

# AOM-6738L-R Omni-Directional Microphone

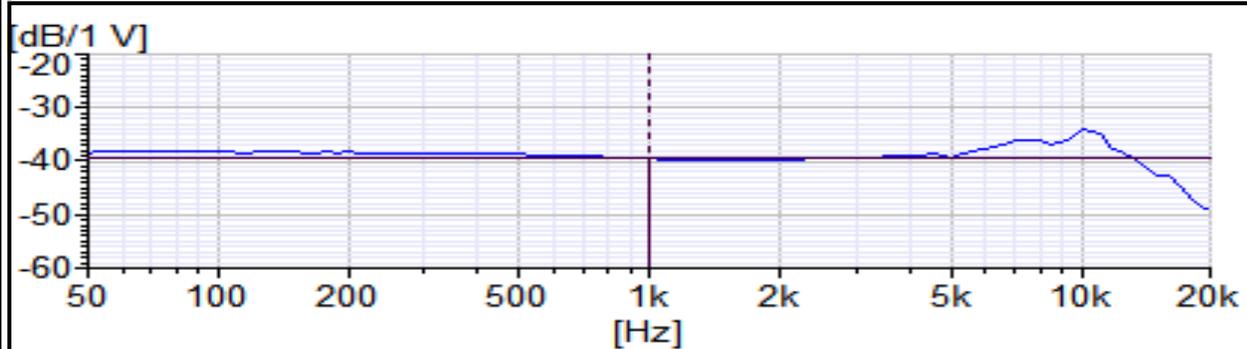


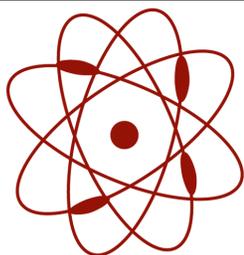
3541 Stop Eight Road • Dayton, Ohio 45414

## 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





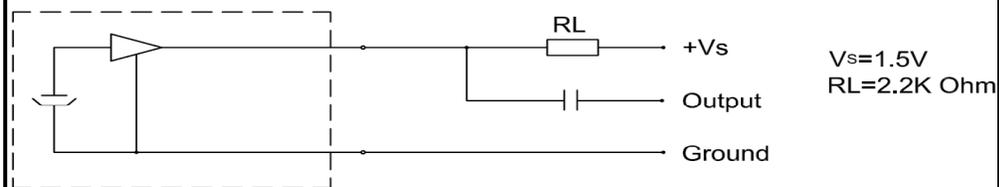
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# AOM-6738L-R

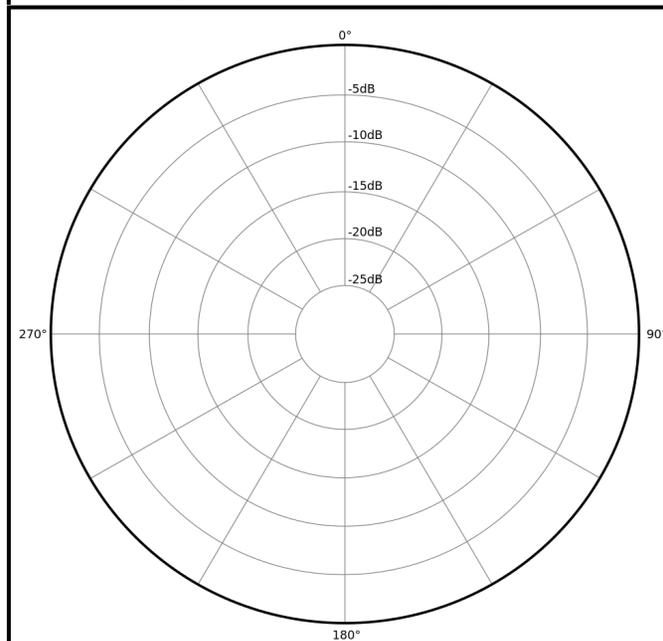
## Omni-Directional Microphone

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

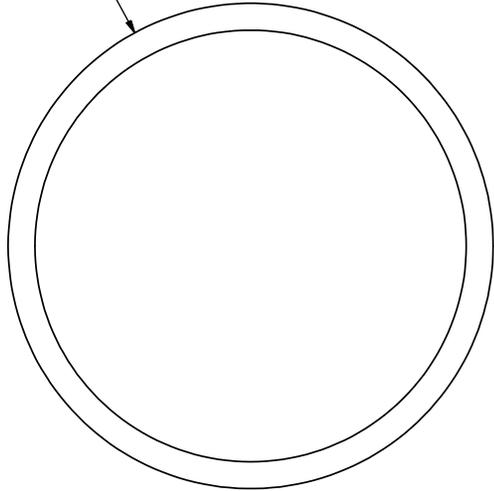
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# REVISION HISTORY

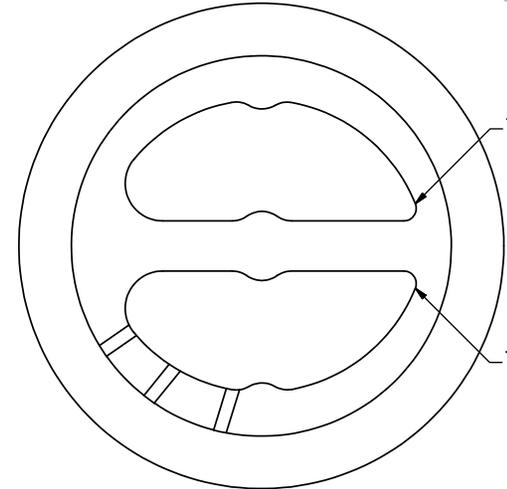
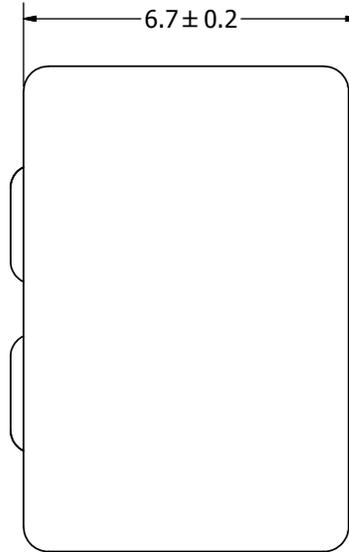
LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	1/30/2006	
A	ADDED TERMINAL POLARITY	1/30/2007	R.W.
B	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	9/17/2010	B.R.



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				<b>AOM-6738L-R</b> Microphone		Edition	Sheet
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