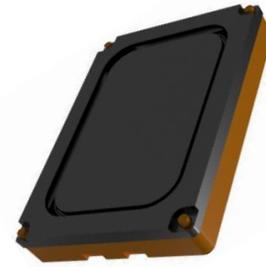




PUI audio



Data Sheet

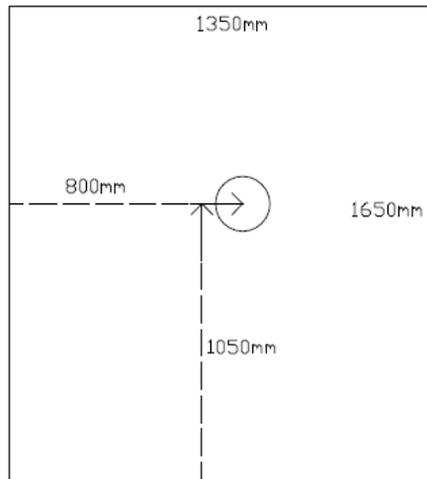
AS01508MS-WP

Specifications

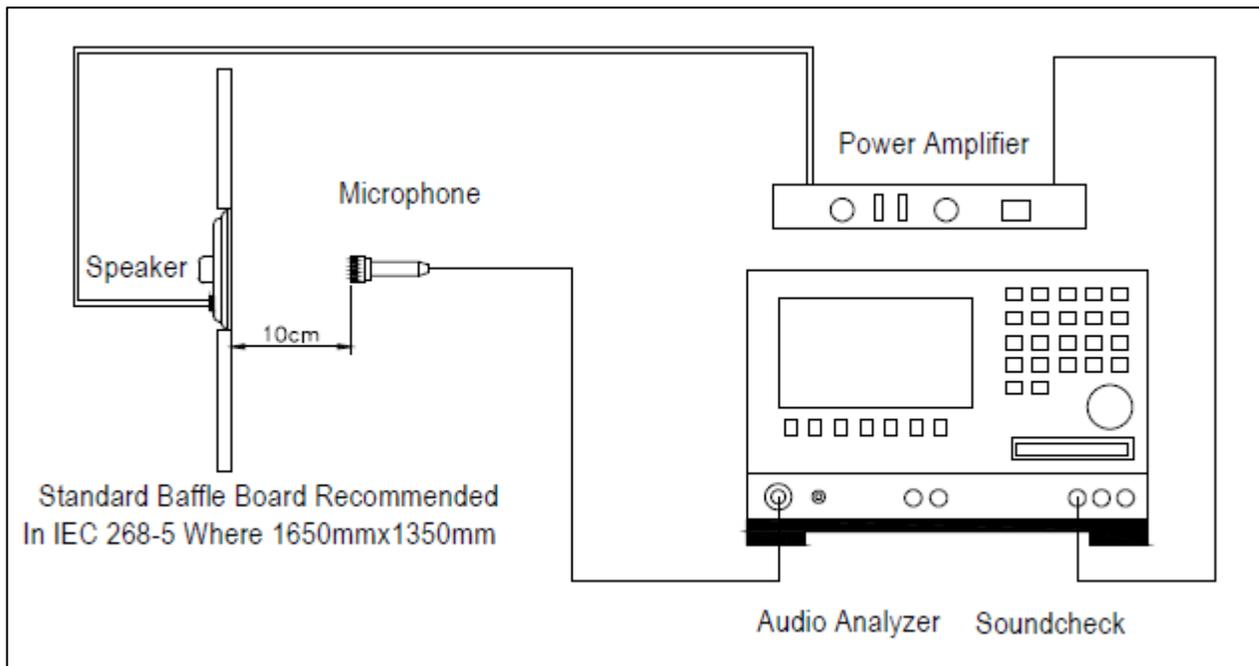
Parameters	Values	Units
Rated Input Power <i>(1cc enclosure)</i>	1	Watts
Max Input Power <i>(1cc enclosure)</i>	1.5	Watts
Impedance <i>(@ 1.5 kHz, 1V)</i>	$8 \pm 15\%$	Ohms
Output SPL <i>(1cc enclosure)</i> <i>(0.8, 1.0, 1.5, 2.0 kHz @ 1W/0.1M)</i>	95 ± 3	dB
Resonant Frequency <i>(1cc enclosure)</i>	$950 \pm 20\%$	Hz
Frequency Range <i>(-10dB from Output SPL)</i>	F0 ~ 20k	Hz
THD <i>(1kHz @ 1W) (1cc enclosure w/ baffle)</i>	See THD Graph	-
Frame Material	PPA	-
Magnet Material	NdFeB	-
Diaphragm Material	Peek	-
Weight	1.5	Grams
Acceptable Soldering Methods	Hand Solder	-
Buzz, Rattle, etc. <i>(1cc enclosure)</i>	Should not be audible when driven with sine wave	300~5k Hz @ 2.83 V
Environmental Compliances	ROHS/REACH	-
Polarity	Cone moves forward when positive DC current is applied to (+) terminal	-
Storage Temperature	-40 ~ +85	°C
Operating Temperature	-20 ~ +60	°C
Ingress Protection	IP65	-

All specifications measured at 15 ~ 35°C, 25~75% RH, unless otherwise noted.

Measurement Method

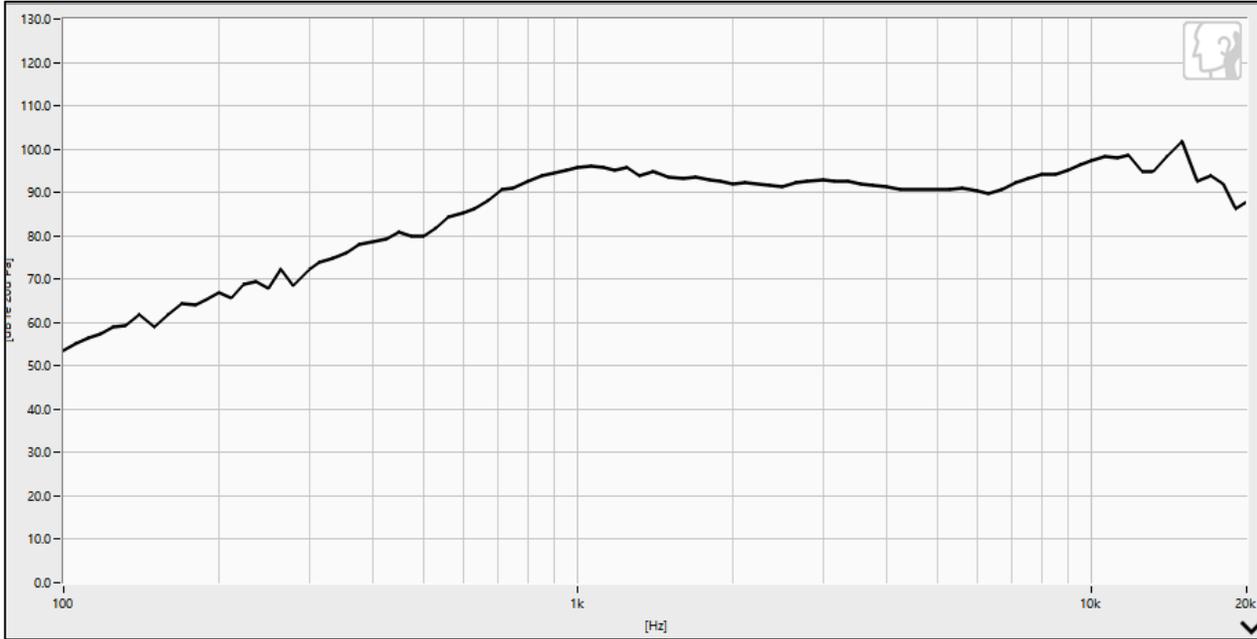


Block Diagram for Measurement Method

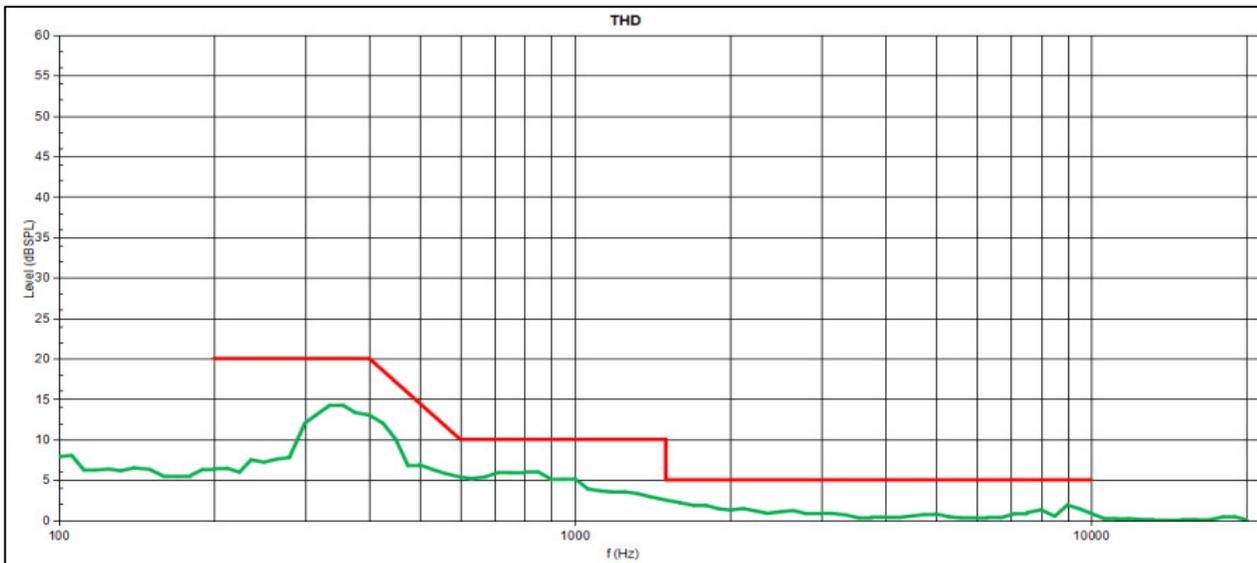


Speaker Test Setup

Typical Frequency Response (1W / 0.1M / 1cc enclosure)

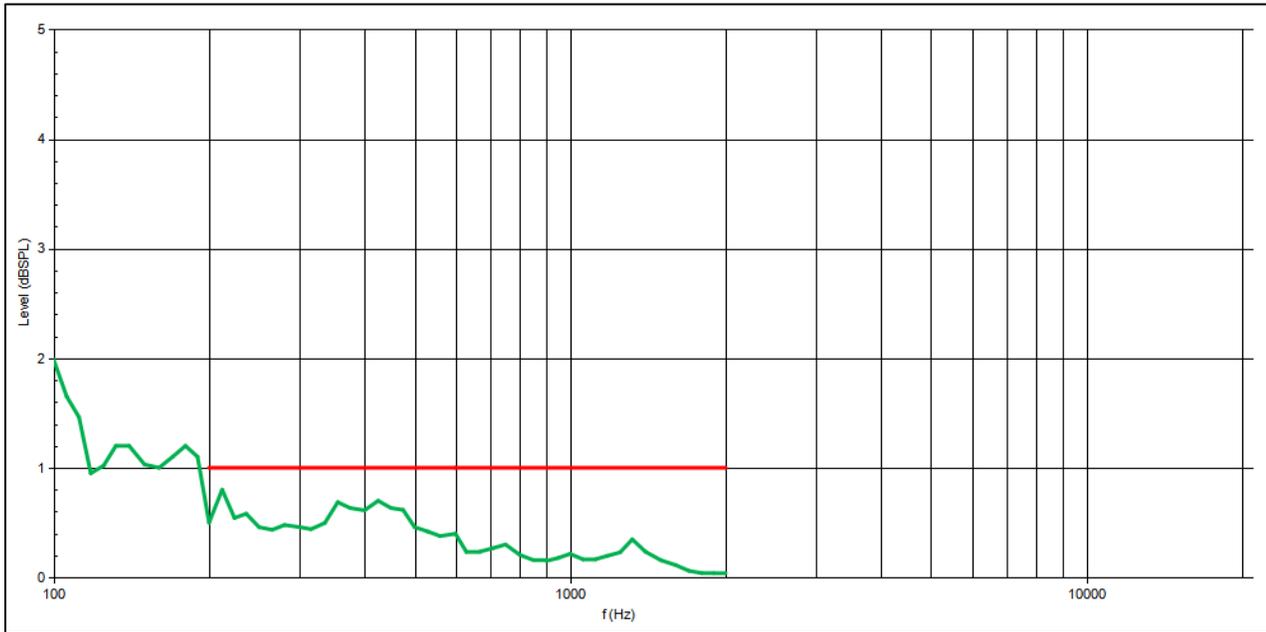


Total Harmonic Distortion Curve (1W / 0.1M / 1cc enclosure)

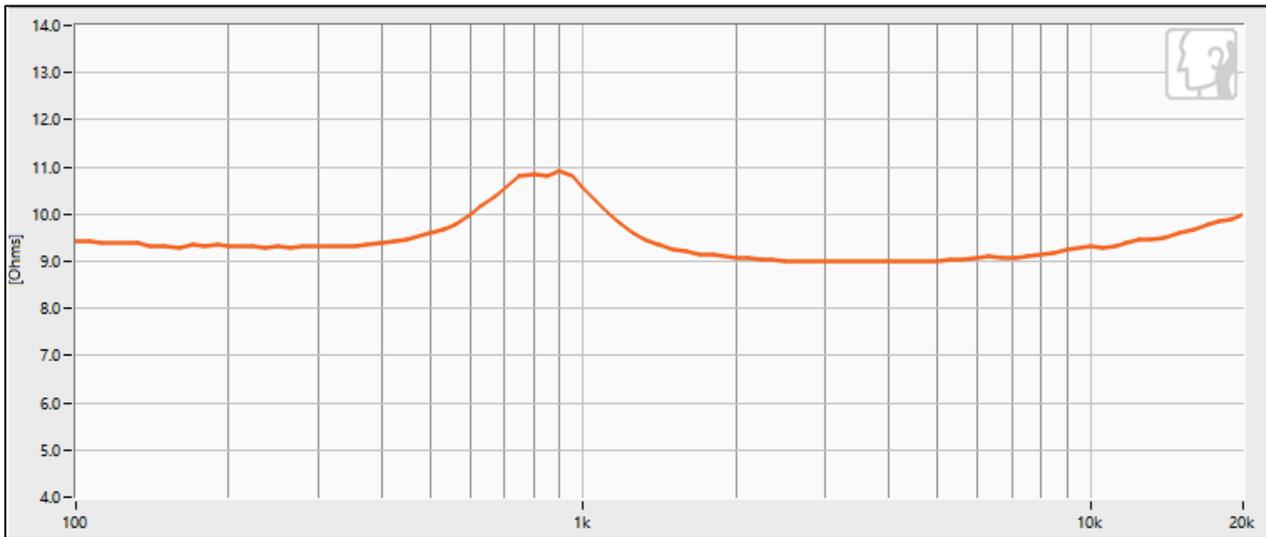


Frequency (Hz)	200-400	599	600-1500	1501-10K
limit (%)	20%	20%	10%	5%

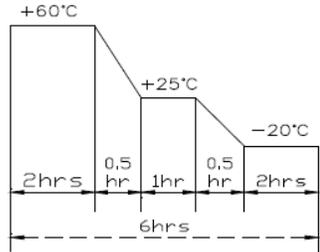
Rub & BUZZ (1W / 0.1M / 1cc enclosure w/ baffle) – Limit 1.0% @ 200 300 2000 Hz



Impedance

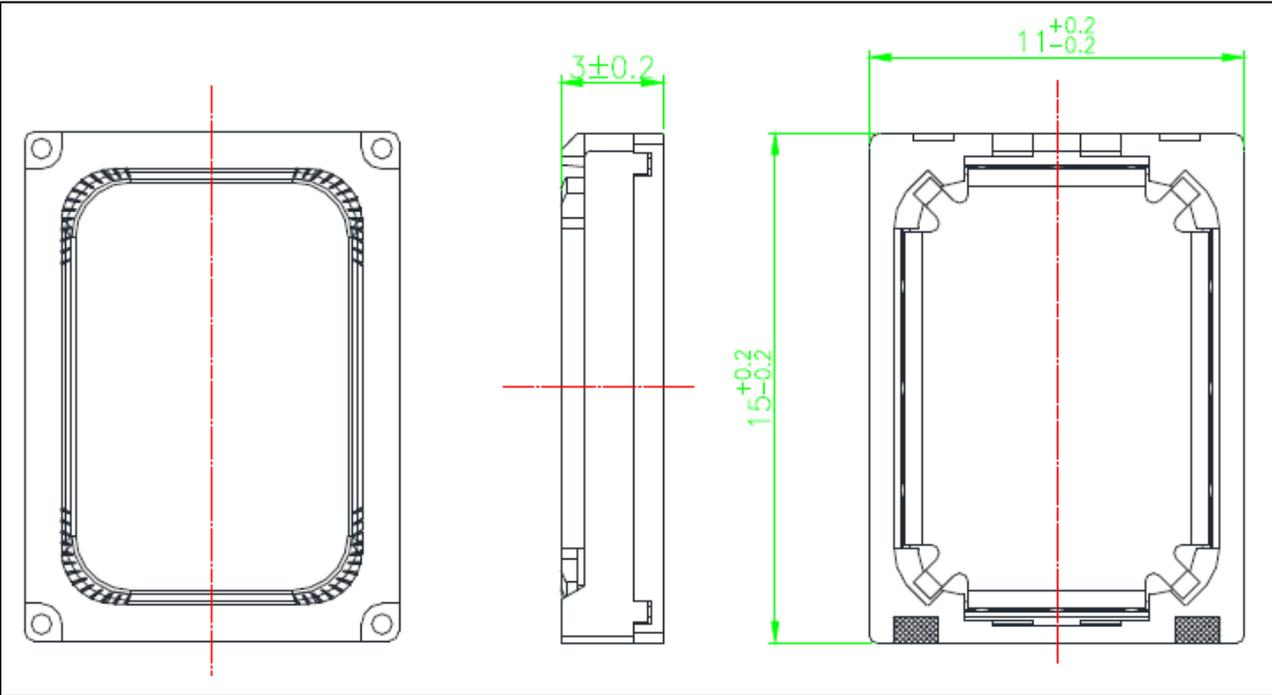


Reliability Testing

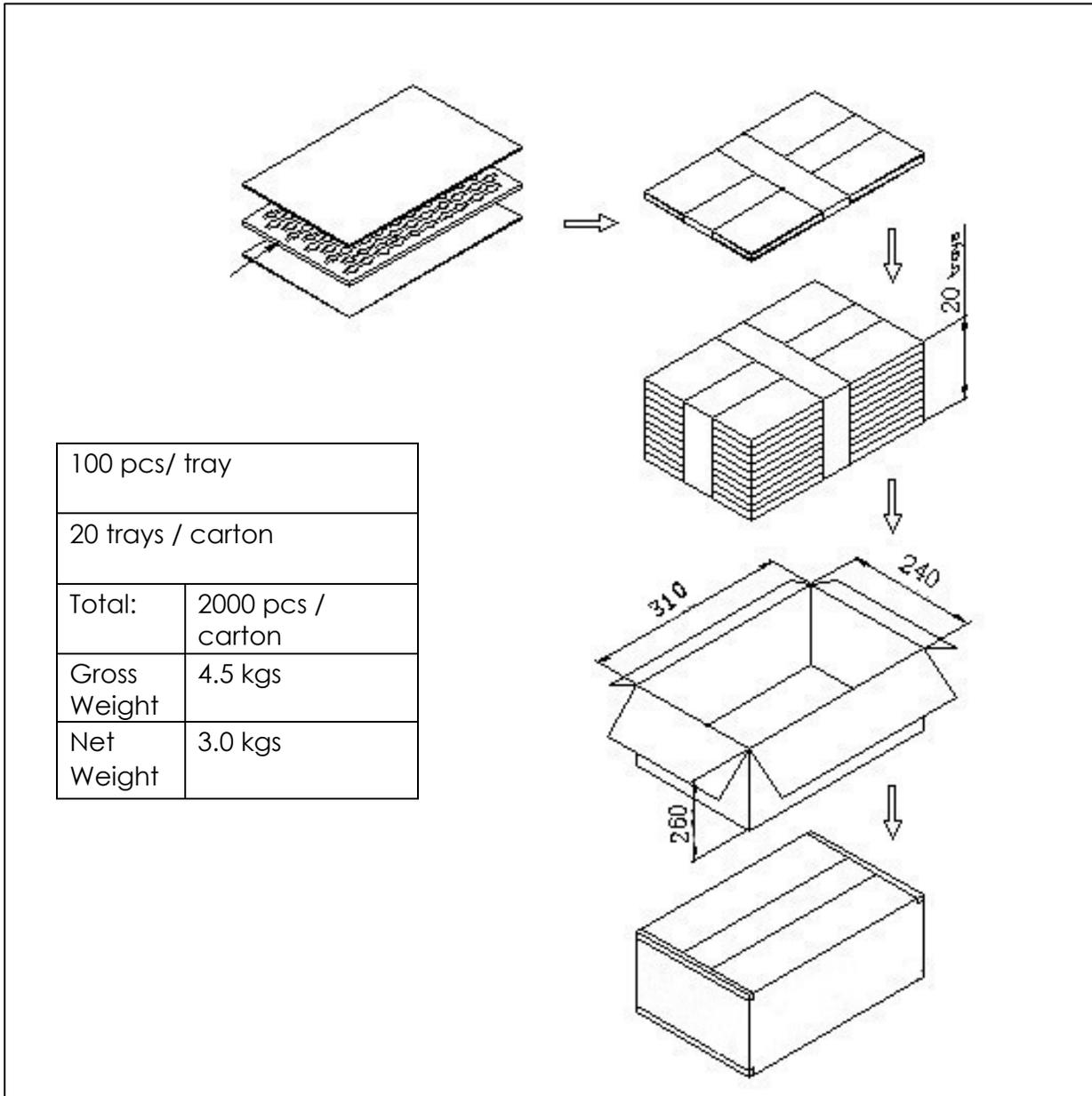
Type of Test	Test Specifications
High Temperature Test	96 hours at $+60\pm 3^{\circ}\text{C}$
Low Temperature Test	96 hours at $-20\pm 3^{\circ}\text{C}$
Humidity Test	96 hours at $+40\pm 2^{\circ}\text{C}$, 90-95% RH
Temperature Cycle Test	<p>Part tested for 5 cycles, 6 hours per cycle according to the profile</p>  <p>shown:</p>
Vibration Test	<p>Frequency: 10~55~10Hz Oct/min Amplitude: 1.5mm Duration: 2 hours per 3 perpendicular directions (XYZ)</p>
Operation Life Test	Pink noise applied at rated power for 96 hours
Drop Test	Dropped in a typical enclosure onto 40mm thick board from 75cm, 10x
Termination Strength Test	3.0N applied to each terminal in horizontal direction for 30 seconds; 2.0N applied to each terminal in vertical direction for 30 seconds

Parts should confirm to original performance within +/- 3dB following testing at rated power and a 6 hour rest period

Dimensions (Tolerance: $\pm 0.15\text{mm}$, unless otherwise stated)



Packaging



Specifications Revisions

Revision	Description	Date
A	Released from Engineering	8/15/2023

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. Specifications subject to change or withdrawal without notice.