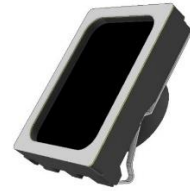




PUI audio



Data Sheet

AS01508MS-SC11-WP-2-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. Each Mobile Series product features an IP67-rated face for protection against dust and water ingress.

The eight-ohm 15mm x 11mm AS01508MS-SC11-WP-2-R speaker is designed for high fidelity audio reproduction in the thinnest size possible—only 3.5mm thick! Spring contacts provide convenient connection.

Features:

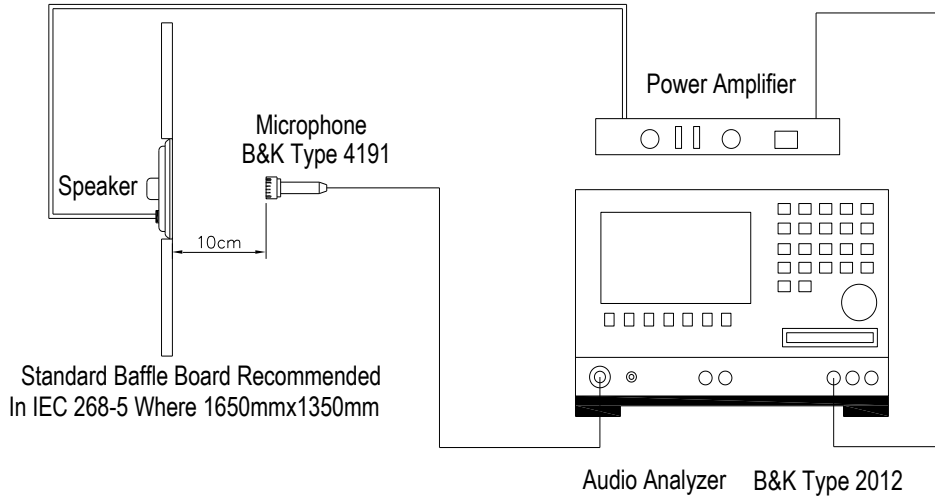
- High-energy neodymium motor
- Rear Mounted Foam Pad
- Dustproof and waterproof IP67-rated face
- TESA 61305 double-sided tape pre-applied

Specifications

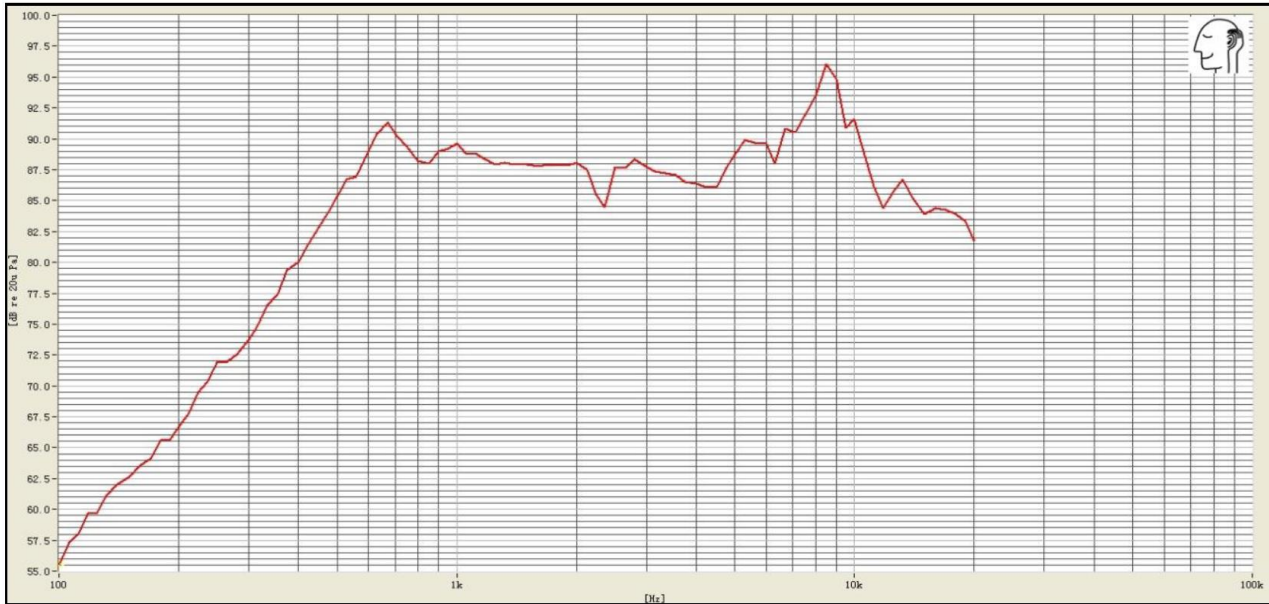
Parameters	Values	Units
Rated Input Power	0.7	Watts
Max Input Power	1.0	Watts
Impedance	8 ± 15%	Ohms
Output SPL (<i>avg. 0.8, 1.0, 1.5, 2.0k Hz @ 2.0V_{rms}/0.1m</i>)	89 ± 3	dB
Resonant Frequency (<i>Free Air</i>)	600 ± 20%	Hz
Frequency Range	fo ~ 20,000	Hz
THD	< 5	%
Diaphragm Material	PEEK	-
Frame Material	PBT	-
Magnet Material	NdFeB	-
Weight	1.5	Grams
Buzz, Rattle, etc.	Must not be audible with 2.0V _{RMS} sine wave between 200Hz ~ 2kHz	-
Environmental Protection Rating	ROHS/REACH	-
Ingress Protection	IP67	
Polarity	Cone moves forward with positive dc current to "+" terminal	-
Storage Temperature	-40 ~ 85	°C
Operating Temperature	-20 ~ 70	°C

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

Standard test condition of speaker



Typical Frequency Response (Measured with 2V drive, distance = 10cm)



Typical Impedance vs. Frequency (Free-air measurement)

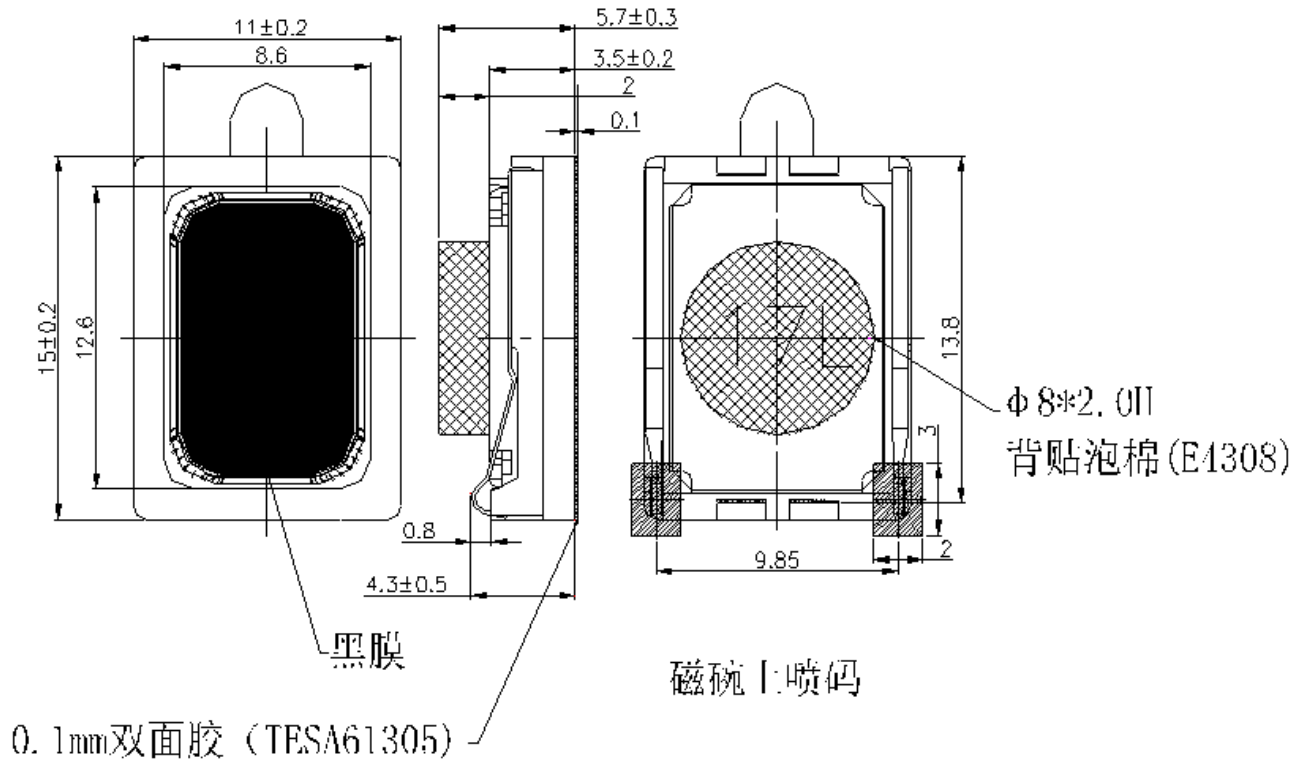


Reliability Testing

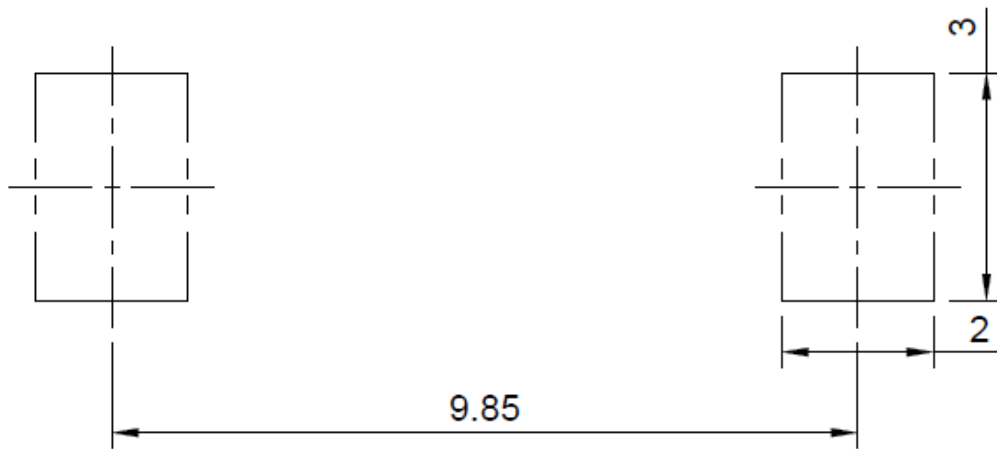
Type of Test	Test Specifications
High Temperature Test	96 hours at 80±3°C
Low Temperature Test	96 hours at -30±3°C
Humidity Test	96 hours at 40±3°C with relative humidity at 90~95%
Temperature Cycle Testing	Run for 10 cycles with each cycle consisting of: -40°C for 1 hour, 85°C for 1 hour.
Vibration Test	10~55~10Hz sine wave sweep 15min. 5G(constant) in X,Y,Z direction 2 hours each, total 6 hours.
Drop Test	Drop the speaker from 1.5m height onto each side (6 sides) and corners (4 corners) x2. Total 20 drops.
Load Test	Must perform normal with program White-Noise source at Rated Power for 96 Hours

After each test let rest for 6 hours in standard room temperature, the part shall be within ±3dB.

Dimensions

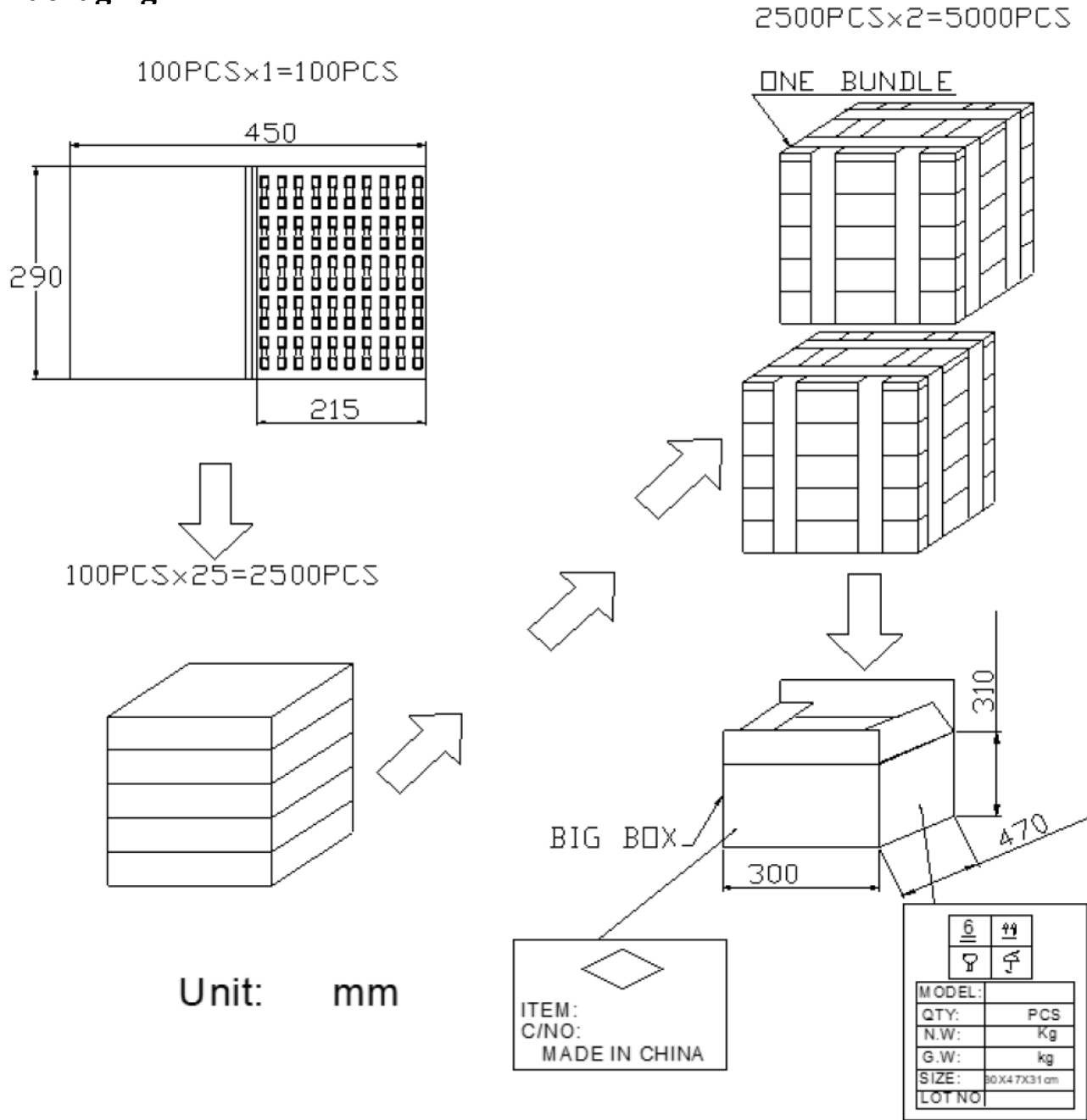


Suggested Land Pattern*



***This land pattern is advisory only and its use or adaptation is entirely voluntary. PUI Audio disclaims all liability of any kind associated with the use, application, or adaptation of this land pattern.**

Packaging



Specifications Revisions

Revision	Description	Date	Approved
A	Released from Engineering	08/01/2023	-
B	Added Land Pattern	04/19/2024	KM

Note:

- Unless otherwise specified:
 - All dimensions are in millimeters.
 - Default tolerances are $\pm 0.5\text{mm}$ and angles are $\pm 3^\circ$.
- Specifications may not be changed without customer approval.