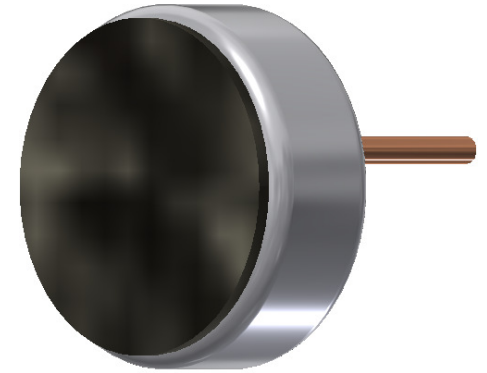




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## TOM-1545P-R Omni-Directional Microphone

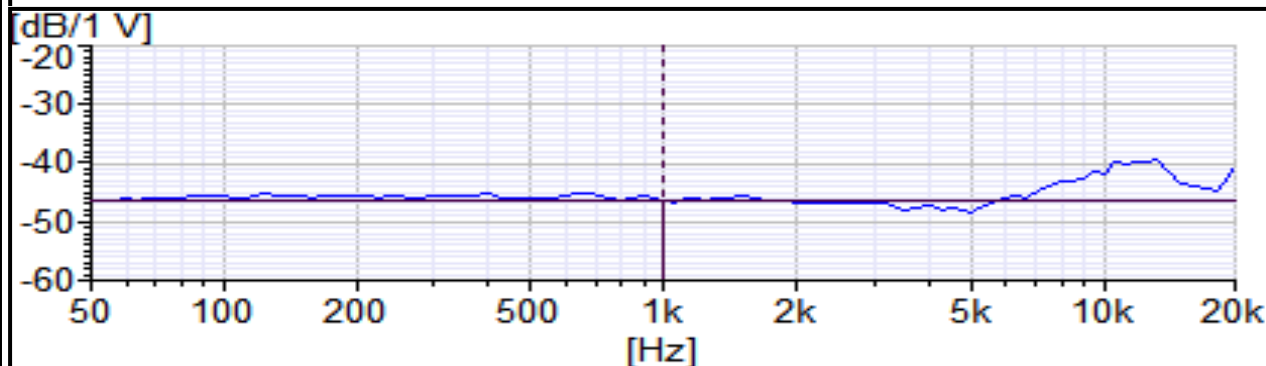


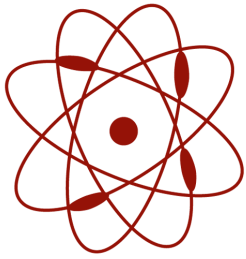
3541 Stop Eight Road • Dayton, Ohio 45414

### Product Overview

- Tiny 4mm overall diameter and 1.5mm height for space-limited applications
- -45 dB sensitivity for use in most environments
- Wide 2 to 10 VDC operating voltage and 100-10,000 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



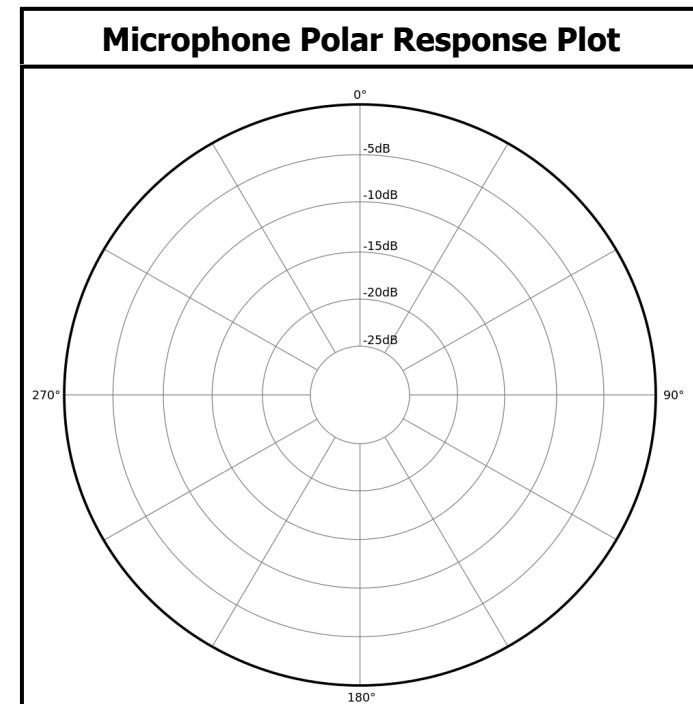
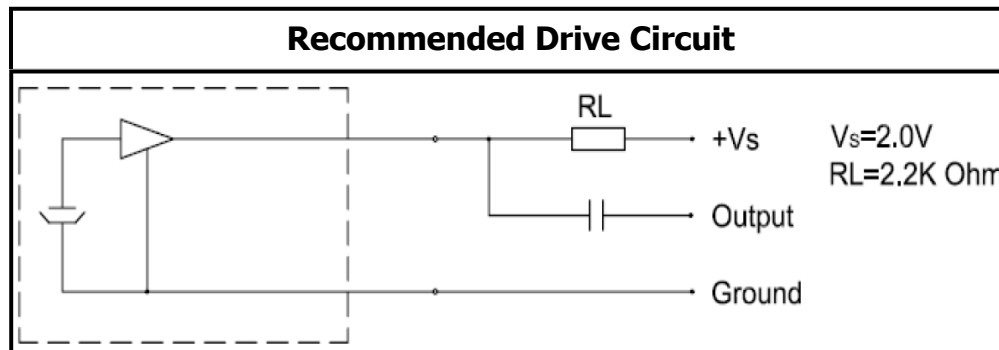


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# TOM-1545P-R

## 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



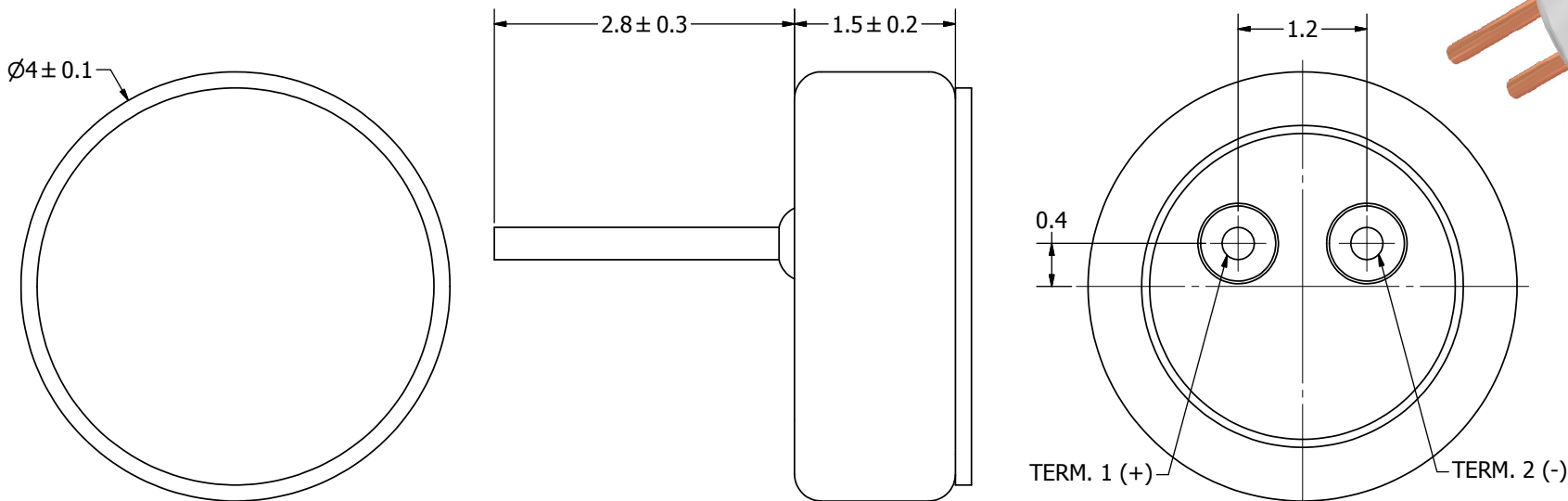
# SPECIFICATIONS

PARAMETERS	VALUES	UNITS
DIRECTIVITY	OMNI	-
SENSITIVITY	-45 ± 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	N/A	pF

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# REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	1/24/2006	
A	ADDED TERMINAL POLARITY	2/5/2007	D.F.
B	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	8/30/2007	B.R.



## NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. SPECIFICATIONS SUBJECT TO CHANGE OR WITHDRAWAL 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 <b>A3</b>	Designed by	Date	Checked by	Date	Approved by	Date	Drawn Date	
		J.A.F.	1/24/2007	E.P.	1/25/2007	B.R.	1/25/2007	8/30/2007	
TOM-1545P-R.idw		 <b>pu</b> audio™ a projects unlimited company				<b>TOM-1545P-R</b> Microphone		Edition -	Sheet 1 / 1