



PUI audio

Data Sheet

AS04004MR-F-WP-R

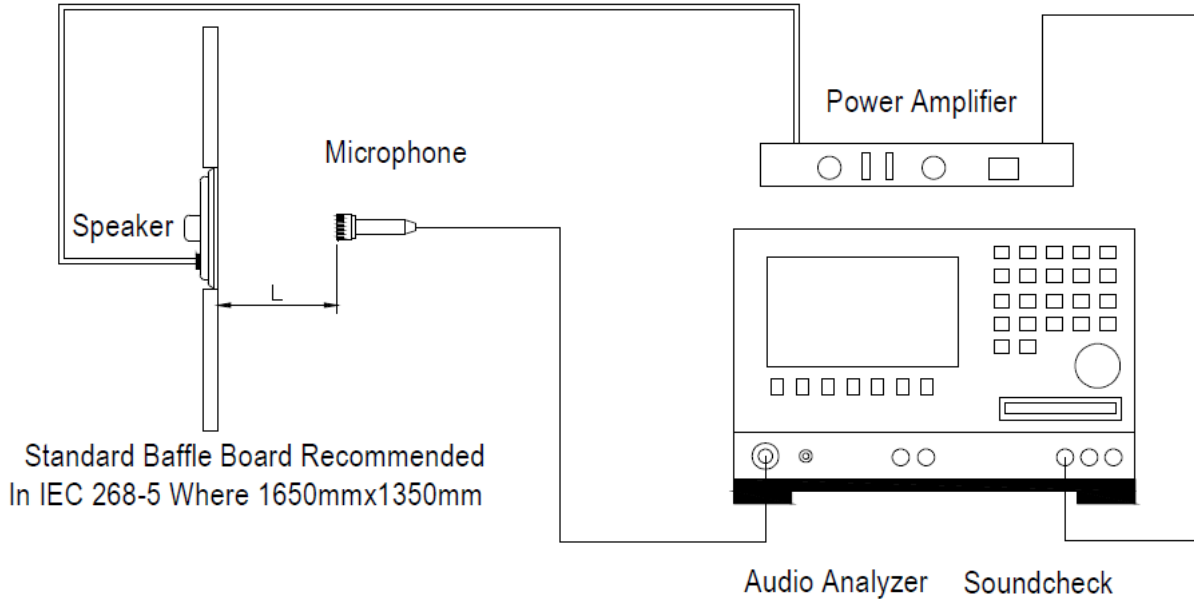
Features:

- Flange Mount for easy installation
- IP 65 Rated

Specifications

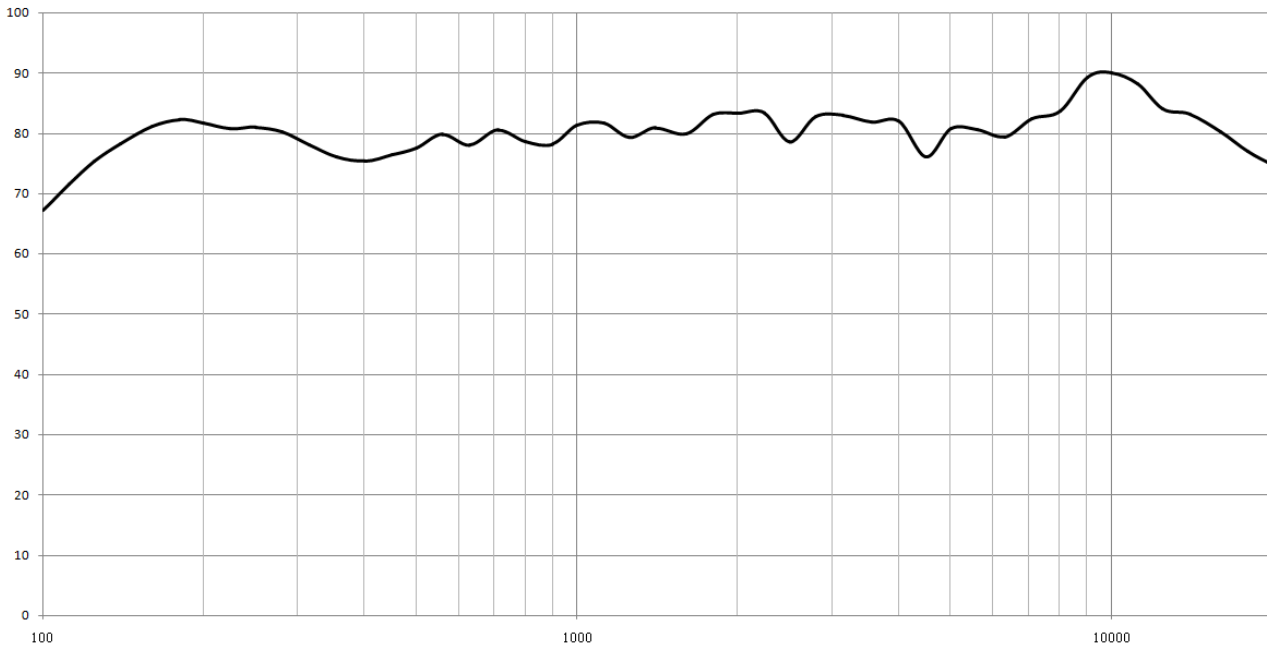
Parameters	Values	Units
Rated Input Power	3.0	Watts
Max Input Power	5.0	Watts
Impedance	4 ± 15%	Ohms
Output SPL (@ 0.8k, 1.0k, 1.2k, 1.5k Hz in 1.0W/1.0M)	80 ± 3	dB
Resonant Frequency	160 ± 20%	Hz
Frequency Range	160 ~ 20,000	Hz
THD (@ 1K Hz, 1.0W)	<10%	
Frame Material	SPCC	-
Magnet Material	NdFeB	-
Diaphragm Material	Rubber + Paper	-
Weight	25	Grams
Ingress Protection Rating	IP65	-
Buzz, Rattle, etc.	must be normal at sine wave between 160 ~ 5K Hz	-
Environmental Compliances	ROHS/REACH	-
Polarity	cone will move forward with positive dc current to "+" terminal	-
Storage Temperature	-40 ~ 85	°C
Operating Temperature	-25 ~ 60	°C

Measurement Method



L=100cm

Typical Frequency Response (1.0W/0.1M)



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

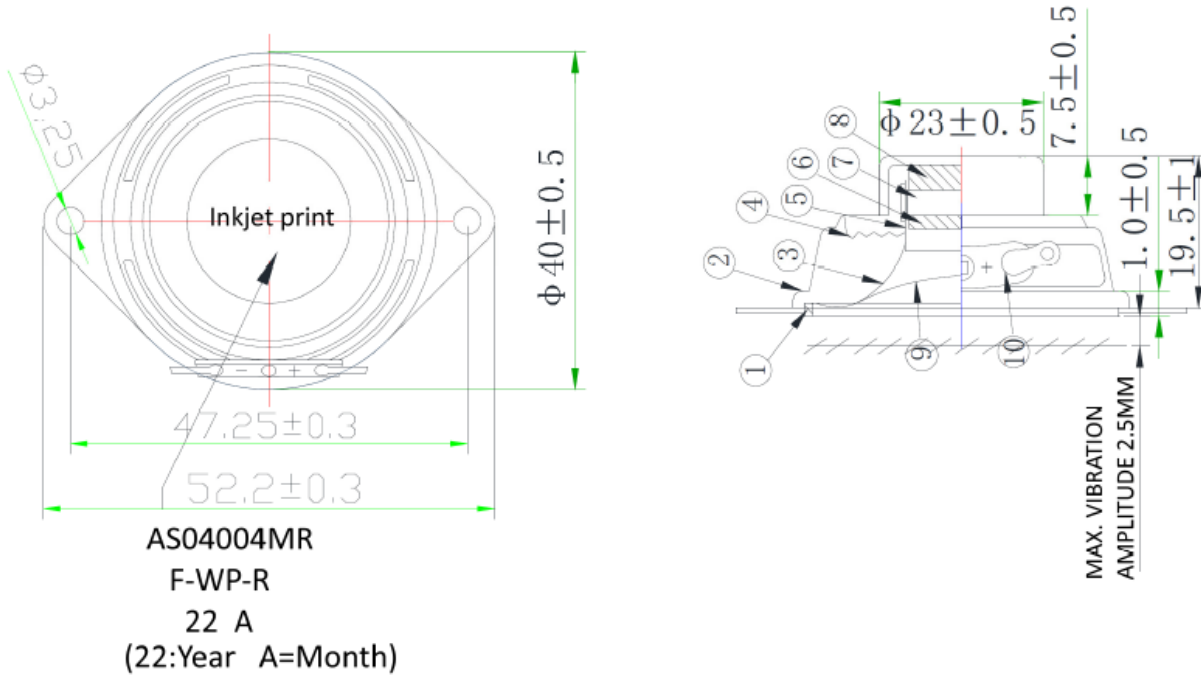
Specification	Value	Description
Re	3.95	DC resistance
Le	0.075	Inductance @ 10 kHz
Fs	158.9	Resonant Frequency
Mms	0.635	Moving Mass
Bl	2.159	Magnet Force Factor
Qms	5.046	Mechanical Q-factor
Qes	0.538	Electrical Q-factor
Qts	0.486	Total Q-factor
Vas	0.1447	Equivalent Air Volume of Suspension

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. A dashed line indicates the total cycle duration 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

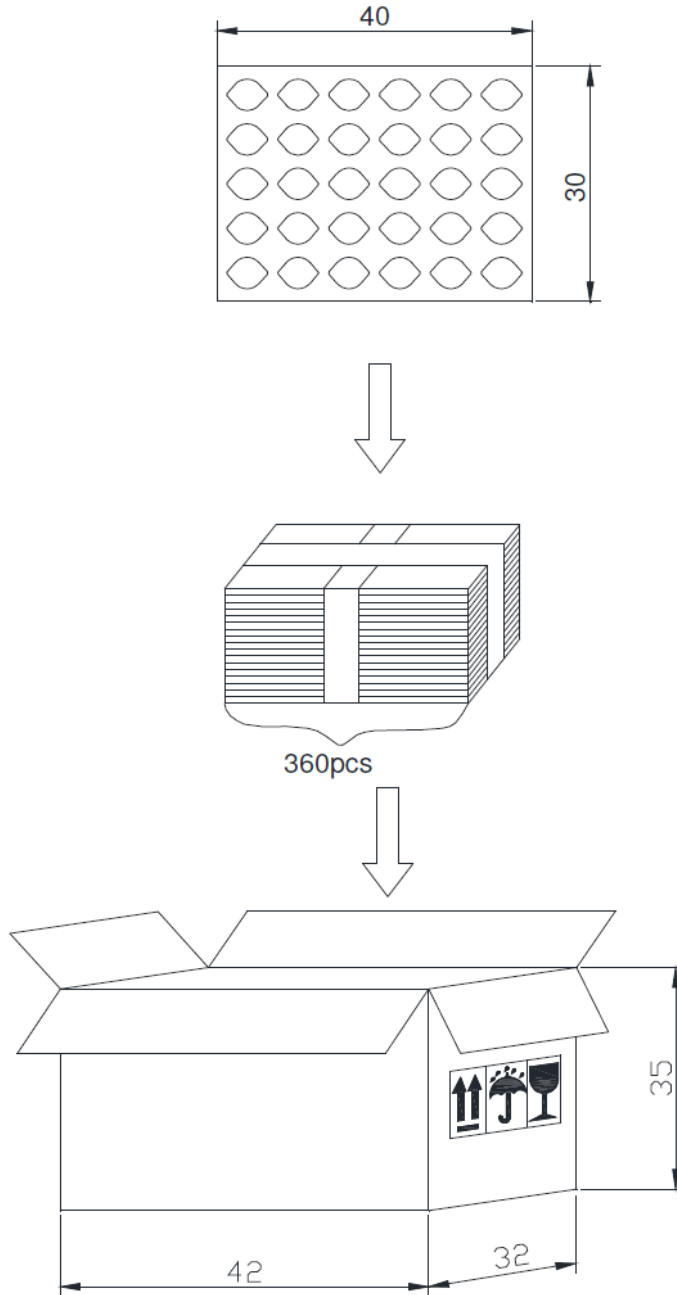
After each test, parts should conform to original performance within ± 3 dB tested with Rated Power, after 6 hours of recovery period.

Dimensions



NO	Component	Material
1	Frame	SPCC
2	Cone	Rubber+ Paper
3	Damper	Cloth
4	Voice coil	KAP+SV
5	Magnet	NdFeB
6	Plate	SPCC
7	Magnet	NdFeB
8	Dust cap	PET
9	Terminals	Paper+steel

Packaging



Specifications Revisions

Revision	Description	Date
A	Released from Engineering	5/11/2022
B	Revised SPL, Drawing, 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.