

# POM-2246P-C33-R

## Omni-Directional

## Microphone

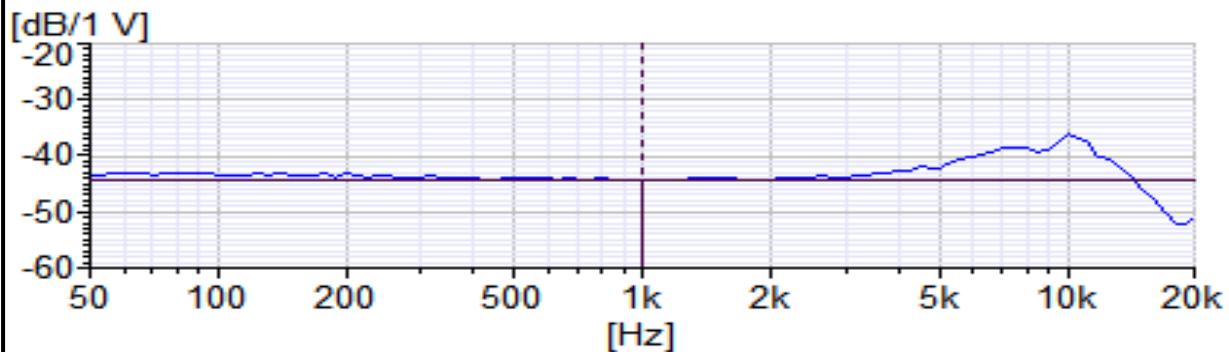
3541 Stop Eight Road • Dayton, Ohio 45414

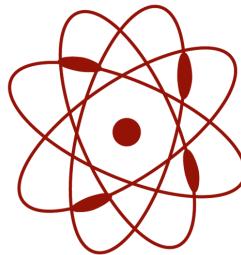
### Product Overview

- 6mm overall diameter and 2.2mm height with pin terminals
- -46 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





**pui**  
**audio**<sup>TM</sup>  
inc  
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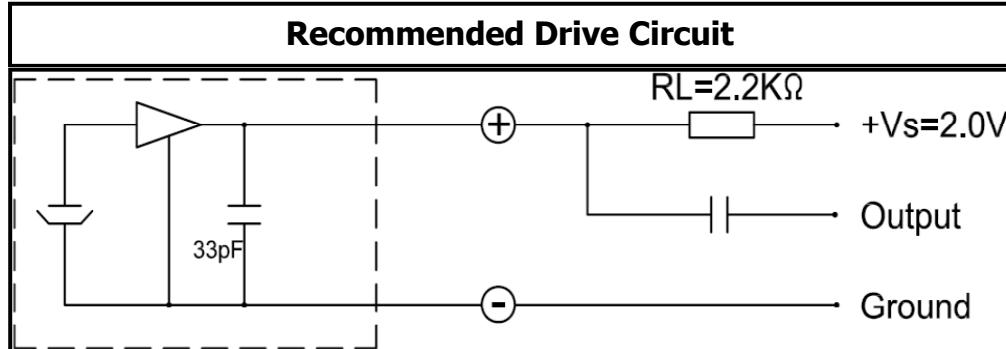
## Omni-Directional

## Microphone

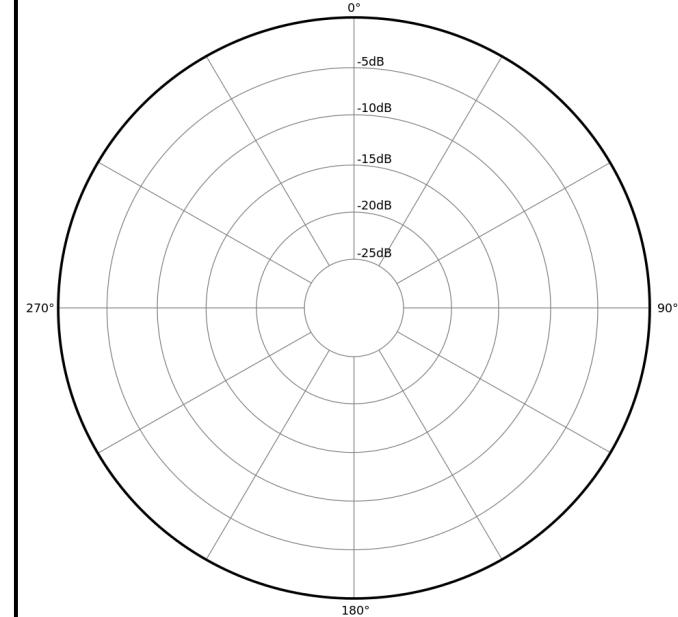
### Mechanical and Environment Testing

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

### Recommended Drive Circuit



### Microphone Polar Response Plot



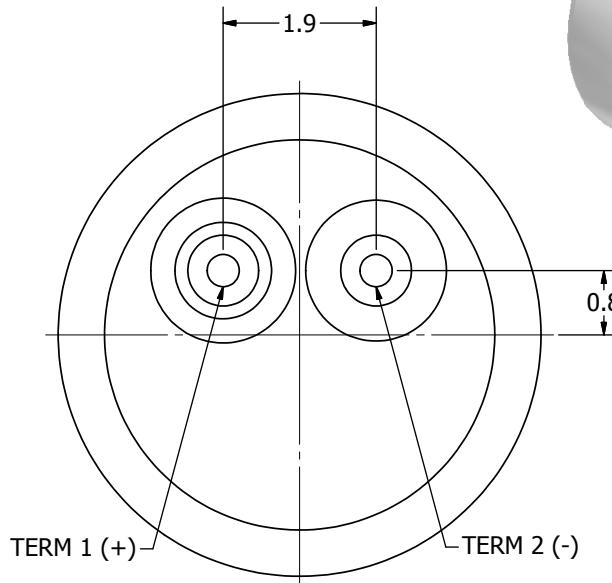
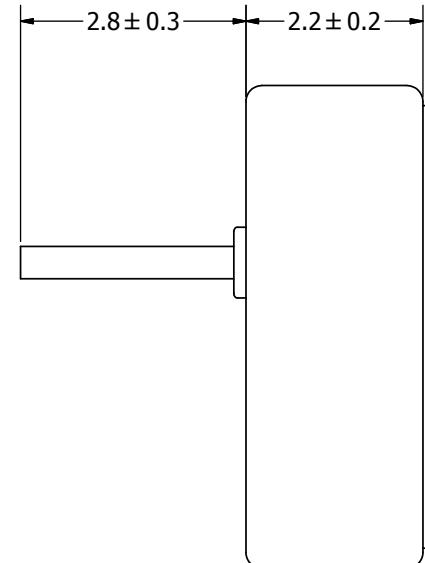
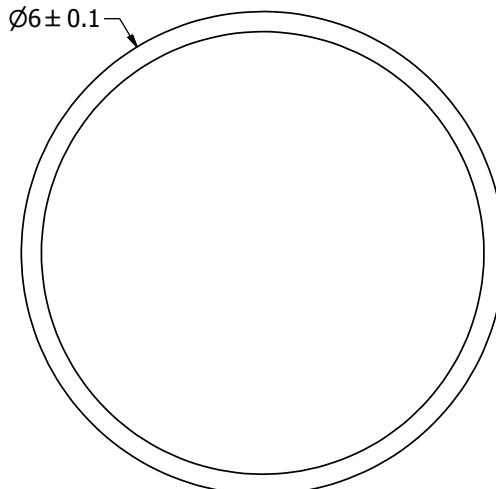
## SPECIFICATIONS

PARAMETERS	VALUES	UNIT
DIRECTIVITY	OMINI	-
SENSITIVITY	-46 ± 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	5/24/2006	
A	ADDED TERMINAL POLARITY	2/2/2007	B.R.
B	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	9/27/2010	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.
4. MICROPHONE CLOTH OVER FACE IS IP51 RATED.

UNLESS OTHERWISE  
SPECIFIED:  
DIMENSIONS ARE IN  
MILLIMETERS,  
TOLERANCES  
ARE ±0.5 AND  
ANGLES ARE ±3°.  
POM-2246P-C33-R.idw

SIZE  
A3

 a projects unlimited company

POM-2246P-C33-R  
Microphone

Designed by	Date	Checked by	Date	Approved by	Date	Drawn Date
J.D.	5/24/2006	E.P.	5/24/2006	B.R.	5/24/2006	9/27/2010

Edition  
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