

## POM-2738P-C33-R Omni-Directional Microphone

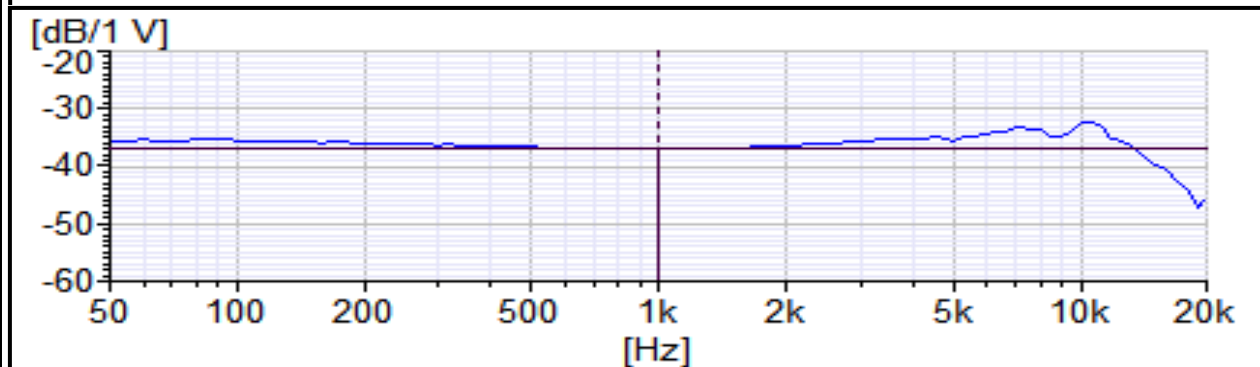


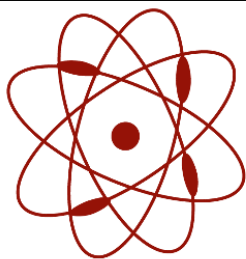
3541 Stop Eight Road • Dayton, Ohio 45414

### Product Overview

- 6mm overall diameter and 2.7mm height with pin terminals
- -38 dB sensitivity for use in most environments
- Wide 2 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
- Internal 33 pF capacitor filters out GSM TDMA noise

Typical Frequency Response and Sensitivity



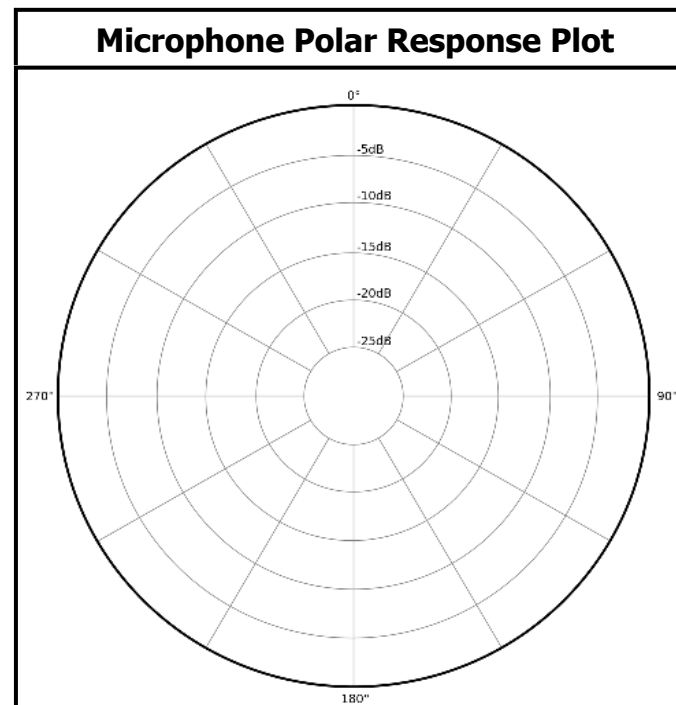
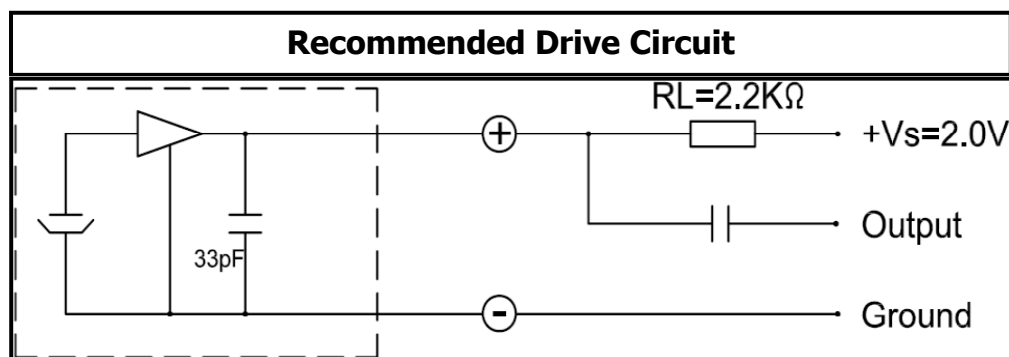


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# POM-2738P-C33-R

## Omni-Directional Microphone

| Mechanical and Environment Testing |  |
|------------------------------------|--|
| Test Description                   | Test Condition   |
| High Temperature                   | 70°C with random humidity for 200 hours                |
| Low Temperature                    | -40°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                                |



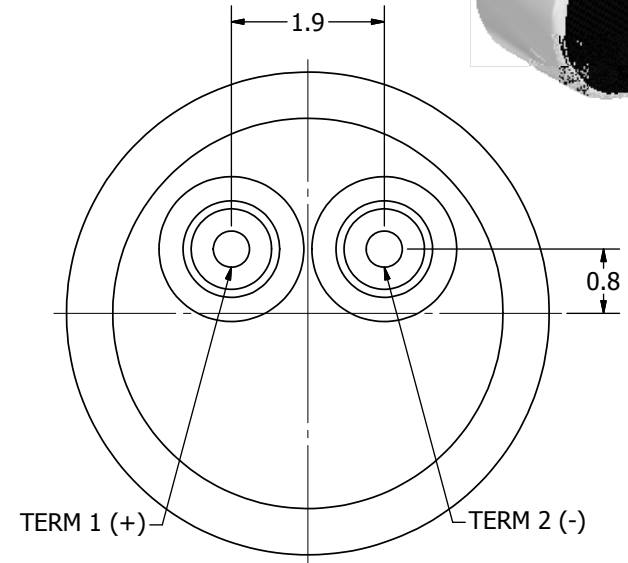
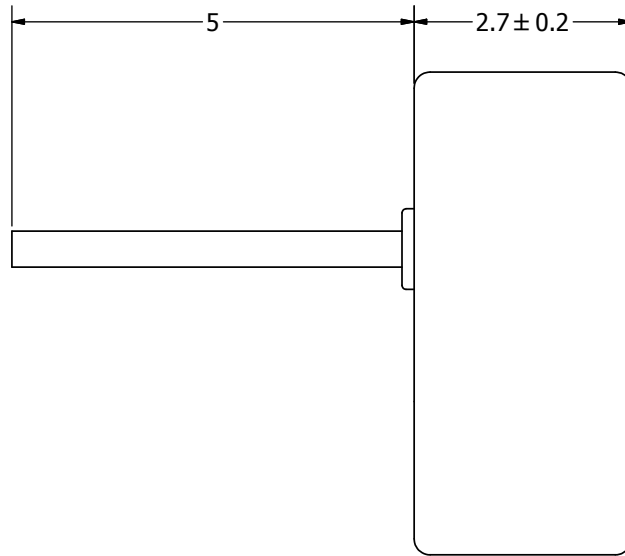
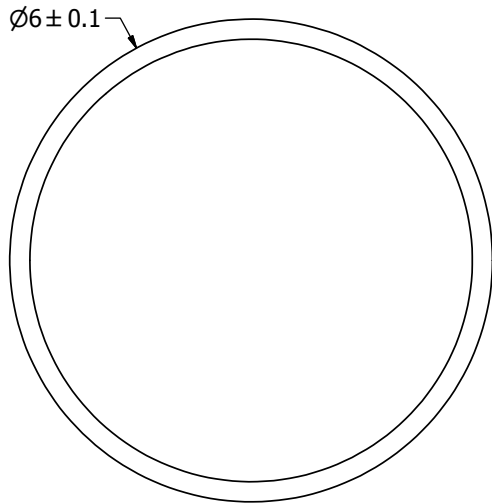
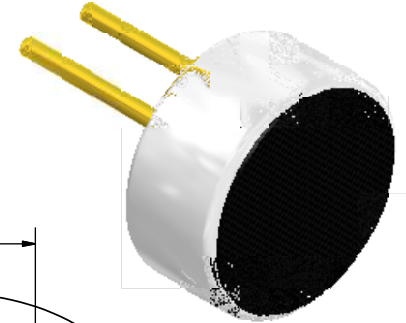
# SPECIFICATIONS

| PARAMETERS                   | VALUES  | UNIT |
|------------------------------|---------|------|
| DIRECTIVITY                  | OMINI   | -    |
| SENSITIVITY                  | -38 ± 3 | dB   |
| STANDARD OPERATING VOLTAGE   | 2       | Vdc  |
| MAX OPERATING VOLTAGE        | 10      | Vdc  |
| CURRENT CONSUMPTION (MAX)    | 0.5     | mA   |
| IMPEDANCE                    | 2.2     | KOhm |
| SIGNAL TO NOISE RATIO (MIN.) | 60      | dB   |
| TERMINAL                     | PIN     | -    |
| INTERNAL CAPACITOR           | 33      | pF   |

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# REVISION HISTORY

| LTR | DESCRIPTION                              | DATE      | APPROVED |
|-----|--|-----------|----------|
| -   | RELEASED FROM ENGINEERING                | 1/24/2006 |          |
| A   | ADDED TERMINAL POLARITY                  | 2/2/2007  | D.F.     |
| B   | REVISED TO INVENTOR 3-D DRAWING TEMPLATE | 10/6/2010 | B.R.     |



### 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:<br>DIMENSIONS ARE IN MILLIMETERS,<br>TOLERANCES ARE ±0.5 AND ANGLES ARE ±3°. | SIZE<br><b>A3</b> | Designed by | Date      | Checked by                           | Date      | Approved by | Date      | Drawn Date |
|  |                   | J.A.F.      | 1/24/2006 | B.R.                                 | 1/24/2006 | E.P.        | 1/24/2006 | 10/6/2010  |
| POM-2738P-C33-R.idw  |                   |             |           | <b>POM-2738P-C33-R</b><br>Microphone |           |             | Edition   | Sheet      |
|  |                   |             |           |                                      |           | -           | 1 / 1     |            |