



# PUI audio

Data Sheet

AS04504PR-F-WP-R

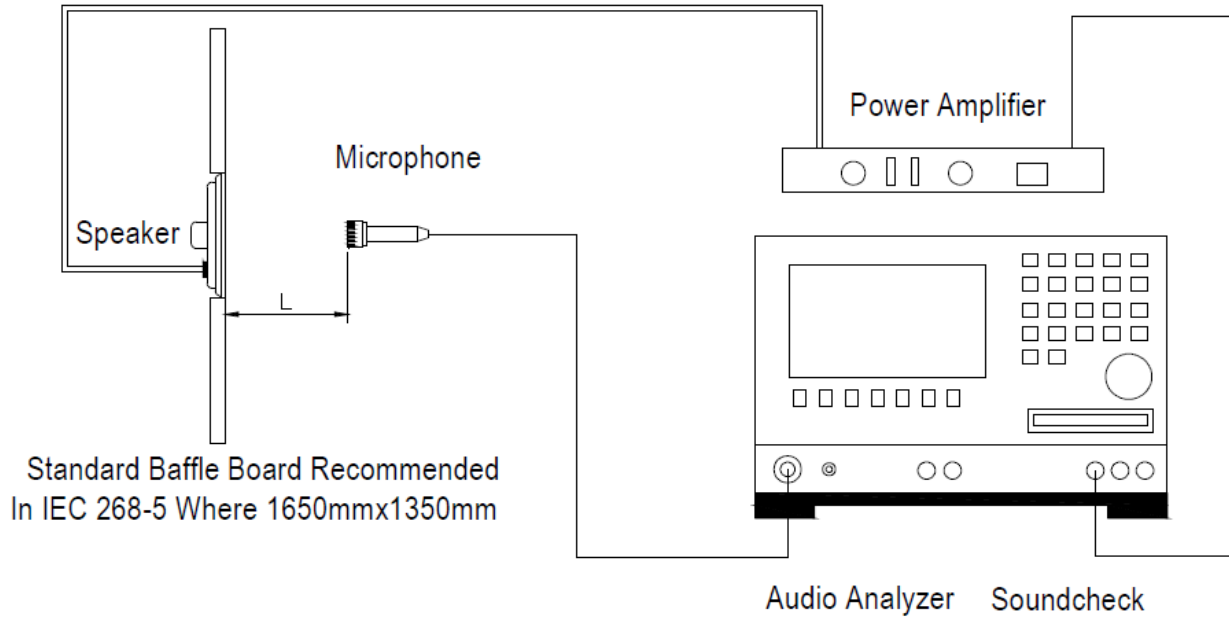
## Features:

- Flange Mount for easy installation
- IP 65 Rated

## Specifications

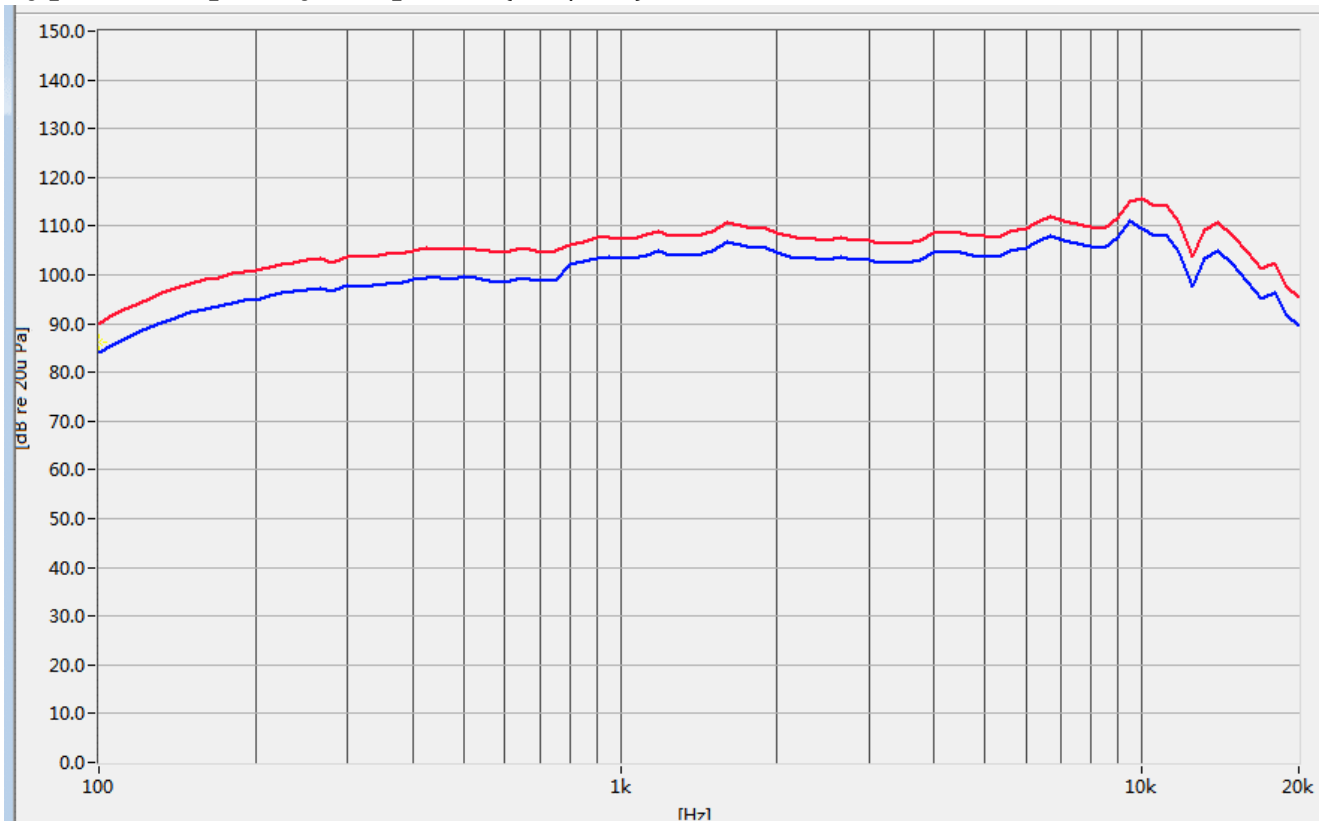
Parameters	Values	Units
Rated Input Power	5.0	Watts
Max Input Power	6.0	Watts
Impedance	$4 \pm 15\%$	Ohms
Output SPL (@ 0.8k, 1.0k, 1.2k, 1.5k Hz in 5.0W/0.1M)	$106 \pm 3$	dB
Resonant Frequency	$120 \pm 20\%$	Hz
Frequency Range	120 ~ 20,000	Hz
THD (@ 1K Hz, 1.0W)	<5%	
Frame Material	PBT	-
Magnet Material	NdFeB	-
Diaphragm Material	Rubber + Paper	-
Weight		Grams
Ingress Protection Rating	IP65	-
Buzz, Rattle, etc.	must be normal at sine wave between 120 ~ 5K Hz	-
Environmental Compliances	ROHS/REACH	-
Polarity	cone will move forward with positive dc current to "+" terminal	-
Storage Temperature	-40 ~ 85	°C
Operating Temperature	-20 ~ 60	°C

## Measurement Method



**L=10cm**

## Typical Frequency Response (1.0W/0.1M)



## Typical Thiele-Small Parameters (based on Golden Sample, up to 20% variance is normal)

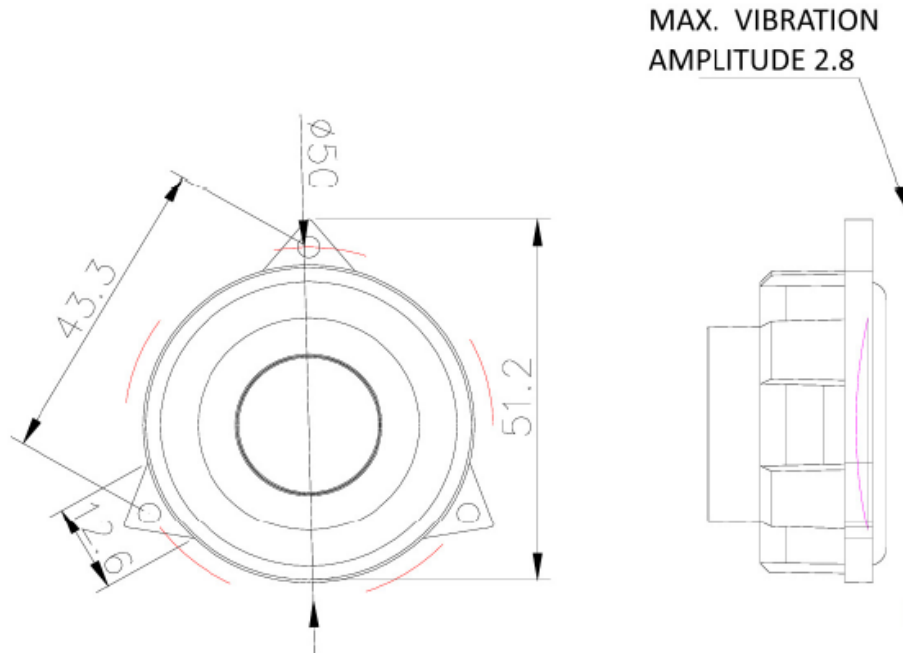
Specification	Value	Description
Re	3.50	DC resistance
Le	0.109	Inductance @ 10 kHz
Fs	116.1	Resonant Frequency
Mms	1.444	Moving Mass
Bl	3.013	Magnet Force Factor
Qms	3.485	Mechanical Q-factor
Qes	0.510	Electrical Q-factor
Qts	0.445	Total Q-factor
Vas	0.1345	Equivalent Air Volume of Suspension

## Reliability Testing

Type of Test	Test Specifications
High Temperature Test	96 hours at $85 \pm 3^\circ\text{C}$
Low Temperature Test	96 hours at $-40 \pm 3^\circ\text{C}$
Humidity Test	96 hours at $30 \pm 3^\circ\text{C}$ with relative humidity at 92~95%
Temperature Cycle Testing	<p>The cycle should be run 5 times, with each cycle consisting of:</p> <p style="text-align: center;">90 ~ 95 % RH</p> <p style="text-align: center;">65°C</p> <p style="text-align: center;">25°C</p> <p style="text-align: center;">0.5hr      6hrs      0.5hr      5hrs</p>
Vibration Test	Frequency: 10~55~10Hz Oct/min, Amplitude: 1.5mm Duration: 2 hours each of 3 perpendicular directions
Drop Test	Drop the speaker contained in normal box onto the surface of 40mm thick board 10 times from the height of 75cm
Load Test	Must perform normal with program White-Noise source at rated power for 96 hours

**After each test, parts should conform to original performance within  $\pm 3$  dB tested with Rated Power, after 6 hours of recovery period.**

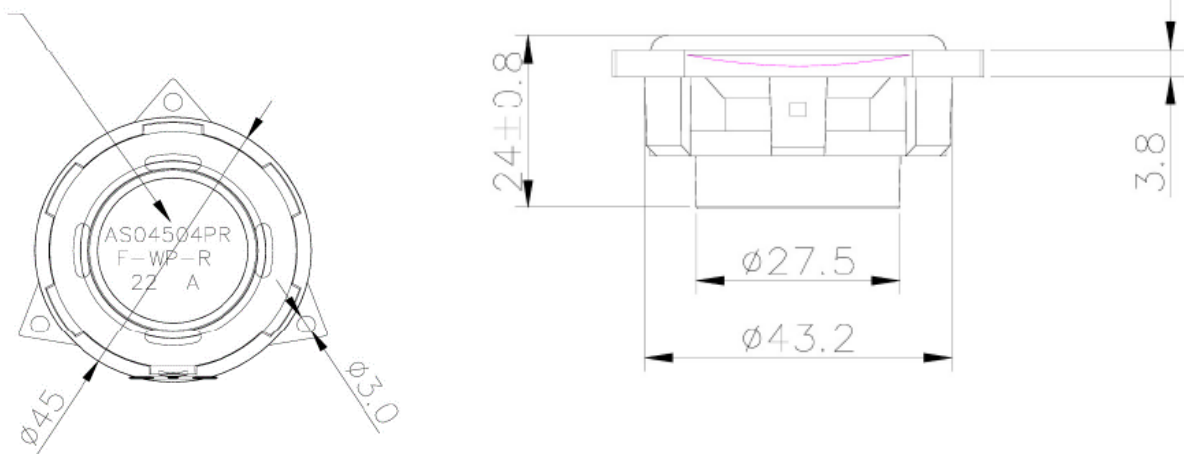
## Dimensions



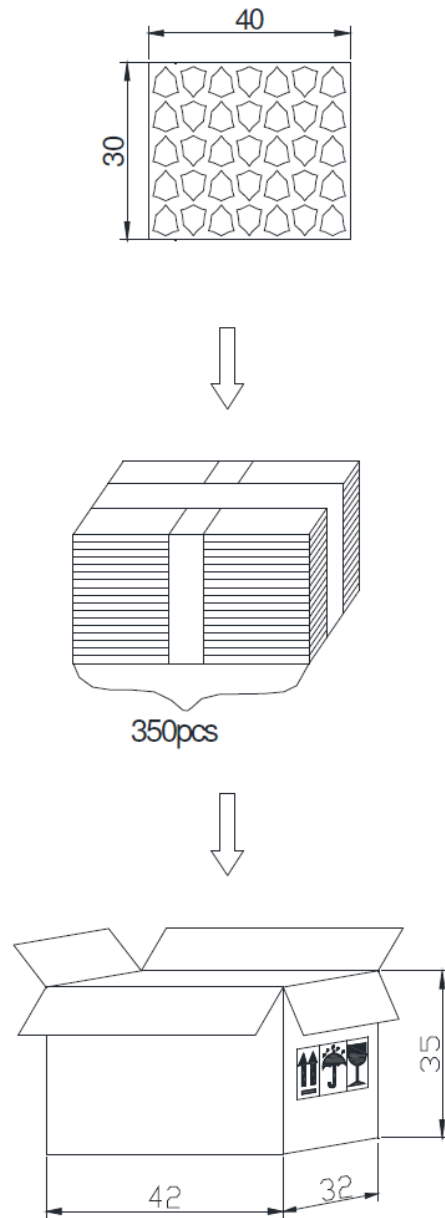
Inkjet print  
AS04504PR

F-WP-R

22 A (22: Year A:Month)



## Packaging



### Specifications Revisions

Revision	Description	Date
A	Released from Engineering	5/11/2022
B	Revised SPL, Resonant Frequency, Frequency Range, Drawing and Packaging	11/18/2022

Note:

- Unless otherwise specified:
  - All dimensions are in millimeters.
  - Default tolerances are  $\pm 0.5\text{mm}$  and angles are  $\pm 3^\circ$ .
- Specifications subject to change or withdrawal without notice.