

AOM-6738L-R Omni-Directional Microphone

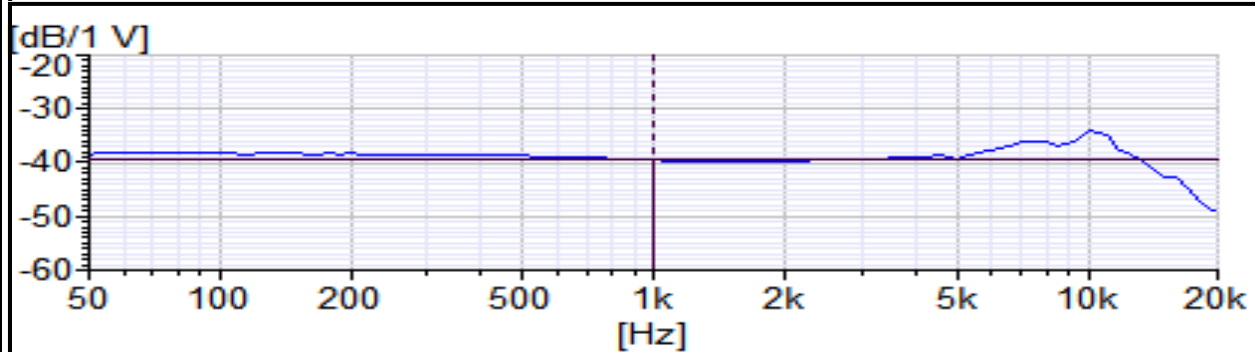


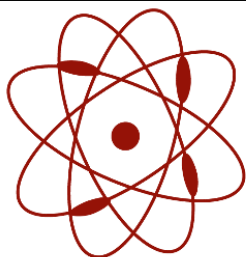
3541 Stop Eight Road • Dayton, Ohio 45414

Product Overview

- 9.7mm overall diameter and 6.7mm height with solder pads
- -38 dB sensitivity for use in most environments
- Wide 1.5 to 10 VDC operating voltage and 50-16,000 Hz frequency response
- >60 dB signal-to-noise ratio and 2.2 kOhm impedance
- Omni-directional polar pattern for great off-axis response

Typical Frequency Response and Sensitivity





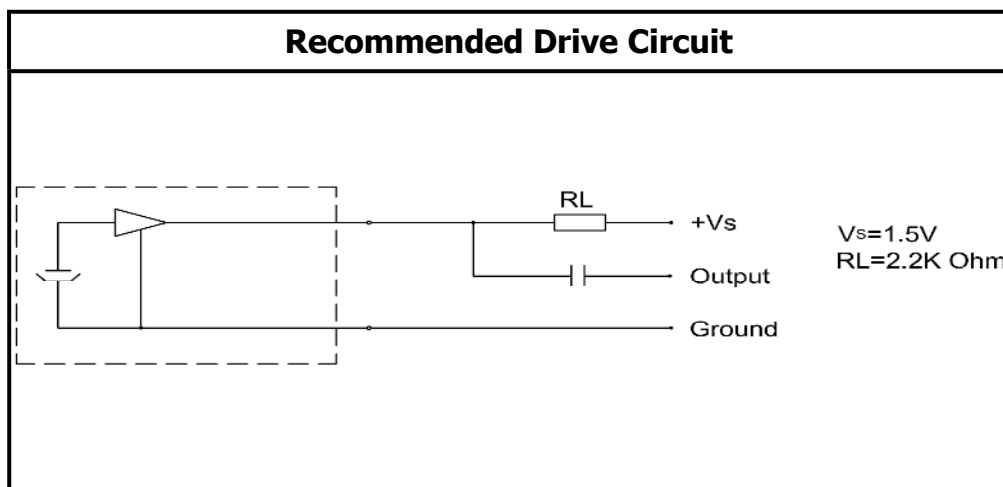
pui
audio™ inc
a projects unlimited company

AOM-6738L-R

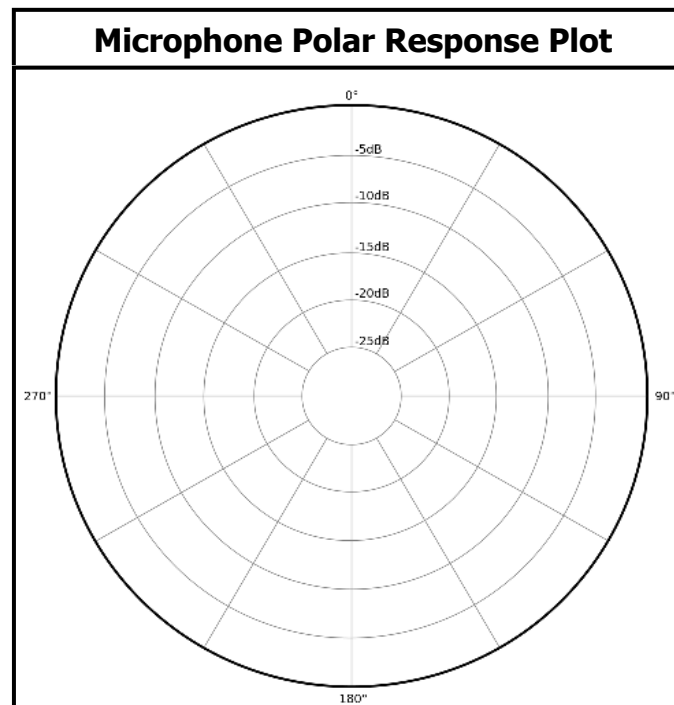
Omni-Directional Microphone

| Mechanical and Environment Testing | |
|------------------------------------|--|
| Test Description | Test Condition |
| High Temperature | 70°C with random humidity for 200 hours |
| Low Temperature | -25°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 | -10°C to 50°C, 5 cycles |

Recommended Drive Circuit



Microphone Polar Response Plot



SPECIFICATIONS

| PARAMETERS | VALUES | UNIT |
|------------------------------|-------------|------|
| DIRECTIVITY | OMINI | - |
| SENSITIVITY | -38 ± 3 | dB |
| STANDARD OPERATING VOLTAGE | 1.5 | Vdc |
| MAX OPERATING VOLTAGE | 10 | Vdc |
| CURRENT CONSUMPTION (MAX) | 0.5 | mA |
| IMPEDANCE | 2.2 | KOhm |
| SIGNAL TO NOISE RATIO (MIN.) | 60 | dB |
| TERMINAL | SOLDER PADS | - |
| INTERNAL CAPACITOR | N/A | pF |

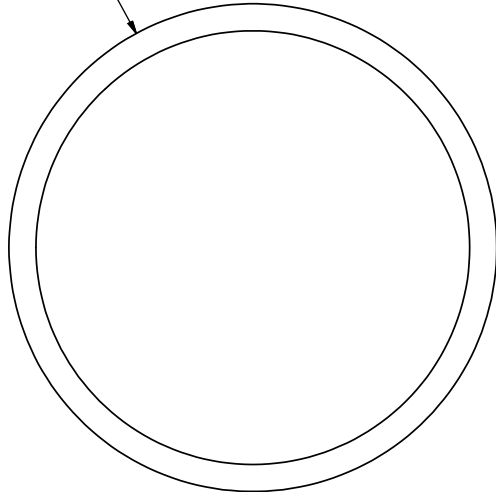
THIS DOCUMENT CONTAINS DATA PROPRIETARY TO PROJECTS UNLIMITED, INC. ANY USE OR REPRODUCTION, IN ANY FORM, WITHOUT PRIOR WRITTEN PERMISSION OF PROJECTS UNLIMITED, INC. IS PROHIBITED.
©2003, Projects Unlimited Inc.

REVISION HISTORY

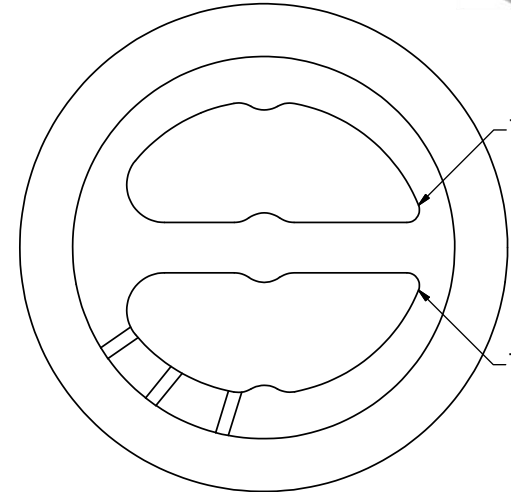
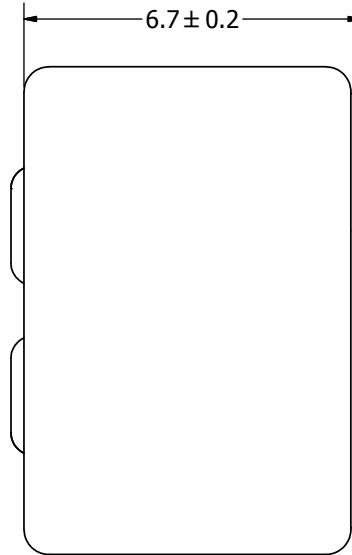
| LTR | DESCRIPTION | DATE | APPROVED |
|-----|--|-----------|----------|
| - | RELEASED FROM ENGINEERING | 1/30/2006 | |
| A | ADDED TERMINAL POLARITY | 1/30/2007 | R.W. |
| B | REVISED TO INVENTOR 3-D DRAWING TEMPLATE | 9/17/2010 | B.R. |



Ø9.7 ± 0.1



6.7 ± 0.2

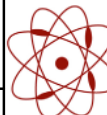


TERM 1 (+)

TERM 2 (-)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. SPECIFICATIONS SUBJECT TO CHANGE OR WITHDRAWL WITHOUT NOTICE.
3. THIS PART IS RoHS 2002/95/EC COMPLIANT.

| | | | | | | | | | |
|--|------|---|-----------|----------------------|-----------|---------------------|-----------|--------------|----------------|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS, TOLERANCES ARE ±0.5 AND ANGLES ARE ±3°. | SIZE | Designed by | Date | Checked by | Date | Approved by | Date | Drawn Date | |
| | A3 | J.A.F. | 1/30/2006 | E.P. | 1/30/2006 | B.R. | 1/30/2006 | 9/17/2010 | |
| AOM-6738L-R.idw | |  pui audio <small>INC</small> <small>a projects unlimited company</small> | | <h1>AOM-6738L-R</h1> | | <h2>Microphone</h2> | | Edition - | Sheet 1 / 1 |