



PUIaudio



Data Sheet

AR01330MR

Features:

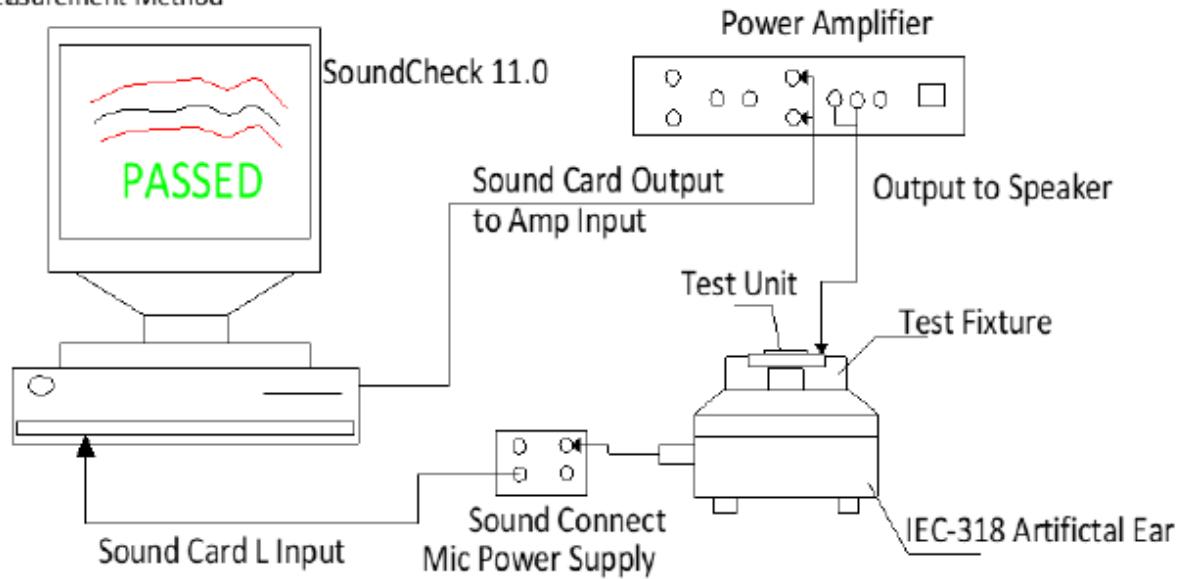
- Low 2mm height
- High 117 dB output with 800mV in Artificial Ear (1cm)
- High energy neodymium magnet
- Wide frequency range of 20Hz to 20,000Hz

Specifications

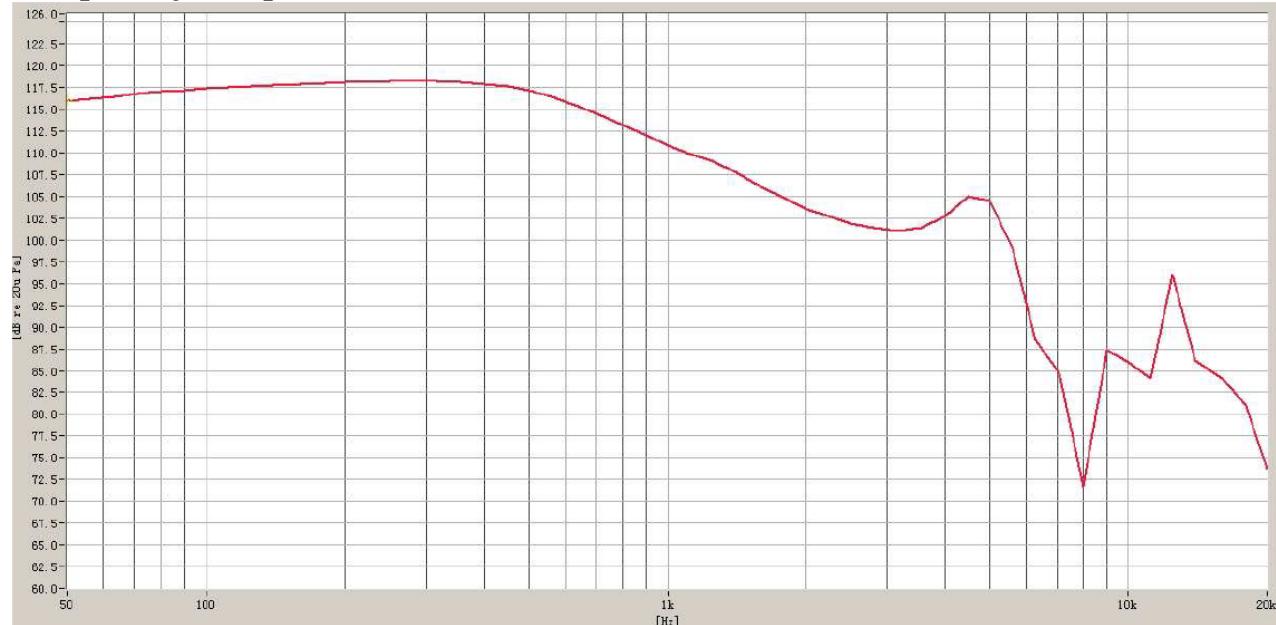
| Parameters | Values | Units |
|--------------------------------------|--|---------|
| Rated Input Power | 5 | mWatts |
| Max Input Power | 10 | mWatts |
| Impedance | $30 \pm 15\%$ | Ohms |
| Sensitivity (SPL @ 1kHz, 1mV) | 117 ± 3 | dB Pa/V |
| Resonant Frequency | $260 \pm 20\%$ | Hz |
| Frequency Range | 20 ~ 20,000 | Hz |
| Distortion (@ 50 ~ 10000 Hz/ 5mW) | 3% Max | - |
| Frame Material | A3 Metal | - |
| Magnet Material | NdFeB | - |
| Diaphragm Material | PET | - |
| Weight | 1.2 | Grams |
| Environmental Compliances | ROHS/REACH | - |
| Buzz, Rattle, etc. | Should not be audible with 380 mV sine wave from 50 Hz to 4 kHz | - |
| Polarity | When positive voltage is applied to the positive terminal, the diaphragm will move outward | - |
| Operating Temperature | -20 ~ +60 | °C |
| Storage Temperature | -20 ~ +60 | °C |

Measurement Method (measured with 500mV, Temperature: 25 ~ 35°C, Relative Humidity: 25%~75%)

1. Measurement Method



Frequency Response (measured at 1mV)

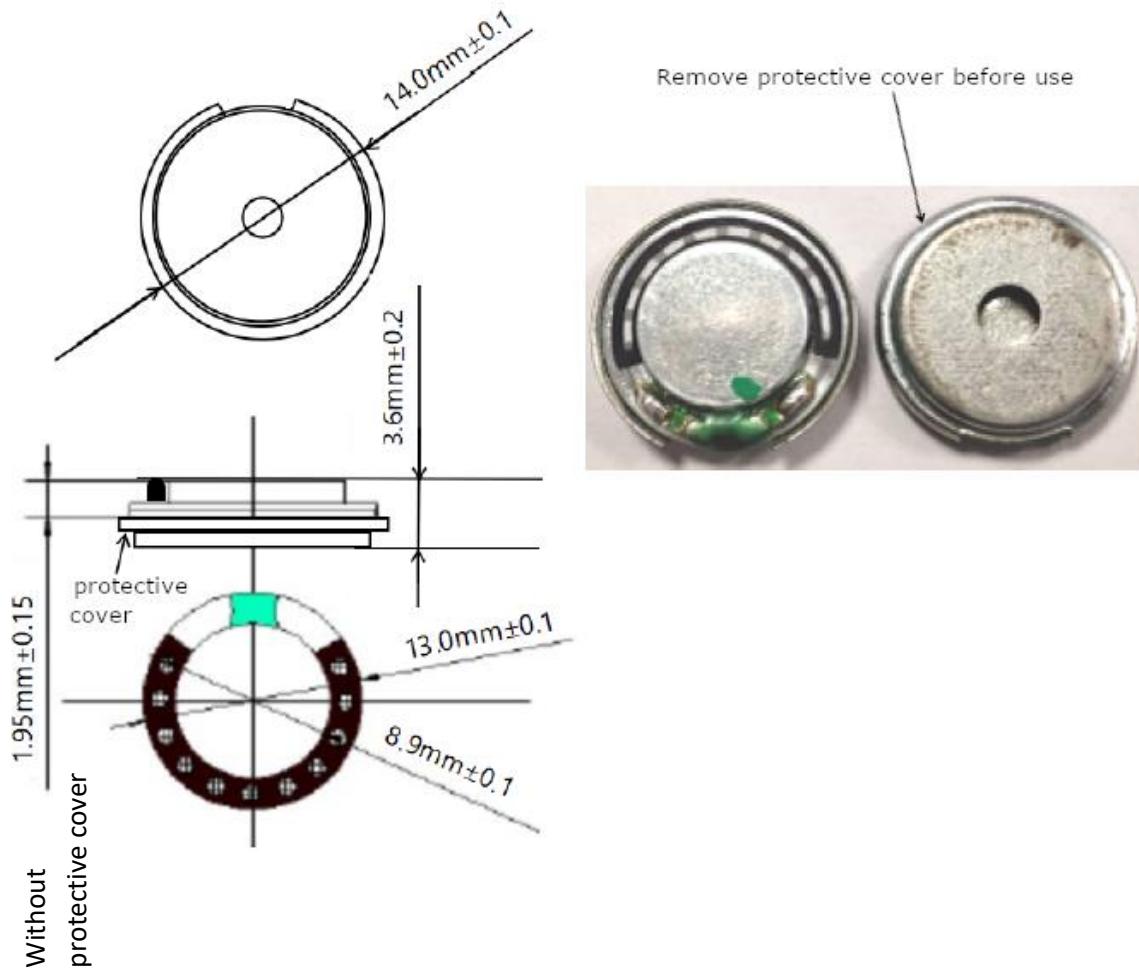


Reliability Testing

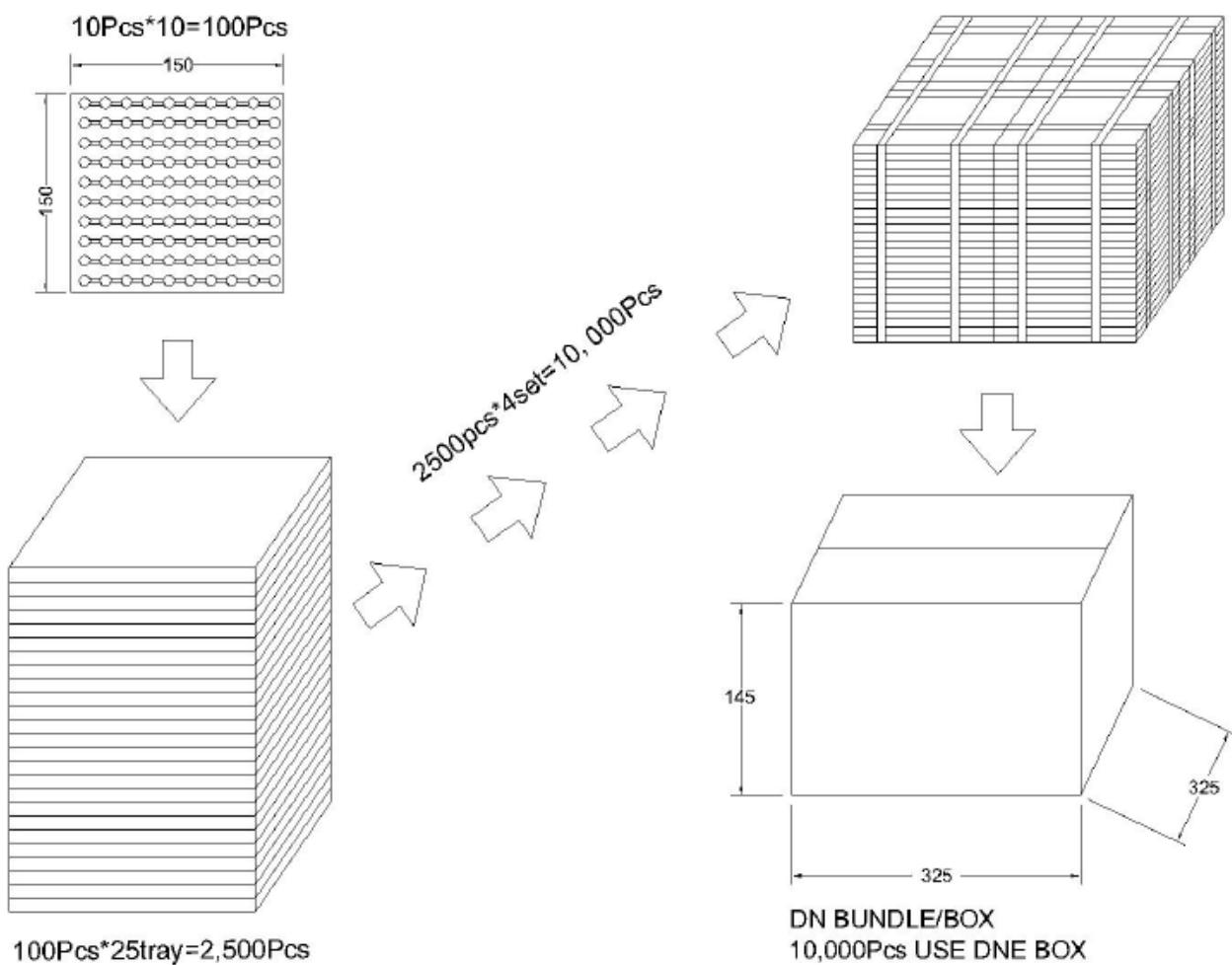
| Type of Test | Test Specifications |
|---------------------------|--|
| High Temperature Test | 48 hours at $+60^{\circ}\text{C} \pm 2^{\circ}\text{C}$ |
| Low Temperature Test | 48 hours at $-20^{\circ}\text{C} \pm 2^{\circ}\text{C}$ |
| Humidity Test | 24 hours at $+50^{\circ}\text{C} \pm 2^{\circ}\text{C}$ with relative humidity at 90~95% relative humidity |
| Temperature Cycle Testing | The part shall be subjected to 15 cycles. One cycle shall be 2 hours and consist of: $50^{\circ}\text{C}+1^{\circ}\text{C}/0.5\text{h} \rightarrow 20^{\circ}\text{C}/0.5\text{h} \rightarrow -20^{\circ}\text{C}/0.5\text{h} \rightarrow 20^{\circ}\text{C}/0.5\text{h}$ |
| Vibration Test | Frequency 15~55 Hz, Amplitude 1.5 mm for 2 hours |
| Drop Test | 100 cm free fall on concrete floor, 10 times |

After each test, the speaker's SPL shall be ± 4 dB of the original SPL after 1 hour of recovery.

Dimensions



Packaging



Specifications Revisions

| Revision | Description | Date | Approved |
|----------|---------------------------------|-----------|----------|
| A | Released from Engineering | 3/21/2025 | JD |
| B | Revised Sensitivity and drawing | 6/13/2025 | JD |

Note:

1. Unless otherwise specified:
 - A. All dimensions are in millimeters.
 - B. Default tolerances are ± 0.5 mm and angles are $\pm 3^\circ$.
2. Specifications subject to change or withdrawal without notice.