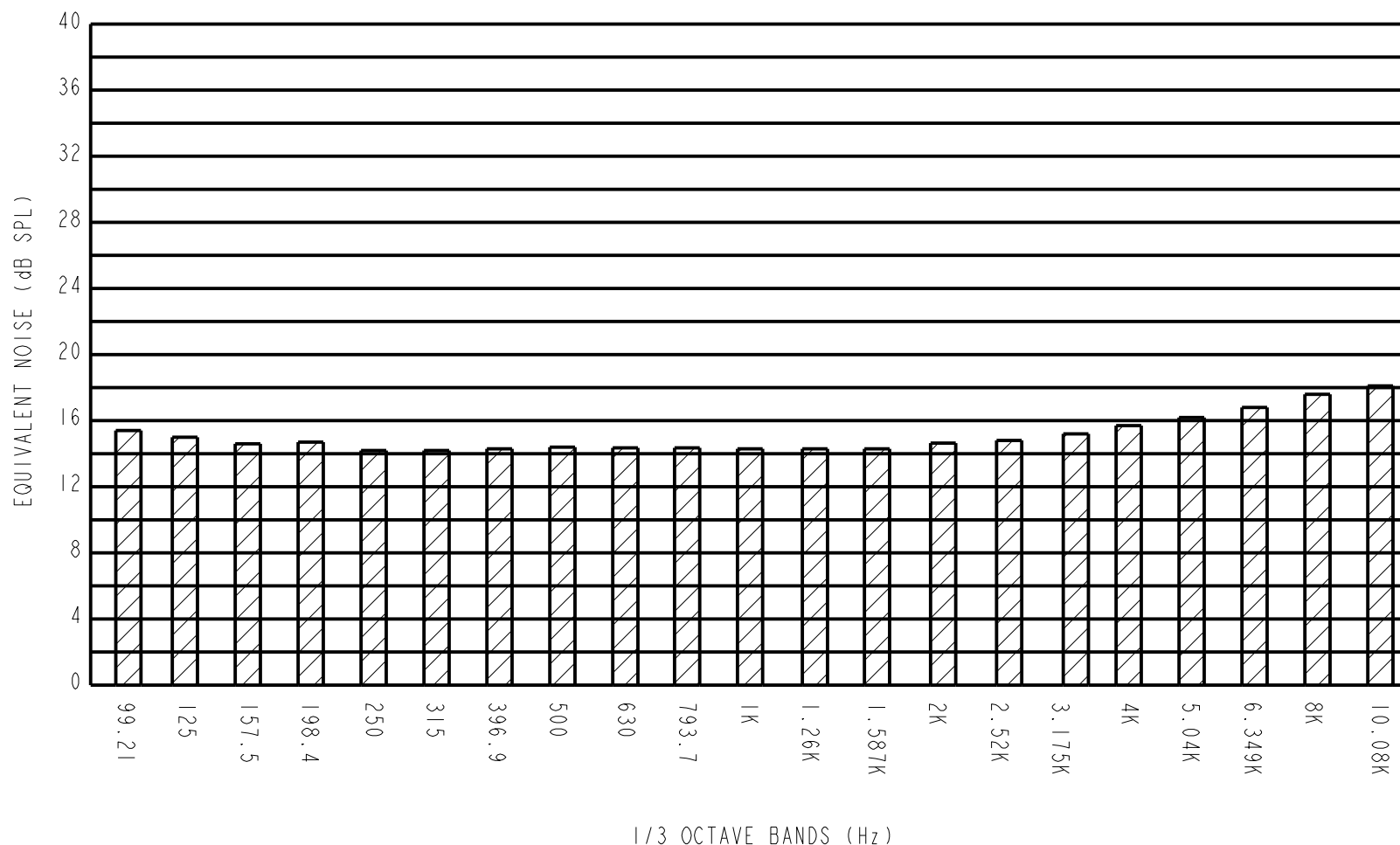
WHEN TEST LIMITS ARE USED TO ESTABLISH INCOMING INSPECTION ACCEPTANCE/REJECTION CRITERIA, CORRELATION OF TEST EQUIPMENT WITH KNOWLES IS ALSO REQUIRED FOR ELIMINATION OF EQUIPMENT AND TEST METHOD VARIATION

| | |
|---------|----------|
| DR. BY | DATE |
| LSY | 12-5-12 |
| CK. BY | DATE |
| GJP | 12-12-12 |
| APP. BY | DATE |
| GJP | 12-12-12 |

TITLE: **MICROPHONE** **MOM-31692-000**
PERFORMANCE SPECIFICATION **SHT 2.1**

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.

A) 1/3 OCTAVE INPUT REFERRED NOISE



B) PERFORMANCE

| PERFORMANCE | | | | | | |
|--------------------------------------|--|---------|-----------|---------|-----------|-------------------------------|
| PARAMETERS | | UNIT | MINIMUM | TYPICAL | MAXIMUM | REMARKS |
| POWER SUPPLY REJECTION RATIO (PSRR) | 1000 Hz | dB | - | -42 | -18 | SUPPLY VOLTAGE @ 0.9 VDC |
| | | | | - | - | SUPPLY VOLTAGE @ 1.3 VDC |
| INPUT REFERRED VIBRATION SENSITIVITY | 1000 Hz | dB SPL | - | 54 | 60 | BLOCKED PORT; 1g ACCELERATION |
| HUMIDITY COEFFICIENT | 1000 Hz | dB | | 0.0 | | PER %RH |
| TEMPERATURE RANGE | OPERATION | °C (°F) | 0 (32) | - | 63 (145) | CELSIUS (FAHRENHEIT) |
| | STORAGE | °C (°F) | -40 (-40) | - | 100 (212) | CELSIUS (FAHRENHEIT) |
| ESD TOLERANCE | MIL-STD-750 CLASS 2 RATING EOS/ESD-S5.1-1993 CLASS 2 RATING | | | | | |

| Revision | C.O. # | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| A | MI0104868 | 12-5-12 | Active | A |

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** **MOM-31692-000**
PERFORMANCE SPECIFICATION **SHT 2.2**

| | |
|---------|----------|
| DR. BY | DATE |
| LSY | 12-5-12 |
| CK. BY | DATE |
| GJP | 12-12-12 |
| APP. BY | DATE |
| GJP | 12-12-12 |