



Data Sheet

AS05004PS-2-F-WP-R

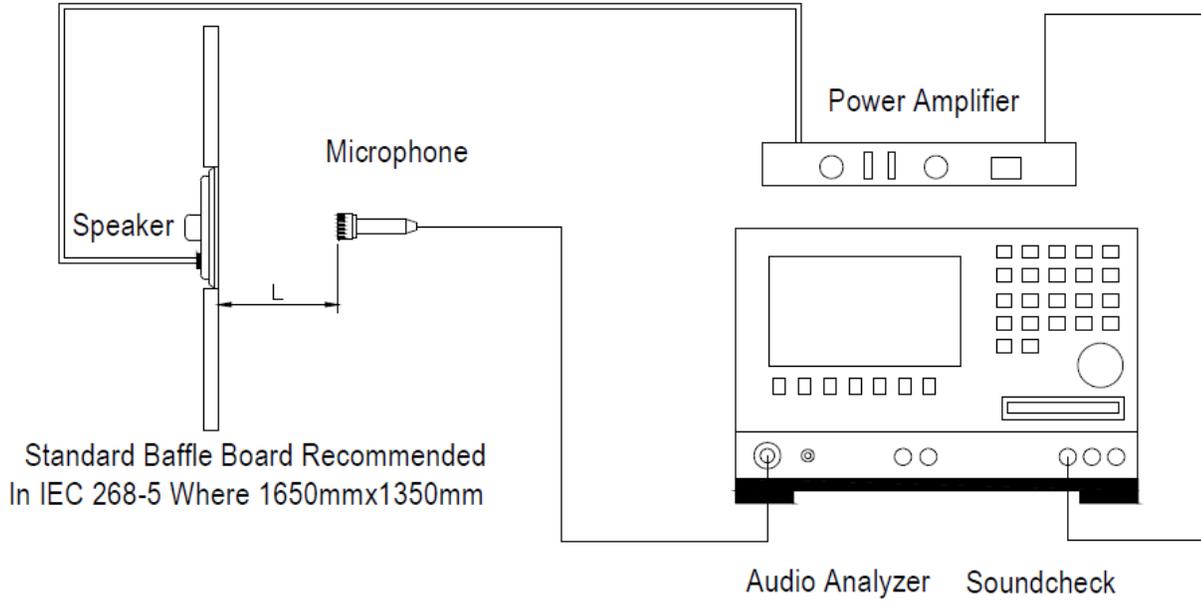
### Features:

- Flange Mount for easy installation
- IP 65 Rated

### Specifications

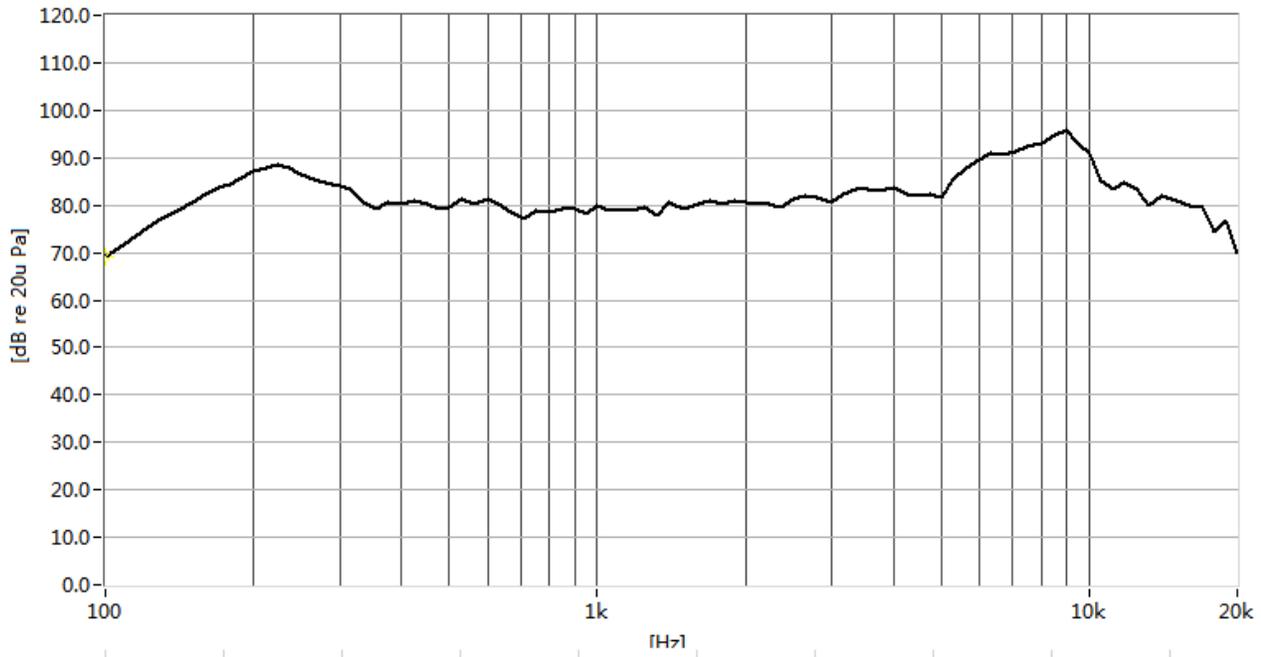
Parameters	Values	Units
Rated Input Power	3.0	Watts
Max Input Power	4.0	Watts
Impedance	4 ± 15%	Ohms
Output SPL (@ 1.0k, 1.2k, 1.5k, 2.0k Hz in 1.0W/0.5M)	80 ± 3	dB
Resonant Frequency	200 ± 20%	Hz
Frequency Range	200 ~ 19,000	Hz
THD (@ 1K Hz, 1.0W)	≤5%	
Frame Material	SPCC	-
Magnet Material	NdFeB	-
Diaphragm Material	Paper + Cu	-
Weight		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=50cm

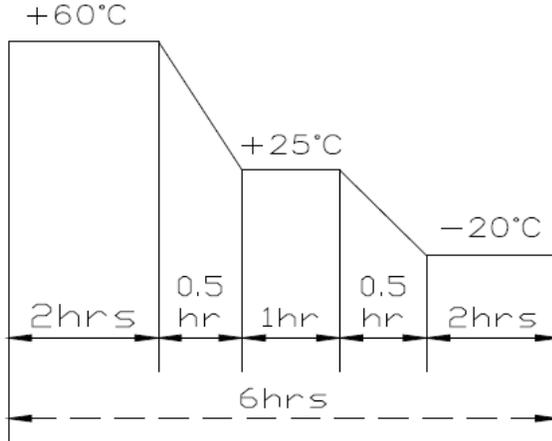
## Typical Frequency Response (1.0W/0.5M)



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

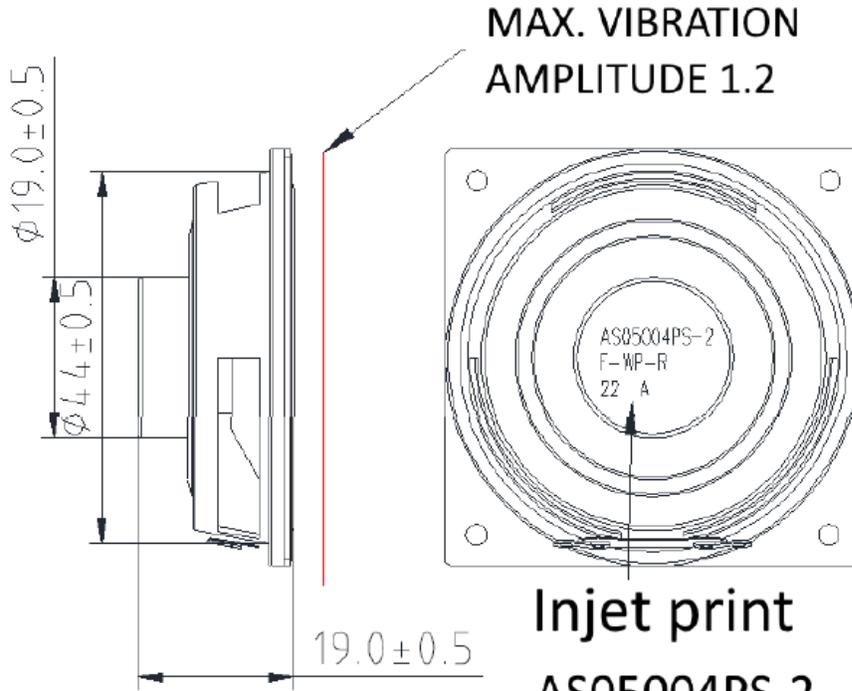
Specification	Value	Description
Re	3.64	DC resistance
Le	0.027	Inductance @ 10 kHz
Fs	377.8	Resonant Frequency
Mms	0.386	Moving Mass
Bl	1.112	Magnet Force Factor
Qms	2.948	Mechanical Q-factor
Qes	2.697	Electrical Q-factor
Qts	1.408	Total Q-factor
Vas	0.0157	Equivalent Air Volume of Suspension

## Reliability Testing

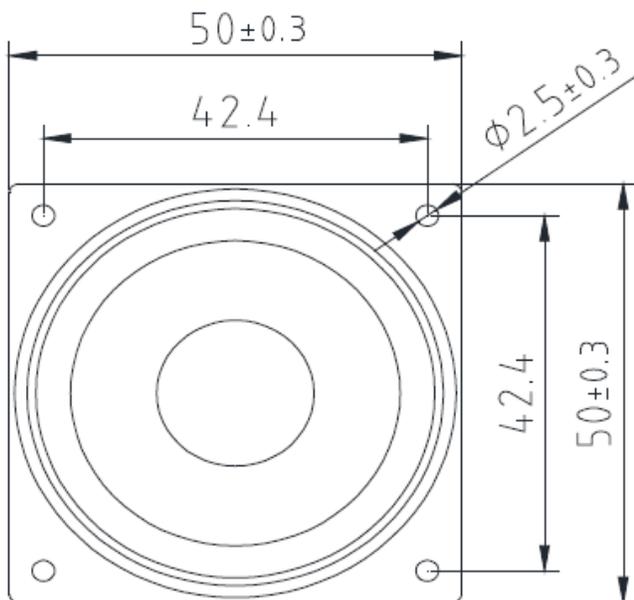
Type of Test	Test Specifications
High Temperature Test	96 hours at $85 \pm 2^\circ\text{C}$
Low Temperature Test	96 hours at $-40 \pm 2^\circ\text{C}$
Humidity Test	48 hours at $40 \pm 2^\circ\text{C}$ with relative humidity at 90~95%
Temperature Cycle Testing	<p>The cycle should be run 4 times, with each cycle consisting of:</p>  <p>The diagram illustrates a temperature cycle with the following segments: a 2-hour dwell at <math>+60^\circ\text{C}</math>, a 0.5-hour ramp down to <math>+25^\circ\text{C}</math>, a 1-hour dwell at <math>+25^\circ\text{C}</math>, a 0.5-hour ramp down to <math>-20^\circ\text{C}</math>, and a 2-hour dwell at <math>-20^\circ\text{C}</math>. A dashed line indicates the total cycle duration is 6 hours.</p>
Vibration Test	Frequency $30 \pm 15$ 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  $\pm 3$  dB tested with Rated Power, after 6 hours of recovery period.**

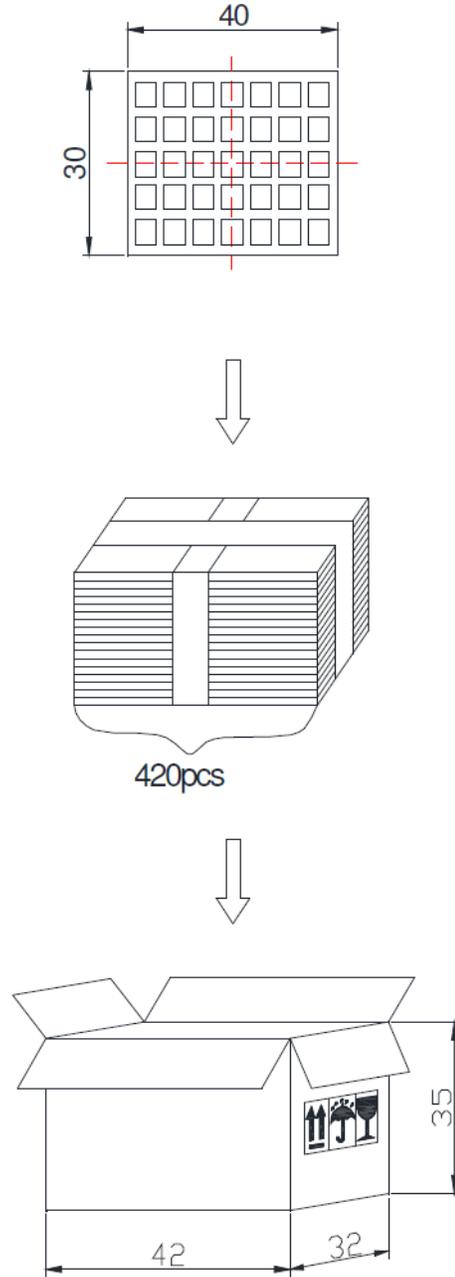
## Dimensions



**Injet print**  
**AS05004PS-2**  
**F-WP-R**  
**22 A (22: Year A: Month)**



## Packaging



### Specifications Revisions

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

**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.