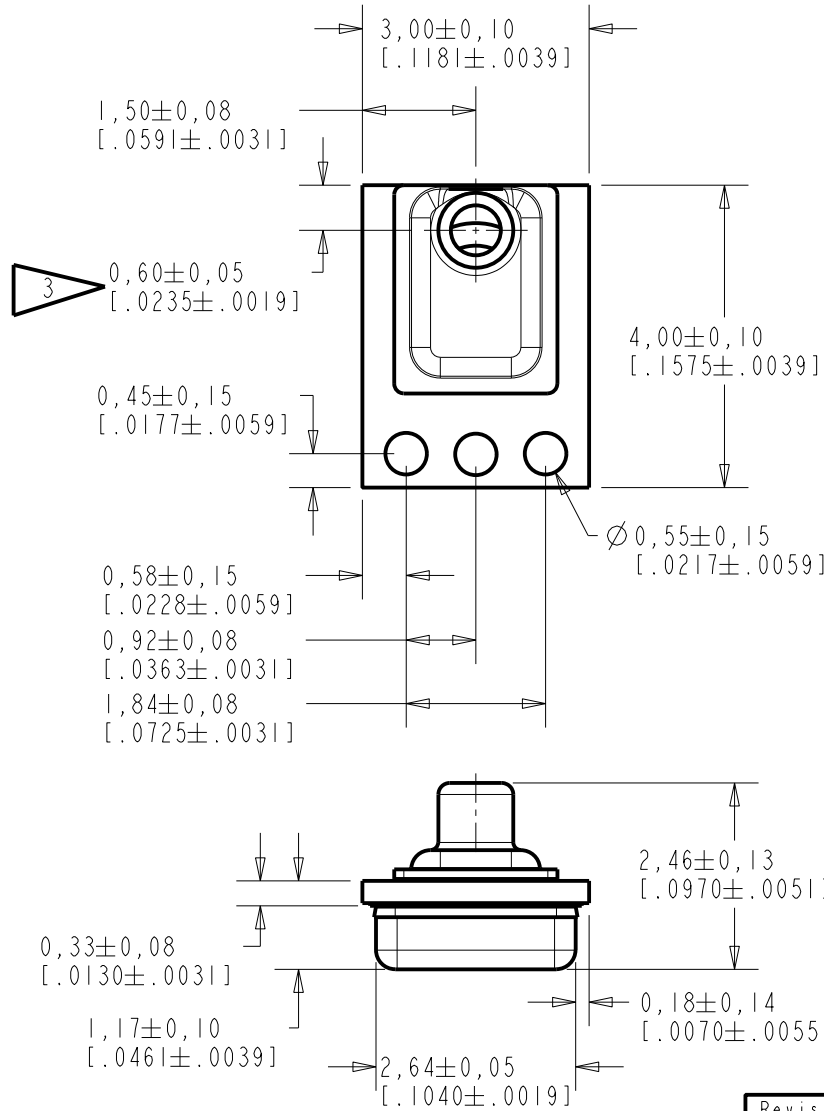


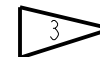
QM-31353-S27

SHT 1.1



NOTES:

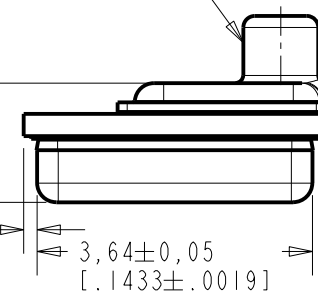
- DO NOT PULL A VACUUM OR APPLY AIR PRESSURE OVER THE PORT HOLE OF THE MICROPHONE. PULLING A VACUUM OR APPLYING AIR PRESSURE OVER THE PORT HOLE CAN DAMAGE THE DEVICE.
- DO NOT INSERT ANY OBJECT IN PORT HOLE OF DEVICE AT ANY TIME AS THIS CAN DAMAGE THE DEVICE.
- TUBE CENTER DIMENSION MEASURED FROM THE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



$\varnothing 0,99 \pm 0,05$
[$.0390 \pm .0019$]
OUTER DIAMETER

$1,576 \pm 0,110$
[$.0620 \pm .0043$]

$0,18 \pm 0,10$
[$.0071 \pm .0039$]

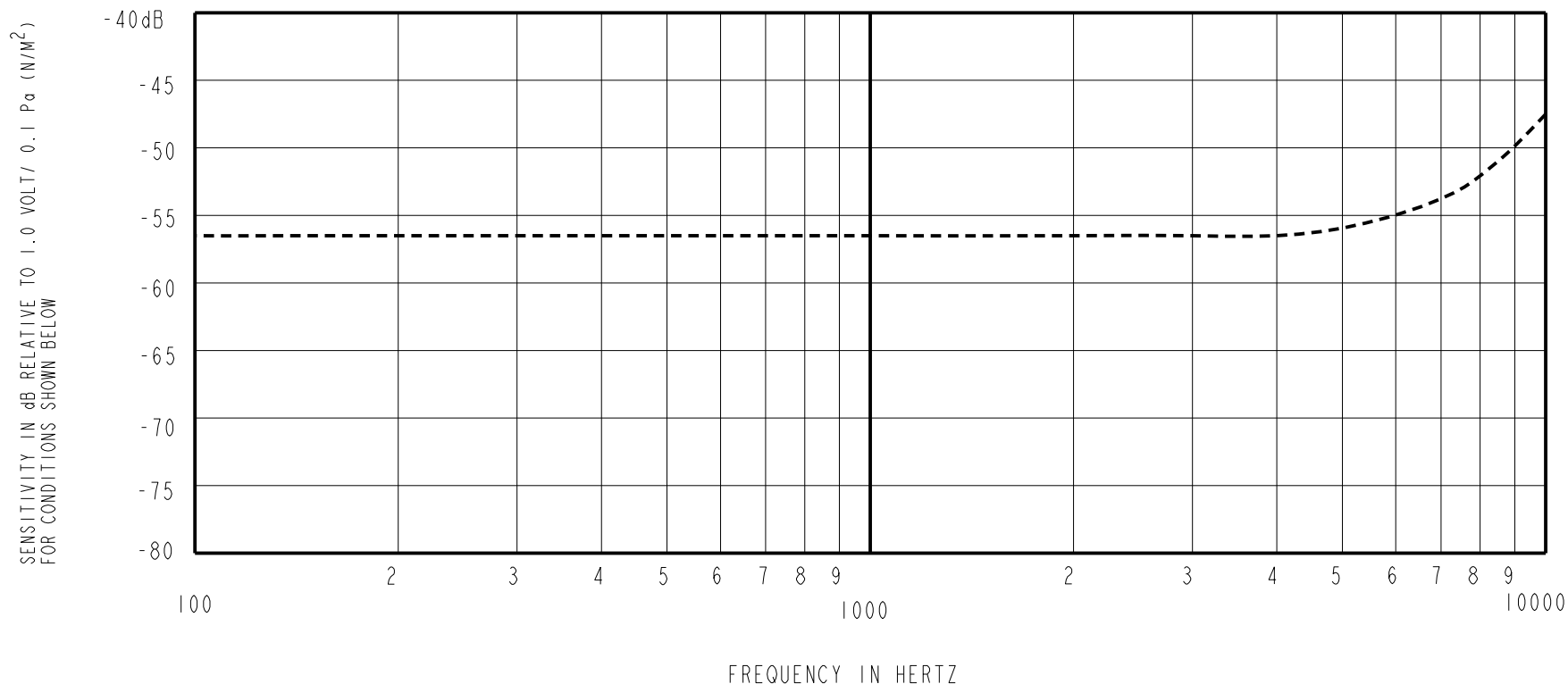


DIMENSIONS IN MILLIMETERS [INCHES]

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| Revision | C.O. # | Implementation Date | RELEASE LEVEL | REVISION |
|--------------------------|-----------|---------------------|---------------|----------|
| E | MI0105112 | 6-14-13 | Active | E |
| D | MI0104622 | 5-23-12 | | |
| SCALE: 10:1 | | | DR. BY | DATE |
| DO NOT SCALE DRAWING | | | MMM | 5-19-11 |
| TITLE: MICROPHONE | | | CK. BY | DATE |
| OUTLINE DRAWING | | | GJP | 5-20-11 |
| QM-31353-S27 | | | APP. BY | DATE |
| SHT 1.1 | | | GJP | 5-20-11 |

TYPICAL SENSITIVITY

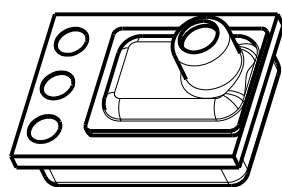


SENSITIVITY MEASURED IN A PRESSURE CAVITY UNDER THE NOMINAL CONDITIONS SHOWN BELOW

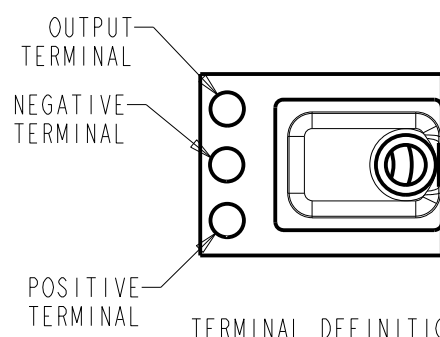
| POWER REQUIREMENT | | | | | |
|----------------------|------|---------|---------|---------|---------|
| PARAMETER | UNIT | MINIMUM | NOMINAL | MAXIMUM | REMARKS |
| SUPPLY VOLTAGE RANGE | VDC | 0.9 | 0.9 | 1.6 | - |

| PERFORMANCE | | | | | | |
|---------------------|----------------|---------|---------|---------|--|-------------------------|
| PARAMETERS | UNIT | MINIMUM | NOMINAL | MAXIMUM | REMARKS | |
| SENSITIVITY | 100 Hz | dB | -2.0 | -0.0 | +2.0 | re SENSITIVITY AT 1 kHz |
| | 1000 Hz | dB | -59.5 | -56.5 | -53.5 | dB re 1V/0.1Pa |
| | 10 kHz | dB | +6.0 | +9.0 | +12.0 | re SENSITIVITY AT 1 kHz |
| CURRENT DRAIN | μA | - | 34 | 55 | - | |
| OUTPUT LOAD VOLTAGE | V _L | 0.28 | 0.45 | 0.80 | OPEN LOAD | |
| A-WEIGHTED NOISE | dB SPL | - | 26.5 | 30 | INPUT REFERRED NOISE re SENSITIVITY AT 1kHz | |
| OUTPUT IMPEDANCE | Ohms | 1900 | 2900 | 5900 | - | |

- NOTES: 1. REFLOWED CUP CONNECTED TO NEGATIVE TERMINAL. GLUED CUP-TUBE PART IS NOT CONNECTED TO NEGATIVE TERMINAL.
 2. PERFORMANCE PARAMETERS ARE VALID AT 0.9 VDC. TYPICAL TEST ENVIRONMENT: 50% RH, 21°C (70°F)



PORT LOCATION: 12JP



TERMINAL DEFINITION

KNOWLES RESERVES THE RIGHT TO MAKE CHANGES TO IMPROVE RELIABILITY AND PERFORMANCE OF THE PRODUCT.

| Revision | C.O. # | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| E | MI0105112 | 6-14-13 | Active | E |
| D | MI0104622 | 5-23-12 | | |

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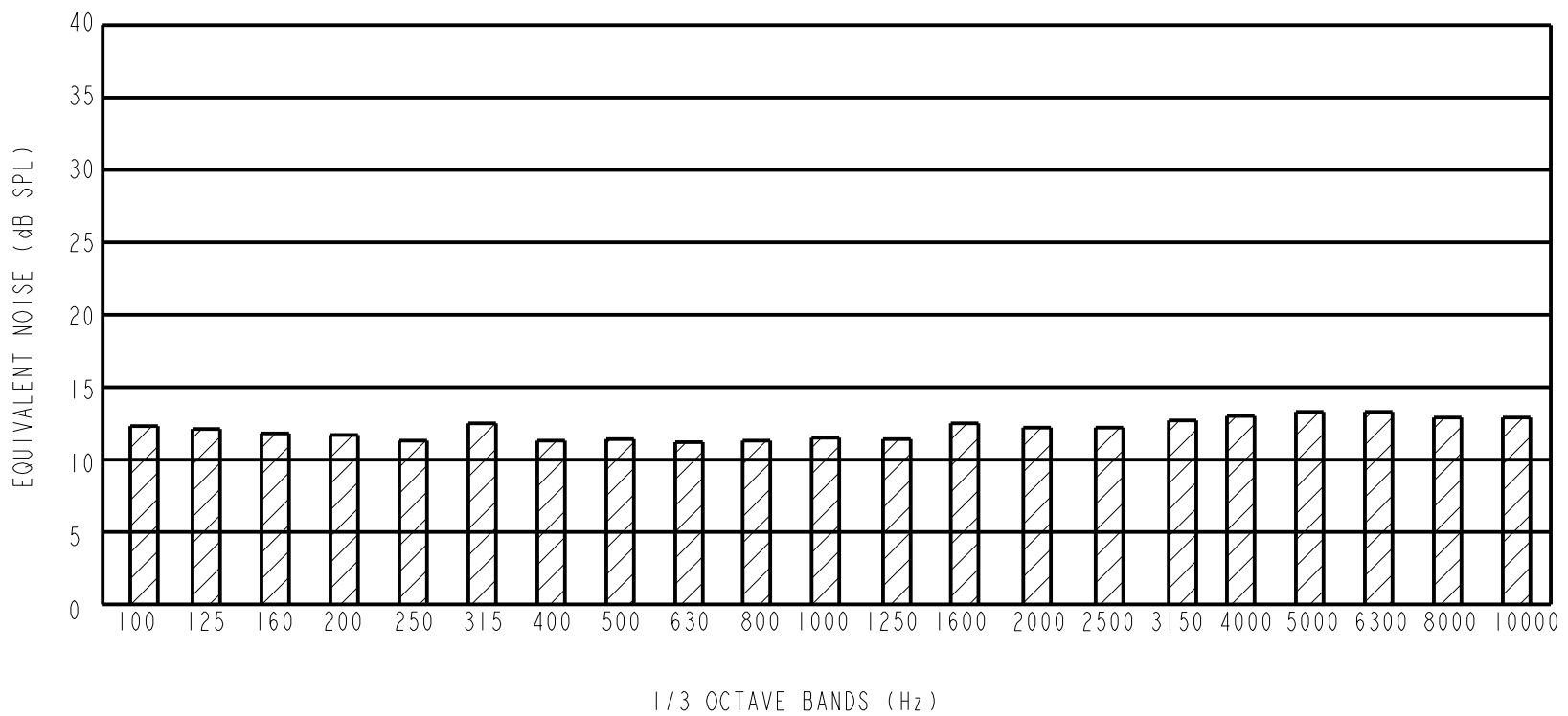
WHEN TEST LIMITS ARE USED TO ESTABLISH INCOMING INSPECTION ACCEPTANCE/REJECTION CRITERIA, CORRELATION OF TEST EQUIPMENT WITH KNOWLES IS ALSO REQUIRED FOR ELIMINATION OF EQUIPMENT AND TEST METHOD VARIATION

TITLE: **MICROPHONE**
 PERFORMANCE SPECIFICATION

OM-31353-S27
 SHT 2.1

| DR. BY | DATE |
|---------|---------|
| MMM | 5-19-11 |
| CK. BY | DATE |
| GJP | 5-20-11 |
| APP. BY | DATE |
| GJP | 5-20-11 |

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 | | | | | |

KNOWLES RESERVES THE RIGHT TO MAKE CHANGES TO IMPROVE RELIABILITY AND PERFORMANCE OF THE PRODUCT.

| Revision | C.O. # | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| E | M10105112 | 6-14-13 | Active | E |
| D | M10104622 | 5-23-12 | | |

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** **OM-31353-S27**
PERFORMANCE SPECIFICATION **SHT 2.2**

| DR. BY | DATE |
|---------|---------|
| MMM | 5-19-11 |
| CK. BY | DATE |
| GJP | 5-20-11 |
| APP. BY | DATE |
| GJP | 5-20-11 |

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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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