



PUIaudio



Data Sheet

AS05004PS-2-F-WP-R

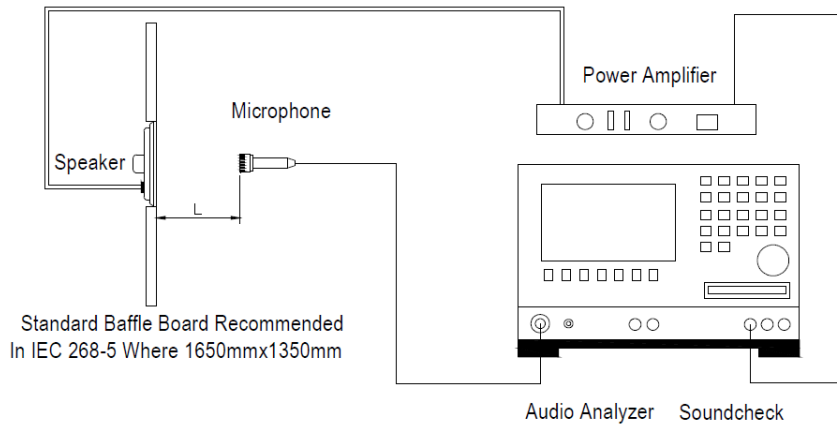
Features:

- Flange Mount for easy installation
- IP 65 Rated

Specifications

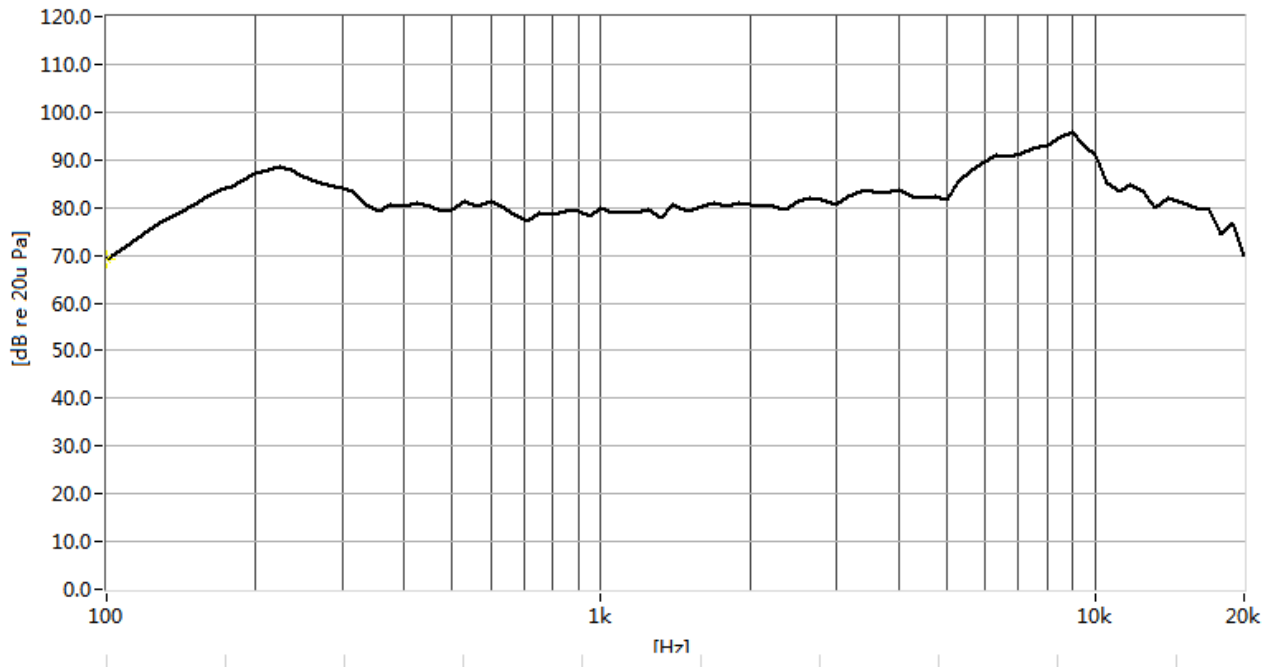
Parameters	Values	Units
Rated Input Power	3.0	Watts
Max Input Power	4.0	Watts
Impedance	$4 \pm 15\%$	Ohms
Output SPL (Avg. 1.0k, 1.2k, 1.5k, 2.0kHz @ 1.0W/0.5M)	80 ± 3	dB
Resonant Frequency	$200 \pm 20\%$	Hz
Frequency Range	Fo ~ 19,000	Hz
THD (@ 1K Hz, 1.0W)	$\leq 5\%$	
Frame Material	SPCC	-
Magnet Material	NdFeB	-
Diaphragm Material	Paper + Cu	-
Weight	24.5	Grams
Ingress Protection Rating	IP65	-
Buzz, Rattle, etc.	must be normal at sine wave between 200 ~ 10K Hz at 3.45 V	-
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



$L=50\text{cm}$

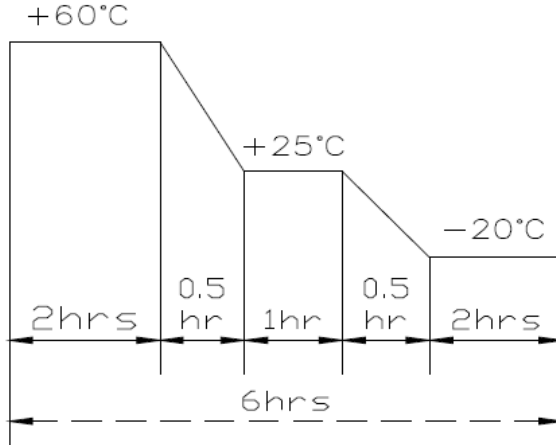
Typical Frequency Response (1.0W/0.5M)



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

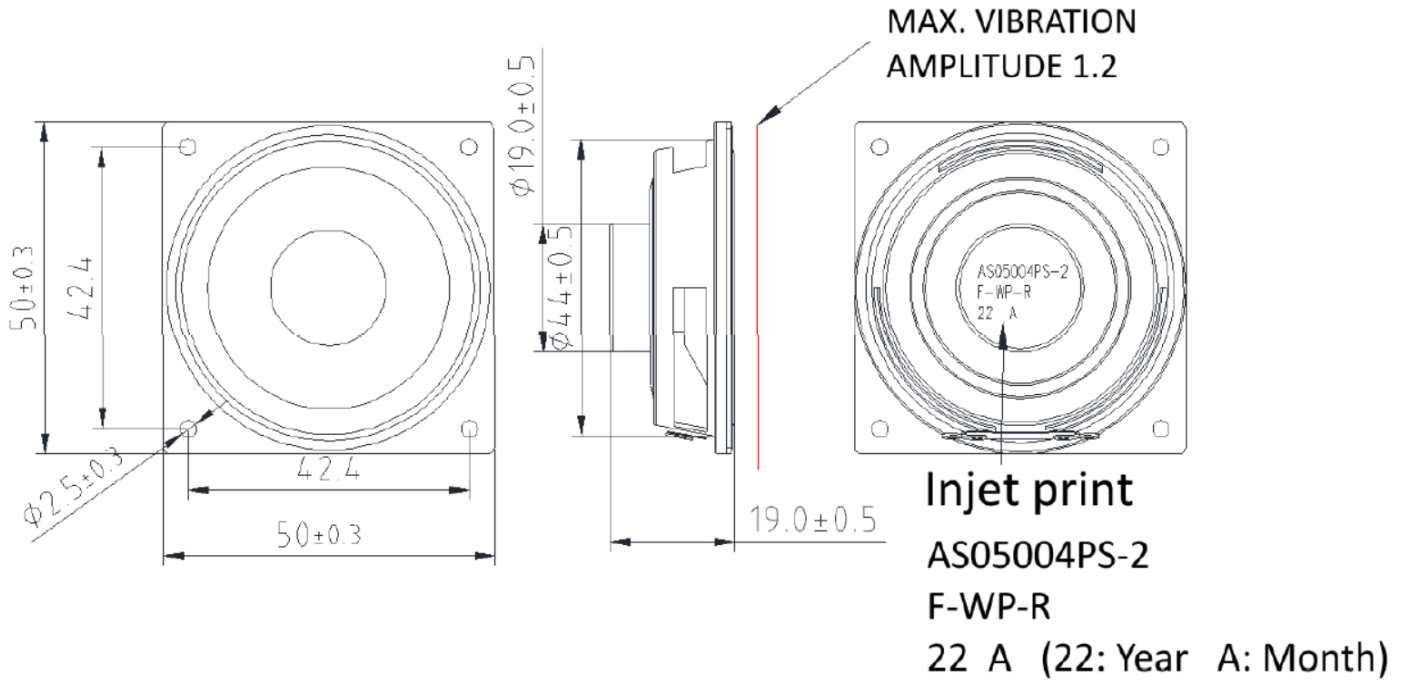
Specification	Value	Description
Re	3.64	DC resistance
Le	0.027	Inductance @ 10 kHz
Fs	377.8	Resonant Frequency
Mms	0.386	Moving Mass
Bl	1.112	Magnet Force Factor
Qms	2.948	Mechanical Q-factor
Qes	2.697	Electrical Q-factor
Qts	1.408	Total Q-factor
Vas	0.0157	Equivalent Air Volume of Suspension

Reliability Testing

Type of Test	Test Specifications
High Temperature Test	96 hours at $85 \pm 2^\circ\text{C}$
Low Temperature Test	96 hours at $-40 \pm 2^\circ\text{C}$
Humidity Test	48 hours at $40 \pm 2^\circ\text{C}$ with relative humidity at 90~95%
Temperature Cycle Testing	<p>The cycle should be run 4 times, with each cycle consisting of:</p>  <p>The diagram illustrates a temperature cycle with the following segments: a 2-hour dwell at $+60^\circ\text{C}$, a 0.5-hour ramp down to $+25^\circ\text{C}$, a 1-hour dwell at $+25^\circ\text{C}$, a 0.5-hour ramp down to -20°C, and a 2-hour dwell at -20°C. The total duration of one cycle is 6 hours.</p>
Vibration Test	Frequency 30 ± 15 Hz, Amplitude 1.5 mm for 3 Hours
Drop Test	75 CM free falling on Concrete floor, 10 times
Load Test	Must perform normal with program White-Noise source at rated power for 96 hours

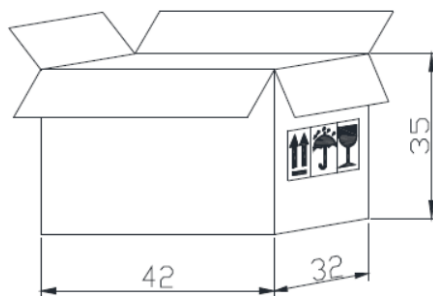
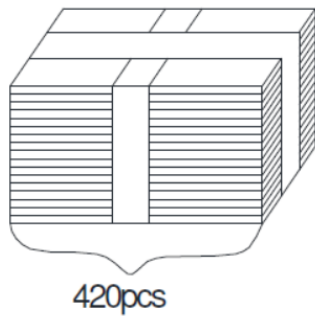
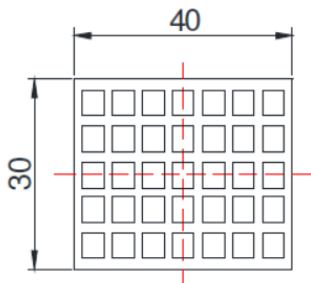
After each test, parts should conform to original performance within ± 3 dB tested with Rated Power, after 6 hours of recovery period.

Dimensions



Packaging

35pcs per tray
12 trays per stack
420pcs Master Carton



Specifications Revisions

Revision	Description	Date	Approved
A	Released from Engineering	5/11/2022	-
B	Revised Drawing and Packaging	11/2/2022	-

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.