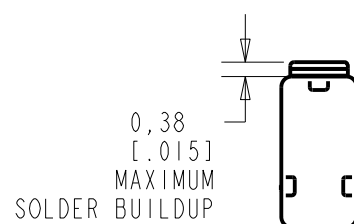
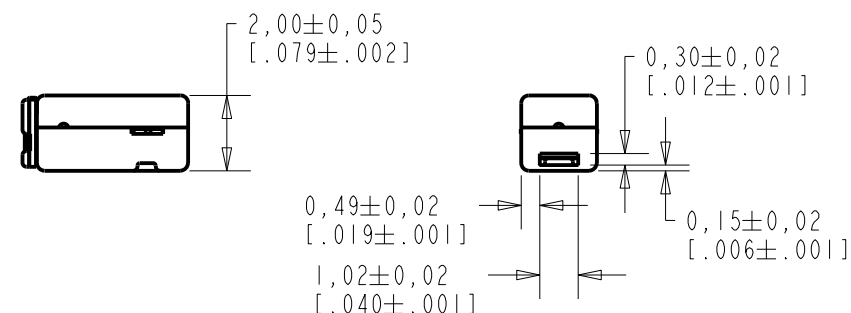
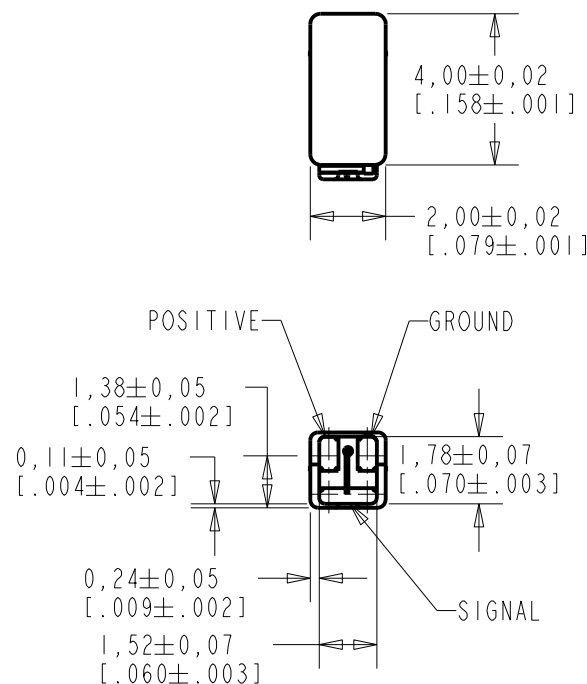


**CA38-30775-000**  
SHT 1.1

NOTES:

1. INCREASED PRESSURE AT SOUND INLET CAUSES A POSITIVE GOING VOLTAGE TO APPEAR AT THE OUTPUT TERMINAL, RELATIVE TO THE NEGATIVE TERMINAL.



NOMINAL WEIGHT  
.052 GRAMS

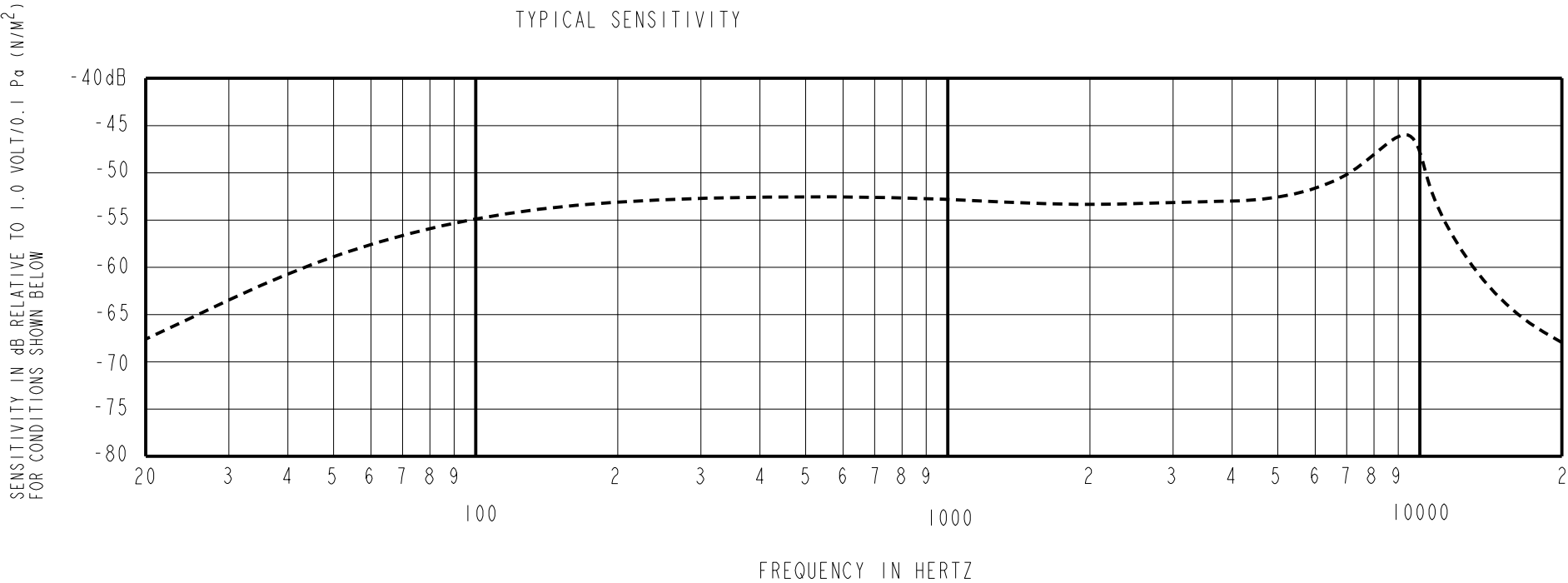
DIMENSIONS IN MILLIMETERS [INCHES]

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| Revision             | C.O. #    | Implementation Date | RELEASE LEVEL | REVISION |
|----------------------|-----------|---------------------|---------------|----------|
|                      |           |                     | Active        | D        |
|                      |           |                     |               |          |
| D                    | MI0104290 | 8-10-11             |               |          |
| SCALE: 5:1           |           |                     | DR. BY        | DATE     |
| DO NOT SCALE DRAWING |           |                     | LSY           | 7-27-10  |
|                      |           |                     | CK. BY        | DATE     |
| TITLE: MICROPHONE    |           |                     | GJP           | 7-28-10  |
|                      |           |                     | APP. BY       | DATE     |
| OUTLINE DRAWING      |           |                     | GJP           | 7-28-10  |
|                      |           |                     |               |          |
| CA38-30775-000       |           |                     | Rev: B        |          |
| SHT 1.1              |           |                     |               |          |

RoHS COMPLIANT

TYPICAL SENSITIVITY



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

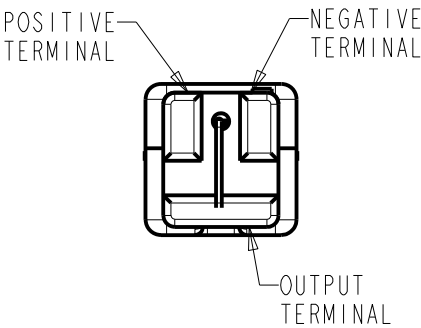
| POWER REQUIREMENT    |  |      |         |         |         |         |
|----------------------|--|------|---------|---------|---------|---------|
| PARAMETER            |  | UNIT | MINIMUM | NOMINAL | MAXIMUM | REMARKS |
| SUPPLY VOLTAGE RANGE |  | VDC  | 0.9     | 0.9     | 1.6     | -       |

| PERFORMANCE         |               |                |         |         |         |                                                |
|---------------------|---------------|----------------|---------|---------|---------|------------------------------------------------|
| PARAMETERS          |               | UNIT           | MINIMUM | NOMINAL | MAXIMUM | REMARKS                                        |
| SENSITIVITY         | 80 Hz         | dB             | -5.0    | -3.0    | -1.0    | re SENSITIVITY AT 1 kHz                        |
|                     | 1000 Hz       | dB             | -56.0   | -53.0   | -50.0   | dB re 1V/0.1Pa                                 |
|                     | 8000-11000 Hz | dB             | +3.0    | +6.0    | +9.0    | re SENSITIVITY AT 1 kHz                        |
| CURRENT DRAIN       |               | µA             | -       | 22.0    | 29.0    | -                                              |
| OUTPUT LOAD VOLTAGE |               | V <sub>L</sub> | 0.28    | 0.43    | 0.58    | OPEN LOAD                                      |
| A-WEIGHTED NOISE    |               | dB SPL         | -       | 25.0    | 27.0    | INPUT REFERRED NOISE<br>re SENSITIVITY AT 1kHz |
| OUTPUT IMPEDANCE    |               | Ohms           | 2800    | 4400    | 6800    |                                                |

- NOTES: 1. CASE CONNECTED TO NEGATIVE TERMINAL.
2. SENSITIVITY AND NOISE VALUES INDICATED ON THIS SPECIFICATION ARE VALID WHEN TESTED AT 909 KOhm//<1500pF LOAD IMPEDANCE. TYPICAL TEST ENVIRONMENT: 50% RH, 21°C (70°F)

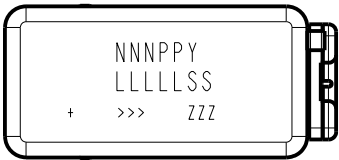


PORT LOCATION: 12N



TERMINAL DEFINITION

CENTER LASER MARKING



|                                                |
|------------------------------------------------|
| NNN IS THE MODEL NUMBER CODE                   |
| PP IS THE PRODUCTION WEEK (01-52)              |
| Y IS THE PRODUCTION YEAR (0-9)                 |
| LLLLL IS THE LOT NUMBER                        |
| SS IS THE SUB-LOT NUMBER (01-99)               |
| + IS THE POSITIVE TERMINAL FOR PAIRS           |
| >>> IS THE LEADING/LAGGING INDICATOR FOR PAIRS |
| ZZZ IS A SERIAL NUMBER FOR ENGINEERING SAMPLES |

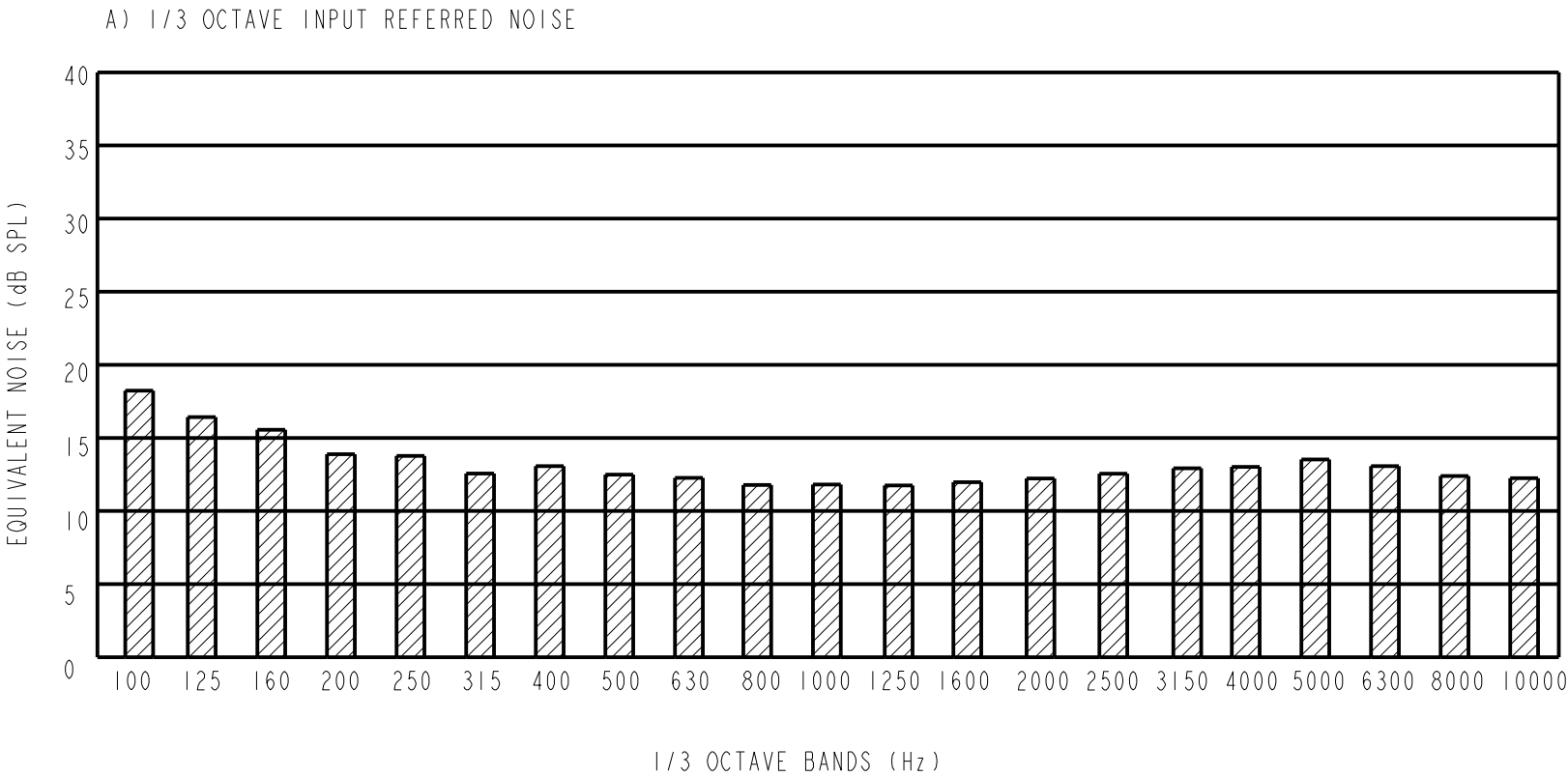
KNOWLES RESERVES THE RIGHT TO MAKE CHANGES TO IMPROVE RELIABILITY AND PERFORMANCE OF THE PRODUCT.

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|                                                                                                                                                                                                              |           |                     |               |         |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------|---------------|---------|----------|
| Revision                                                                                                                                                                                                     | C.O. #    | Implementation Date | RELEASE LEVEL |         | REVISION |
|                                                                                                                                                                                                              |           |                     | Active        |         | D        |
|                                                                                                                                                                                                              |           |                     |               |         |          |
| D                                                                                                                                                                                                            | MI0104290 | 8-10-11             |               |         |          |
| 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     |
| TITLE: MICROPHONE<br><br>PERFORMANCE SPECIFICATION                                                                                                                                                           |           |                     |               | LSY     | 7-27-10  |
|                                                                                                                                                                                                              |           |                     |               | CK. BY  | DATE     |
|                                                                                                                                                                                                              |           |                     |               | GJP     | 7-28-10  |
| CA38-30775-000<br><br>SHT 2.1                                                                                                                                                                                |           |                     |               | APP. BY | DATE     |
|                                                                                                                                                                                                              |           |                     |               | GJP     | 7-28-10  |

CA38-30775-000

SHT 2.1



B) PERFORMANCE

| PERFORMANCE                          |                                                                |         |           |         |            |                               |
|--------------------------------------|----------------------------------------------------------------|---------|-----------|---------|------------|-------------------------------|
| PARAMETERS                           |                                                                | UNIT    | MINIMUM   | TYPICAL | MAXIMUM    | REMARKS                       |
| POWER SUPPLY REJECTION RATIO (PSRR)  | 1000 Hz                                                        | dB      | -         | -36     | -18        | SUPPLY VOLTAGE @ 0.9 VDC      |
| INPUT REFERRED VIBRATION SENSITIVITY | 1000 Hz                                                        | dB SPL  | -         | -       | 60         | BLOCKED PORT; 1g ACCELERATION |
| HUMIDITY COEFFICIENT                 | 1000 Hz                                                        | dB      |           | 0.03    |            | PER %RH                       |
| TEMPERATURE RANGE                    | OPERATION                                                      | °C (°F) | -17 (1.4) | -       | 63 (145.4) | CELSIUS (FAHRENHEIT)          |
|                                      | STORAGE                                                        | °C (°F) | -40 (-40) | -       | 63 (145.4) | CELSIUS (FAHRENHEIT)          |
| ESD TOLERANCE                        | MIL-STD-750 CLASS 2 RATING<br>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 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------|----------------|---------|----------|
|                                                                                                                                                                                                              |           |                     | Active         |         | D        |
|                                                                                                                                                                                                              |           |                     |                |         |          |
| D                                                                                                                                                                                                            | MI0104290 | 8-10-11             |                |         |          |
| 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            | 7-27-10 |          |
| TITLE: MICROPHONE<br>PERFORMANCE SPECIFICATION                                                                                                                                                               |           |                     | CK. BY         | DATE    |          |
|                                                                                                                                                                                                              |           |                     | GJP            | 7-28-10 |          |
|                                                                                                                                                                                                              |           |                     | APP. BY        | DATE    |          |
|                                                                                                                                                                                                              |           |                     | GJP            | 7-28-10 |          |
|                                                                                                                                                                                                              |           |                     | CA38-30775-000 |         |          |
|                                                                                                                                                                                                              |           |                     | SHT 2.2        |         |          |

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Электрон  
Связь**

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