



Data Sheet

AS01508MO-SC11-R

PUI Audio's **Mobile Series** line of speakers and receivers is designed for cutting-edge applications such as smart watches and pendants, Wi-Fi enabled security devices and action cameras, mobile radios and smart phones, as well as IoT devices.

The 8Ω, 15mm x 11mm AS01508MO-SC11-R speaker is designed for high fidelity audio reproduction in the thinnest size possible—only 3.9mm thick with the included foam adhesive.

Features:

- 89 dB output (2V @ 10cm)
- High-energy neodymium motor
- 4mm thick with included 2-sided foam adhesive

Specifications

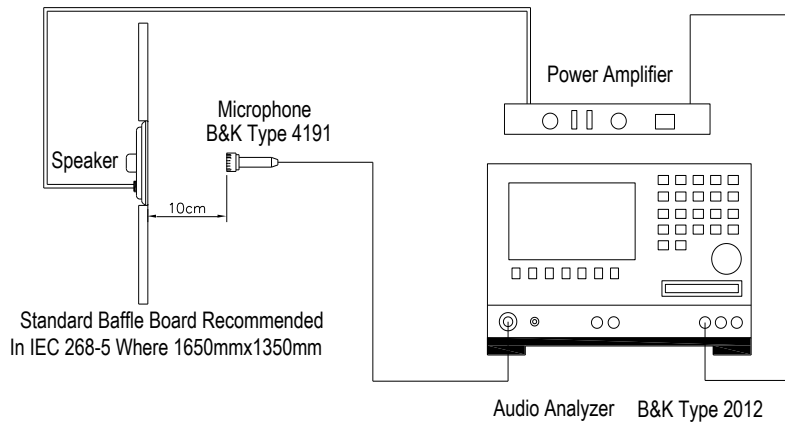
| Parameters | Values | Units |
|--|--------------|-------|
| Rated Input Power | 0.7 | Watts |
| Max Input Power | 1 | Watts |
| Impedance | 8 ± 15% | Ohms |
| Sensitivity (SPL @ 2V/10cm) 2.0 kHz | 89 ± 3 | dB |
| Resonant Frequency (free air) | 600 ± 20% | Hz |
| Frequency Range | 600 ~ 20,000 | Hz |
| Frame Material | PBT | - |
| Magnet Material | NdFeB | - |
| Weight | 1.5 | Grams |
| Environmental Protection Rating | - | - |

Specifications (continued)

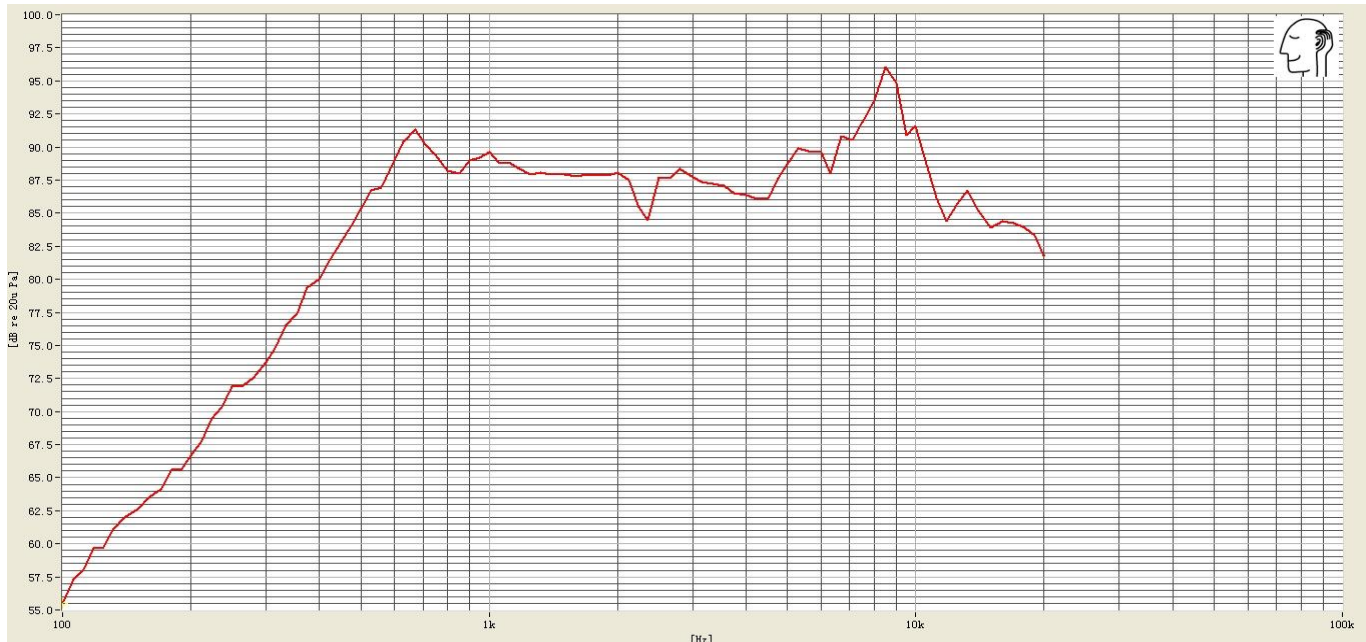
| | | |
|-----------------------|--|----|
| Buzz, Rattle, etc. | Should not be audible with 2V sine wave from 200 Hz to 2 kHz | - |
| Polarity | When positive voltage is applied to the positive terminal, the diaphragm will move outward | - |
| Storage Temperature | -30 ~ +70 | °C |
| Operating Temperature | -20 ~ +60 | °C |

Measurement Method (measured with 2V, Temperature: 15 ~ 35°C, Relative Humidity: 25%~70%)

Standard test condition of speaker



Frequency Response (measured with 2V @ 10cm)



Impedance Response (Free air measurement)

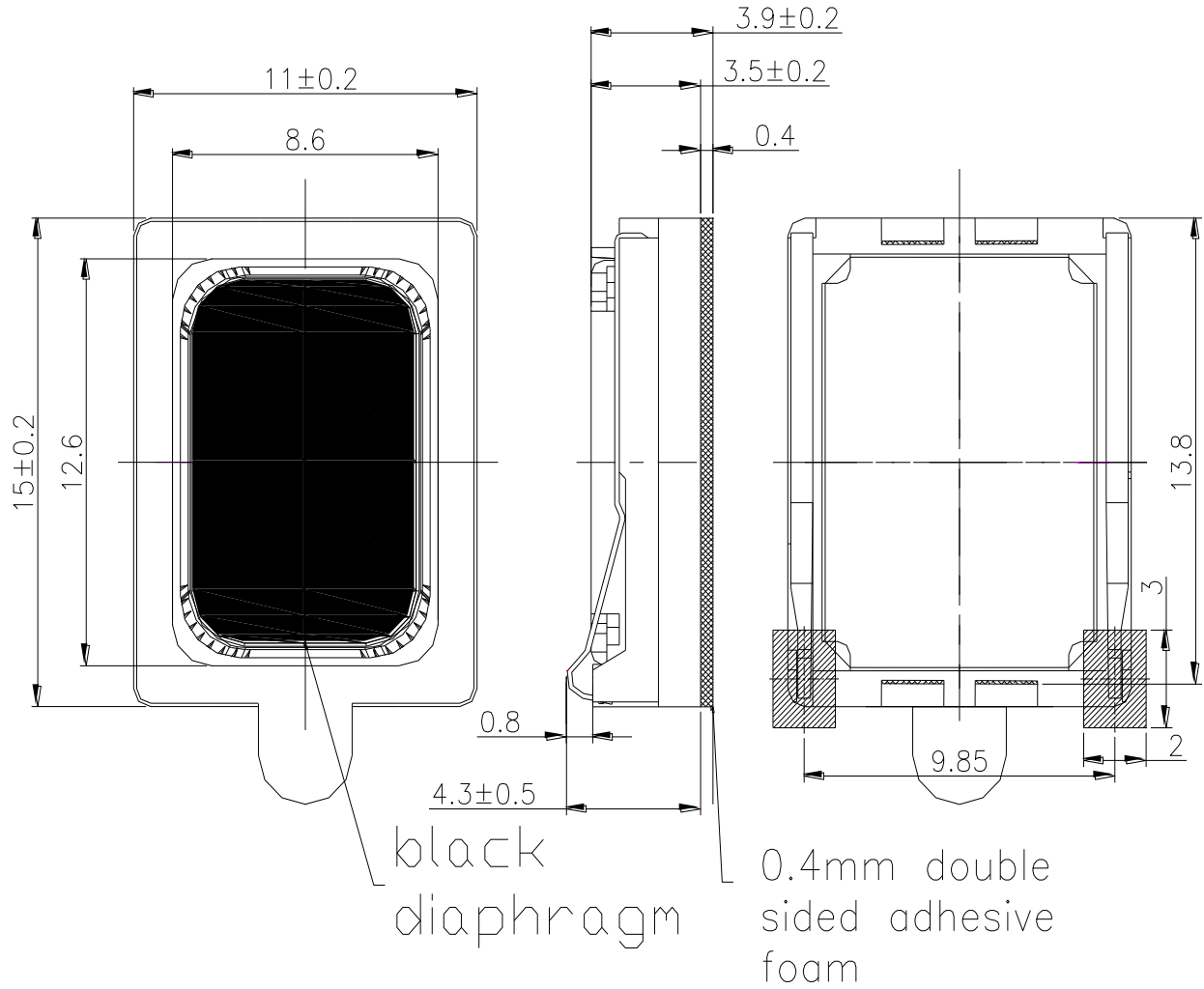


Reliability Testing

| Type of Test | Test Specifications |
|---------------------------|--|
| High Temperature Test | 96 hours at +70°C ± 3°C followed by three hours in normal room temperature |
| Low Temperature Test | 96 hours at -30°C ± 3°C followed by three hours in normal room temperature |
| Humidity Test | 96 hours at +40°C ± 3°C with relative humidity at 90%~95% followed by 6 hours in normal room temperature |
| Temperature Cycle Testing | The part shall be subjected to 12 cycles using the following procedure: Low temperature: -30°C±3°C High temperature: +70°C±3°C Cycle: 2 hours at High, 5 minutes High to Low, 2 hours at Low, 5 minutes Low to High |
| Vibration Test | 10 to 55 to 10 Hz sine sweep, per minute @ 1.5mm amplitude 2 hours in each axis X, Y, and Z. |
| Drop Test | Mount speaker to 100g fixture, drop fixture 1.5 meters, twice per side and twice for each corner |
| Load Test | White noise is applied at the speakers rated power for 96 hours at room temperature with speaker in 1cc enclosure. |

After each test, the speaker's SPL shall be ±3 dB of the original SPL

Dimensions (Left contact is positive on the far right drawing below)



Packaging

