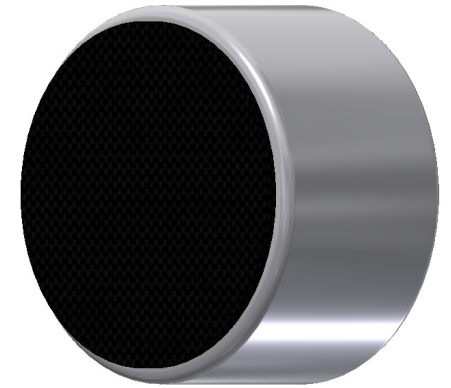


PNM-3546L-R Noise-Canceling Microphone

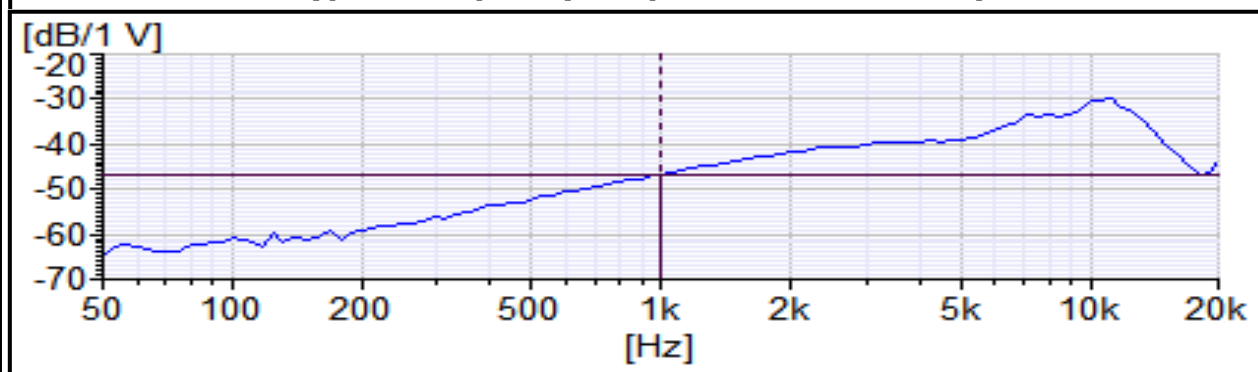


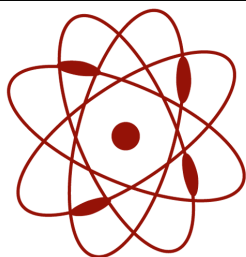
3541 Stop Eight Road • Dayton, Ohio 45414

Product Overview

- 6mm overall diameter and 3.5mm height with solder pads
- -46 dB sensitivity for use in most environments
- Wide 2 to 10 VDC operating voltage and 50-16,000 Hz frequency response
- >68 dB signal-to-noise ratio and 2.2 kOhm impedance
- Omni-directional polar pattern for great off-axis response

Typical Frequency Response and Sensitivity

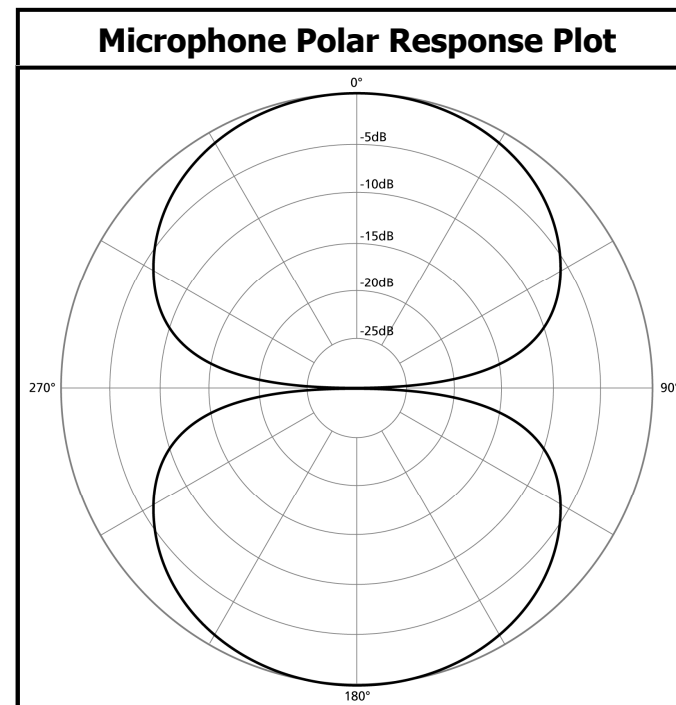
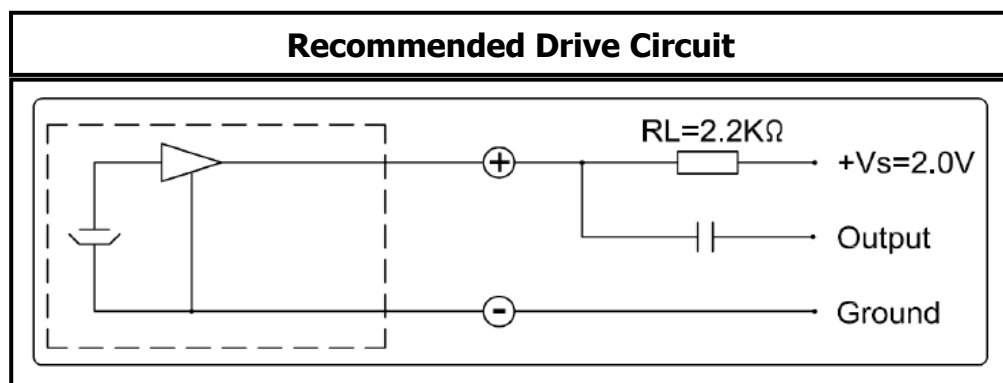




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PNM-3546L-R Noise-Canceling Microphone

| 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 |



SPECIFICATIONS

| PARAMETERS | VALUES | UNIT |
|------------------------------|------------------|------|
| DIRECTIVITY | NOISE CANCELLING | - |
| SENSITIVITY | -46 ± 4 | 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 |
| MAXIMUM SOUND INPUT | 110 | dB |
| OPERATING TEMPERATURE | -20 ~ +70 | °C |
| STORAGE TEMPERATURE | -40 ~ +85 | °C |
| TERMINAL | SOLDER PADS | - |
| INTERNAL CAPACITOR | N/A | pF |

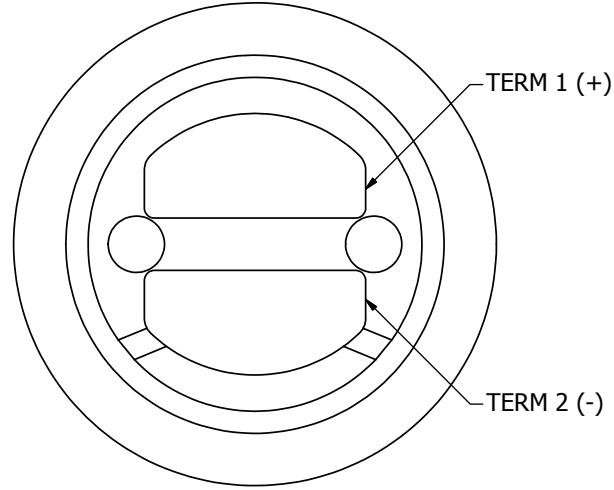
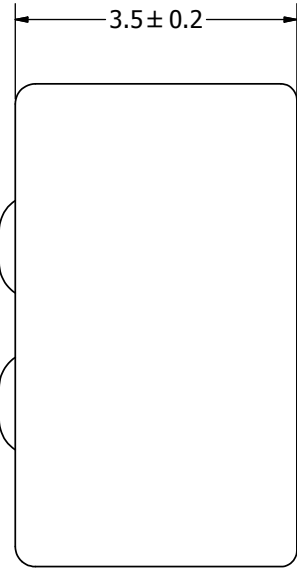
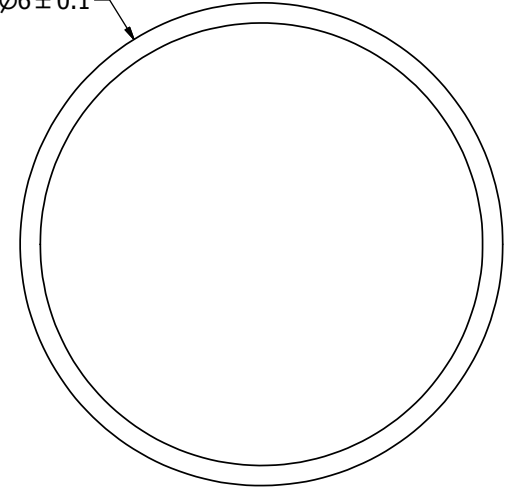
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REVISION HISTORY

| LTR | DESCRIPTION | DATE | APPROVED |
|-----|--|-----------|----------|
| - | RELEASED FROM ENGINEERING | 1/30/2006 | |
| A | ADDED TERMINAL POLARITY | 2/1/2007 | D.F. |
| B | REVISED ELECTRICAL PARAMETERS | 2/4/2010 | B.R. |
| C | REVISED TO INVENTOR 3-D DRAWING TEMPLATE | 9/23/2010 | B.R. |



Ø6 ± 0.1



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 A3 | Designed by | Date | Checked by | Date | Approved by | Date | Drawn Date |
| | | J.A.F. | 1/30/2006 | E.P. | 1/30/2006 | B.R. | 1/30/2006 | 9/23/2010 |
| PNM-3546L-R.idw | | | | | | PNM-3546L-R | | |
| | | | | | | Microphone | | Edition |
| | | | | - | 1 / 1 | | | |