



## Data Sheet

# AS07108PO-LW152-WR-R

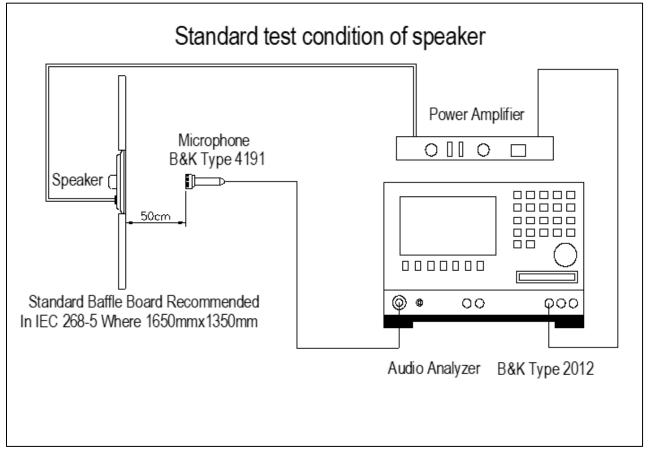
#### Features:

- 71mm x 41mm x 25mm oval shape
- 8 Ω impedance, 3W rated input power
- Water resistant coating
- 152mm (6 in) lead wires

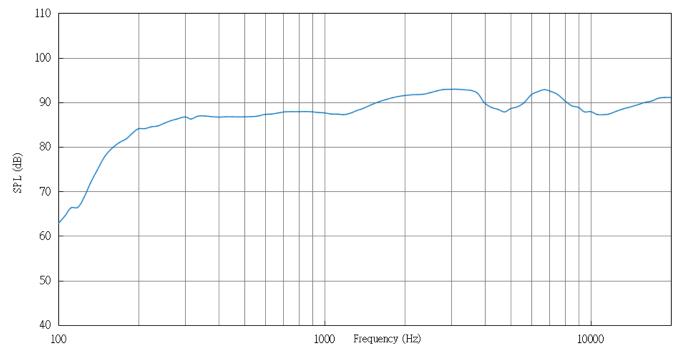
#### **Specifications**

Parameters	Values	Units
Rated Input Power	3	Watts
Max Input Power	5	Watts
Impedance	8 ± 15%	Ohms
Output SPL at 1W/50cm		
(At 0.8, 1.0, 1.2, 1.5 kHz)	86 ± 3	dB
Resonant Frequency	250 ± 70	Hz
Frequency Range	100 ~ 20,000	Hz
THD	< 5%	-
Frame Material	Metal	-
Magnet Material	NdFeB	-
Diaphragm Material	Treated Paper	-
Terminal Material	Lead Wires	UL1571 AWG #26
Weight	38	Grams
Acceptable Soldering Methods	Hand Solder	-
Delevity	Cone will move forward with positive (+) DC current applied to positive (red) terminal	
Polarity		-
Storage Temperature	$-30 \sim +70$	°C
Operating Temperature	-20 ~ +60	°C
Environmental Compliances	ROHS/REACH	-

## **Measurement Method**



### Typical Frequency Response (Measured at 50cm, 1W)



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

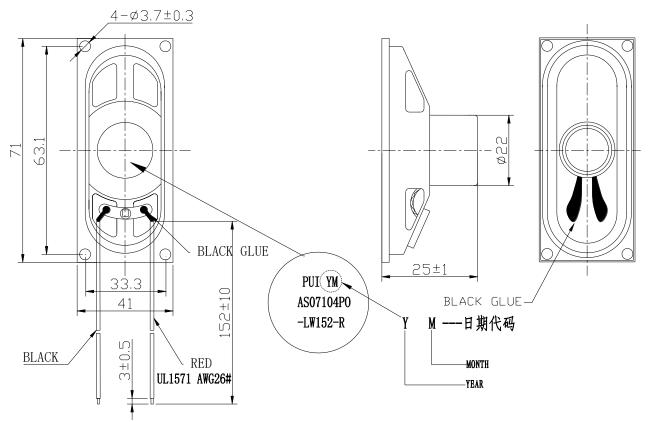
Specification	Value	Description
Re	3.686	DC resistance
Le	0.1108	Inductance @ 10 kHz
Fs	365.4	Resonant Frequency
Mms	1.378	Moving Mass
Bl		Magnet Force Factor
Qms	5.807	Mechanical Q-factor
Qes	8.232	Electrical Q-factor
Qts	3.405	Total Q-factor
Vas	0.1092	Equivalent Air Volume of Suspension
Xmax		One-Way Voice Coil Travel

## **Reliability Testing**

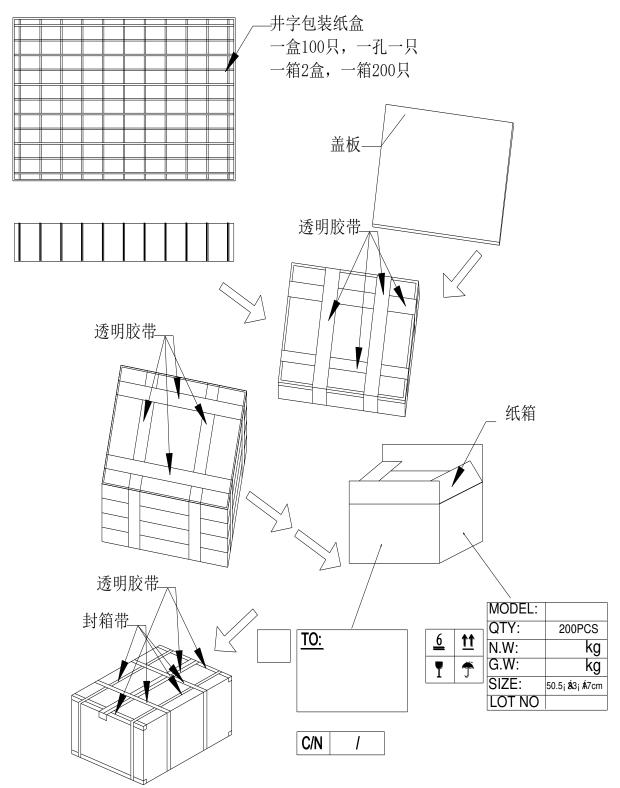
Type of Test	Test Specifications
High Temperature Test	Keep 96 hours at $+70^{\circ}C \pm 3^{\circ}C$ and leave 3 hours in normal temperature and then check
Low Temperature Test	Keep 96 hours at -30°C±3°C and leave 3 hours in normal temperature and then check
Humidity Test	Keep 96 hours at + 40°C±3°C relative humidity 95% and leave 3 hours in normal temperature and then checked.
Temperature Cycle Testing	Low temperature: -30°C±3°C, temperature:+70°C±3°C, cycle: 1 hour/cycle each, and then keep 5 cycles in a room.
	10~55~10Hz sin-wave sweep 15min. 5G(constant)
Vibration Test	X,Y, Z 3 direction. 2 hours each, total 6 hours.
Max Power Test	Max power 1 min on – 2 min off 10 cycles.
	Free drop from 100cm height to a board of 20mm thick x,y, z 6
Drop Test	direction. 1 times each, total 6 times
Load Test	Rated Power white noise is applied for 96 hours

After tests, part SPL shall be within ±3dB.

# Dimensions (Red Wire +)



# Packaging



#### Specifications Revisions

Revision	Description	Date
А	RELEASED FROM ENGINEERING	2/14/2014
В	Change wire AWG from 28 to 26, packaging adjusted for individual pocket trays	4/7/2022

Note:

1.

Unless otherwise specified:

- A. All dimensions are in millimeters.
- B. Default tolerances are  $\pm 0.5$  mm and angles are  $\pm 3^{\circ}$ .
- 2. Specifications subject to change or withdrawal without notice.
- **3**. Cone has been treated for water resistance.