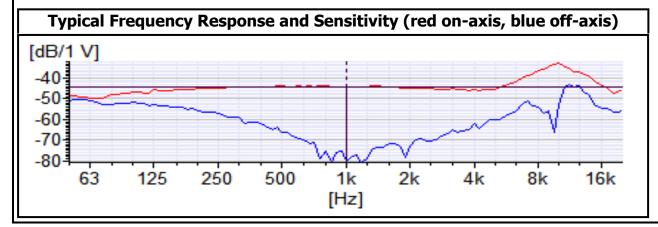


## **AUM-5047L-3-R Uni-Directional Microphone**

3541 Stop Eight Road • Dayton, Ohio 45414

## **Product Overview**

- 9.7mm overall diameter and 5mm height with solder pads
- -47 dB sensitivity for use in most environments
- Wide 1.5 to 10 VDC operating voltage and 50-16,000 Hz frequency response
- 55 dB signal-to-noise ratio and 680 ohm impedance
- Omni-directional polar pattern for great off-axis response

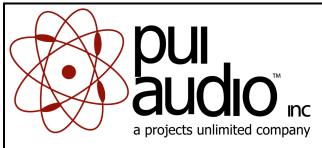






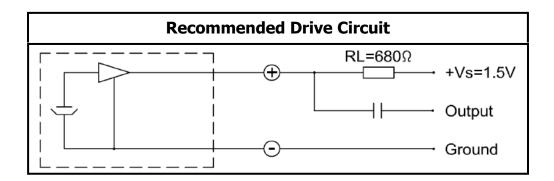


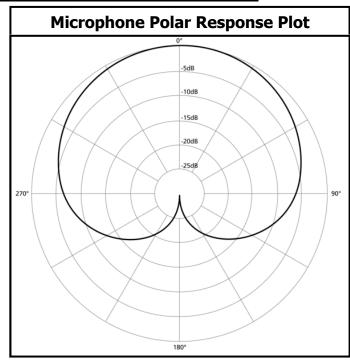




## AUM-5047L-3-R Uni-Directional Microphone

| Mechanical and Environment Testing |  |  |  |
|------------------------------------|--|--|--|
| Test Description                   | Description Test Condition                             |  |  |
| High Temperature                   | 70°C with random humidity for 200 hours                |  |  |
| Low Temperature                    | -20°C with random humidity for 200 hours               |  |  |
| Humidity                           | 40°C with 90% relative humidity for 200 hours          |  |  |
| Vibration                          | 3 mm movement for 3 minutes in each of 3 axis          |  |  |
| Drop Test                          | 70 cm free fall onto 20 mm thick board, two directions |  |  |
| Temperature Cycle Test             | -20°C to 70°C, 5 cycles                                |  |  |



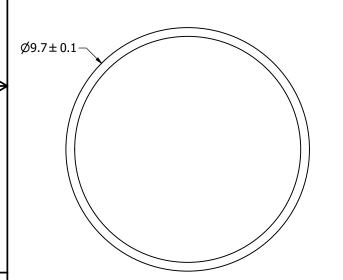


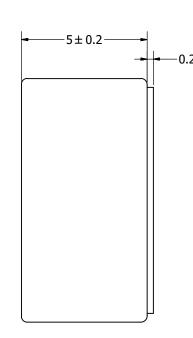
| SPECIFICATIONS               |             |      |  |
|------------------------------|-------------|------|--|
| PARAMETERS                   | VALUES      | UNIT |  |
| DIRECTIVITY                  | UNI         | -    |  |
| SENSITIVTY                   | -47 ± 4     | dB   |  |
| STANDARD OPERATING VOLTAGE   | 1.5         | Vdc  |  |
| MAX OPERATING VOLTAGE        | 10          | Vdc  |  |
| CURRENT CONSUMPTION (MAX)    | 0.5         | mA   |  |
| IMPEDANCE                    | 0.68        | KOhm |  |
| SIGNAL TO NOISE RATIO (MIN.) | 55          | dB   |  |
| TERMINAL                     | SOLDER PADS | -    |  |
| INTERNAL CAPACITOR           | N/A         | pF   |  |

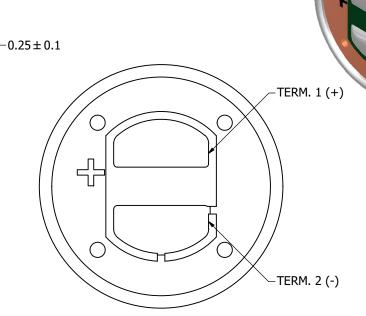
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| REVISION HISTORY |   |           |          |
|------------------|---|-----------|----------|
| LTR              | DESCRIPTION                               | DATE      | APPROVED |
| -                | RELEASED FROM ENGINEERING                 | 4/17/2013 |          |
| Α                | REVISED TO INVENTOR 3-D DRAWIING TEMPLATE | 8/5/2013  | B.R.     |







## NOTES:

- 1. ALL DIMENSIONS ARE IN MILLIMETERS.
- 2. SPECIFICATIONS SUBJECT TO CHANGE OR WITHDRAWL WITHOUT NOTICE.
- 3. THIS PART IS RoHS 2011/65/EU COMPLIANT.
- 4. THIS PART IS BACK ELECTRET.

| UNLESS OTHERWISE<br>SPECIFIED:                |    |  |
|---|----|--|
| DIMENSIONS ARE IN MILLIMETERS.                | A3 |  |
| TOLERANCES<br>ARE ±0.5 AND<br>ANGLES ARE ±3°. |    |  |
| AUM-5047L-3-R (Back Electret).                |    |  |

Designed by

Date

| J.D. | 4/17/2013                        | ١           | 1.L. | 4/17/2013 | B.R.  |
|------|----------------------------------|-------------|------|-----------|-------|
|      | pul.                             |             | _    | M-5047    | L-3-R |
|      | audic<br>a projects unlimited co | nc<br>mpany |      | Microp    | ohone |

Checked by

Date

| NUM-5047L-3-R (Back Electret) |         |                |  |
|-------------------------------|---------|----------------|--|
| Misususlasus                  | Edition | Sheet          |  |
| Microphone                    | -       | Sheet<br>1 / 1 |  |

Date

4/17/2013 8/5/2013

Drawn Date

Approved by

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