



# PUIaudio

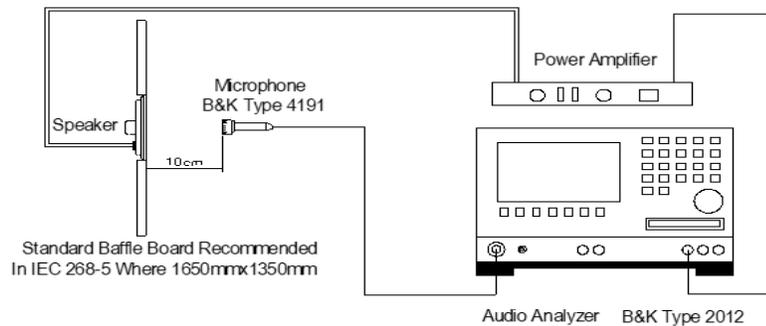


Data Sheet	AS01508MS-SC15-WP-2-R
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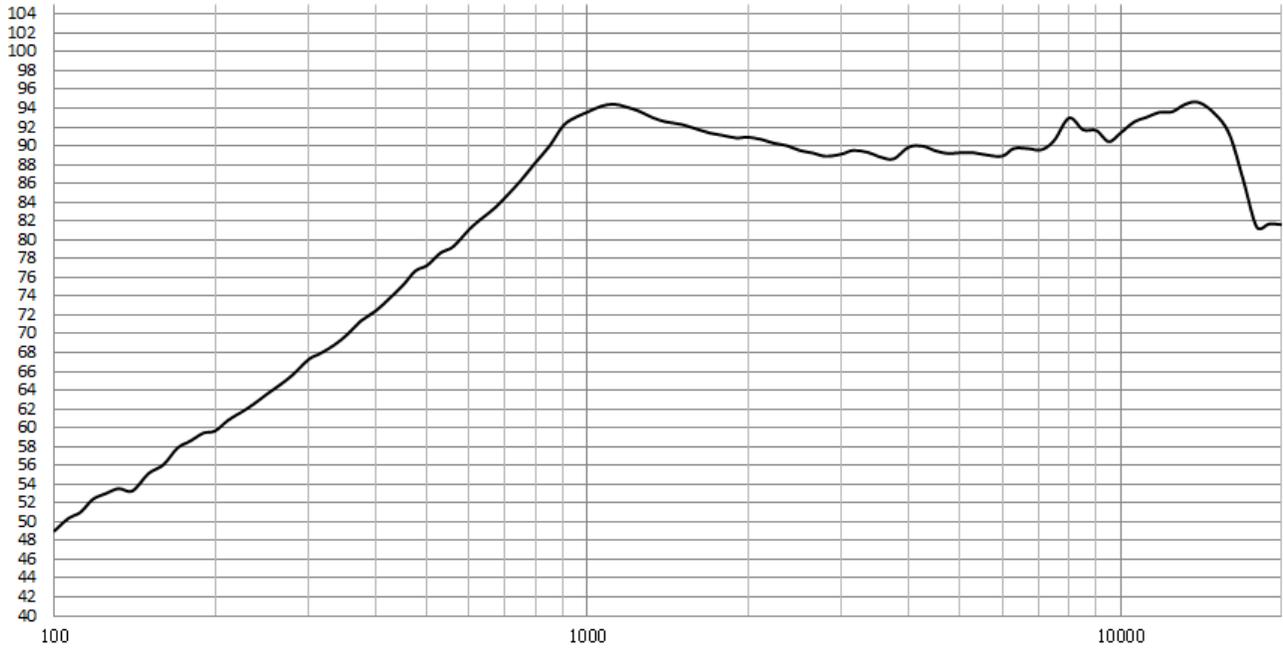
## Specifications

Parameters	Values	Units
Rated Input Power	0.7	Watts
Max Input Power	1	Watts
Impedance	$8 \pm 15\%$	Ohms
Output SPL @ 2.37Vrms/10cm (1cc box)	$92 \pm 3$	
In Free-Air (Avg. 0.8, 1.0, 1.2, 1.5 kHz)	$85 \pm 3$	dB
Resonant Frequency (1cc box)	$1000 \pm 20\%$	
RF Free Air	$700 \pm 20\%$	Hz
Frequency Range	$F_0 - 20,000$	Hz
THD max. (1kHz, 0.1W)	10%	-
Diaphragm Material	Aluminum Cap PEEK	-
Frame Material	PPA	-
Magnet Material	NdFeB	-
Weight	1.5	Grams
Ingress Protection Rating	IP67	-
Buzz, Rattle, etc.	Should not be audible at 6.32Vrms sine wave between (90Hz-20kHz)	-
Environmental Compliances	ROHS/REACH	-
Polarity	Diaphragm to move in forward direction when +pos applied to pos+ terminal	-
Storage Temperature	-40 to 85	°C
Operating Temperature	-20 to 70	°C

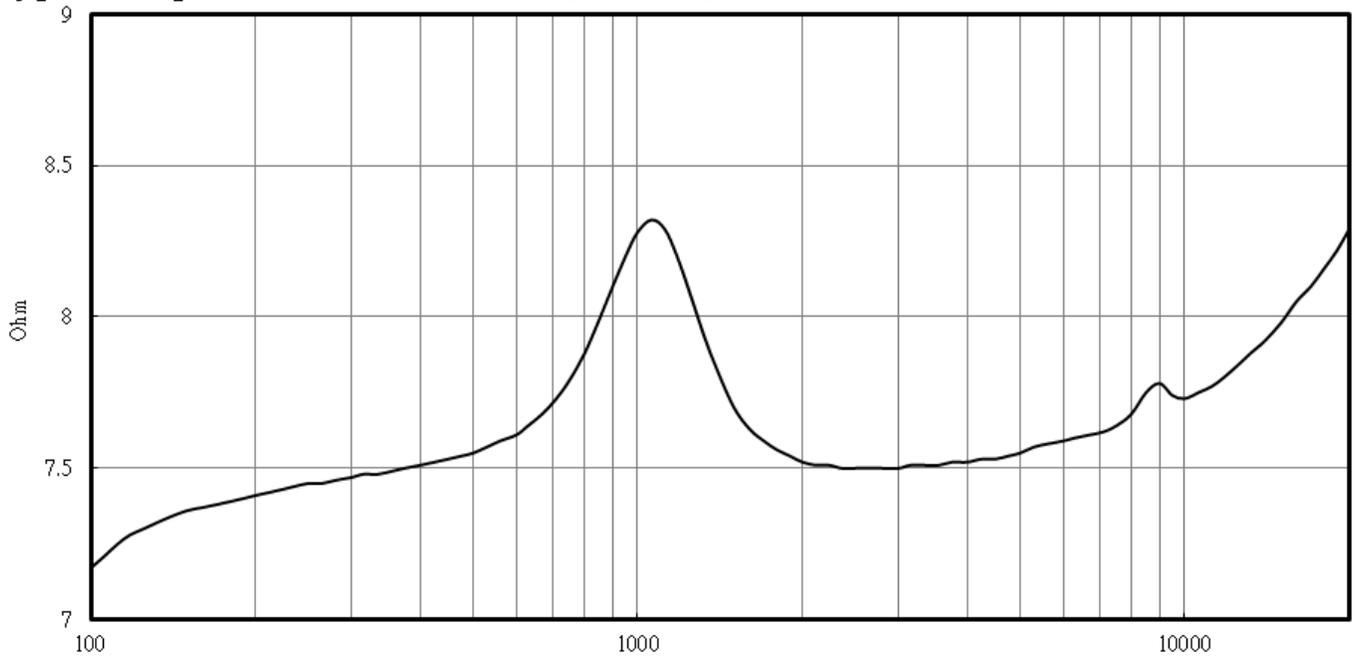
## Measurement Method



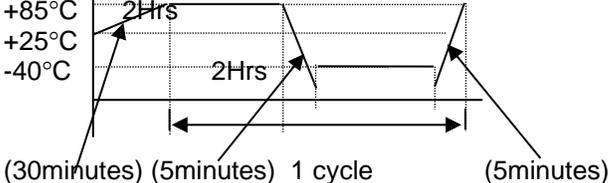
### Typical Frequency Response (2.37Vrms, 10cm) 1cc box



### Typical Impedance curve 1cc box (2.37Vrms)

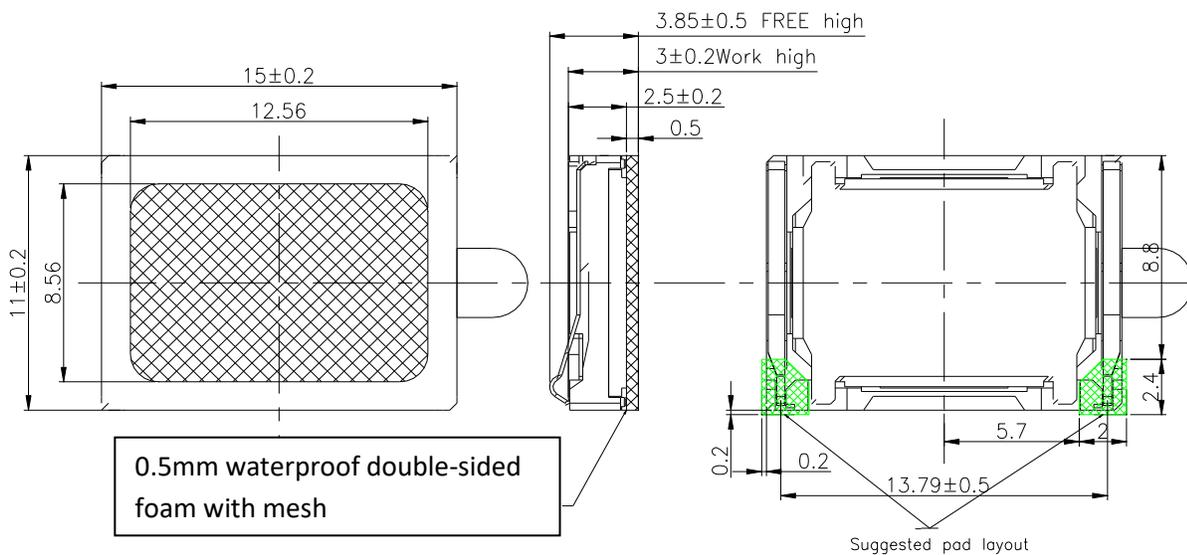


## Reliability Testing

Type of Test	Test Specifications
High Temperature Test	96 hours at 85±3°C
Low Temperature Test	96 hours at -40±3°C
Humidity Test	96 hours at 40±3°C with relative humidity at 90~95% (recovery 6 hours)
Temperature Cycle Testing	Temperature: -40°C±3°C ↔ +85°C±3°C Cycle: 12 cycles Duration: 2 hour 2 hour (recovery 2 hours)  (30minutes) (5minutes) 1 cycle (5minutes)
Vibration Test	Frequency: 10~55~10Hz Oct/min. Amplitude: 1.5mm Duration: 2 hours each of 3 perpendicular directions
Drop Test	Height: 1.5m Cycle: 6 cycles ( be mounted in a 100g fixture, drop samples 1.5m 2 drops on side(2*6), 2 drops on each corner(2*4). Total 20 drops total 18 times
Load Test	Must perform normal with program White-Noise source at 0.7W for 96 Hours

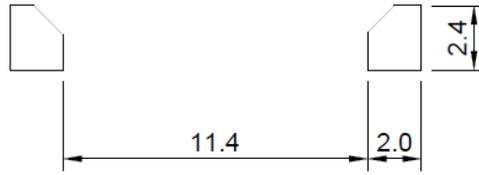
After each test let rest for 6 hours in standard room temperature, the part shall be within ±3dB.

## Dimensions



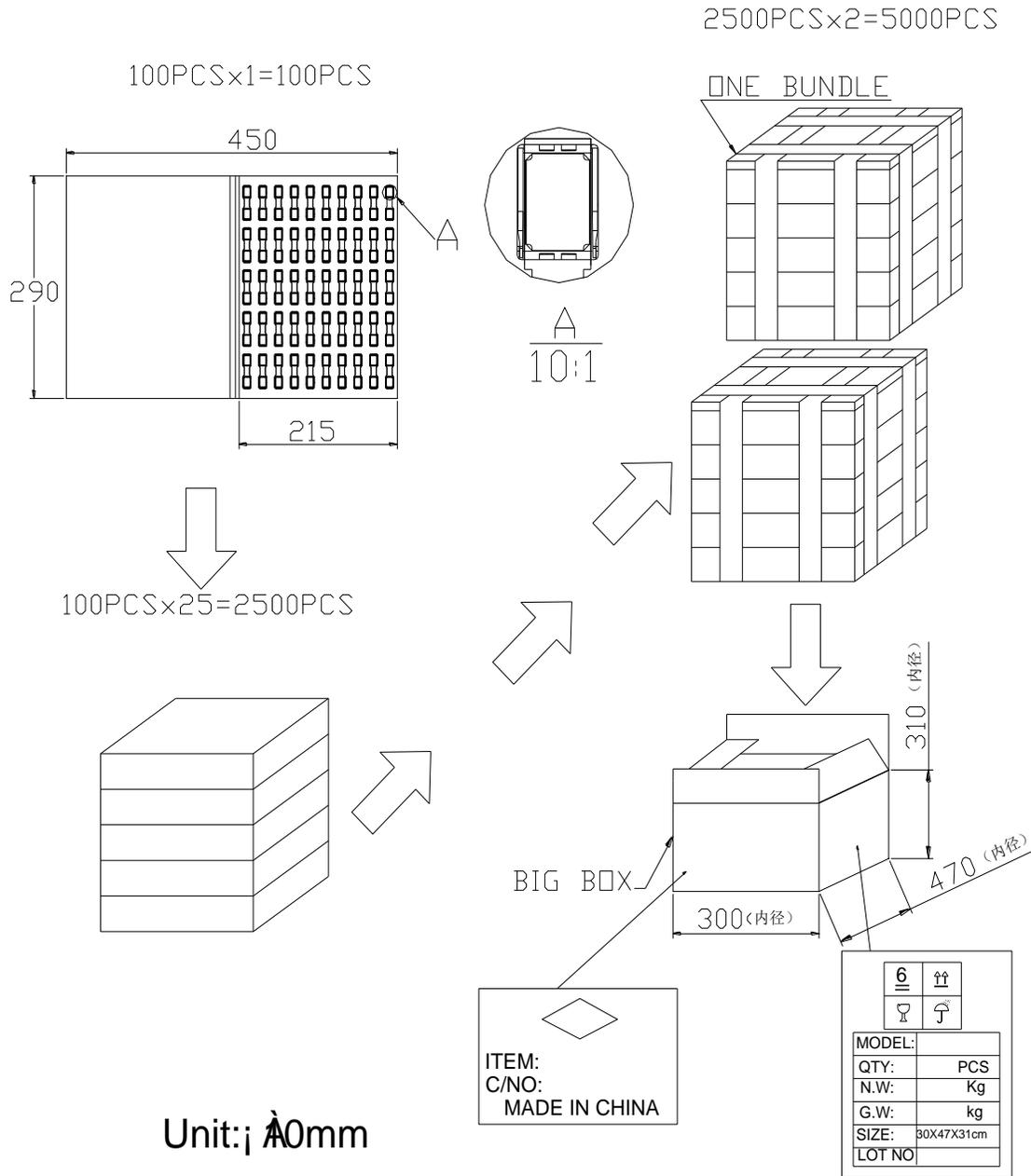
Note: Tolerances not specified are +/- 0.2mm

## 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**

<b>Revision</b>	<b>Description</b>	<b>Date</b>	<b>Approved</b>
A	Released from Engineering	11/11/2020	-
B	Update performance values and dimensions	10/4/2022	-
C	Added Land Pattern	04/22/2024	M.L.

Note:

1. Unless otherwise specified:
  - A. All dimensions are in millimeters.
  - B. Default tolerances are  $\pm 0.5\text{mm}$  and angles are  $\pm 3^\circ$ .
2. No change to specification without written consent and approval by customer.
3. Part is IP67 rated from front of speaker only.