



## Data Sheet

## AS07104PO-LW152-R

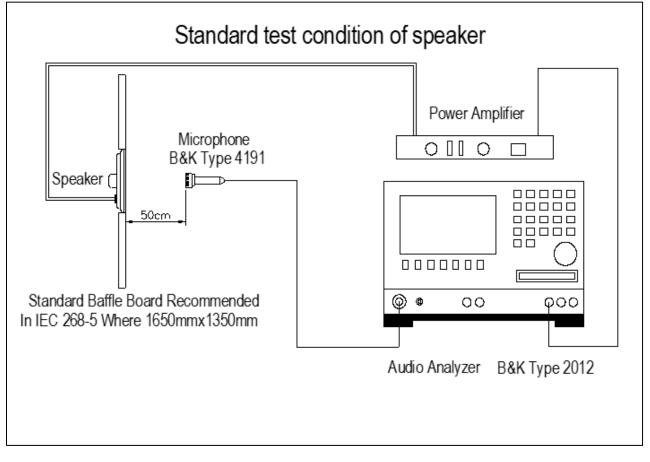
#### Features:

- 71mm x 41mm x 25mm oval shape
- 4  $\Omega$  impedance, 3W rated input power
- 152mm (6 in) lead wires

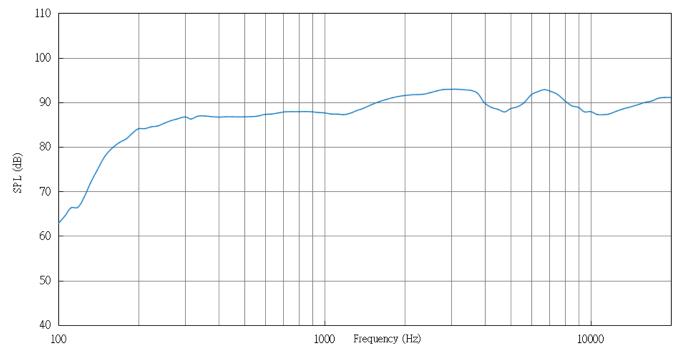
## **Specifications**

Parameters	Values	Units	
Rated Input Power	3	Watts	
Max Input Power	5	Watts	
Impedance	4 ± 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		- °C	
Storage Temperature	$-30 \sim +70$	°C	
Operating Temperature	$-20 \sim +60$	-u	
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)

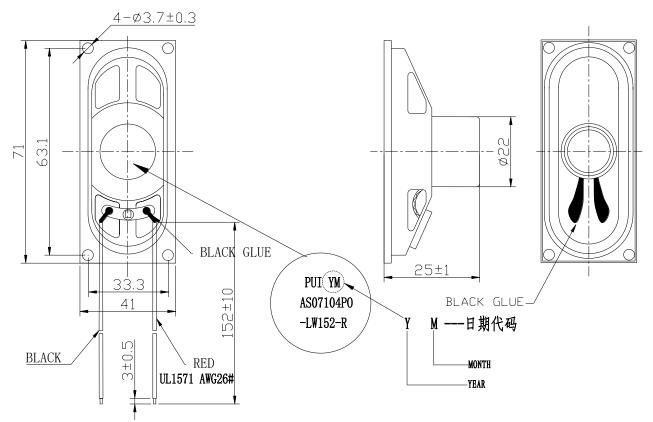
Specification	Value	Description	
Re	3.686	DC resistance	
Le	0.1108	Inductance @ 10 kHz	
Fs	365.4	Resonant Frequency	
Mms	1.378	Moving Mass	
Bl		Magnet Force Factor	
Qms	5.807	Mechanical Q-factor	
Qes	8.232	Electrical Q-factor	
Qts	3.405	Total Q-factor	
Vas	0.1092	Equivalent Air Volume of Suspension	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

### **Reliability Testing**

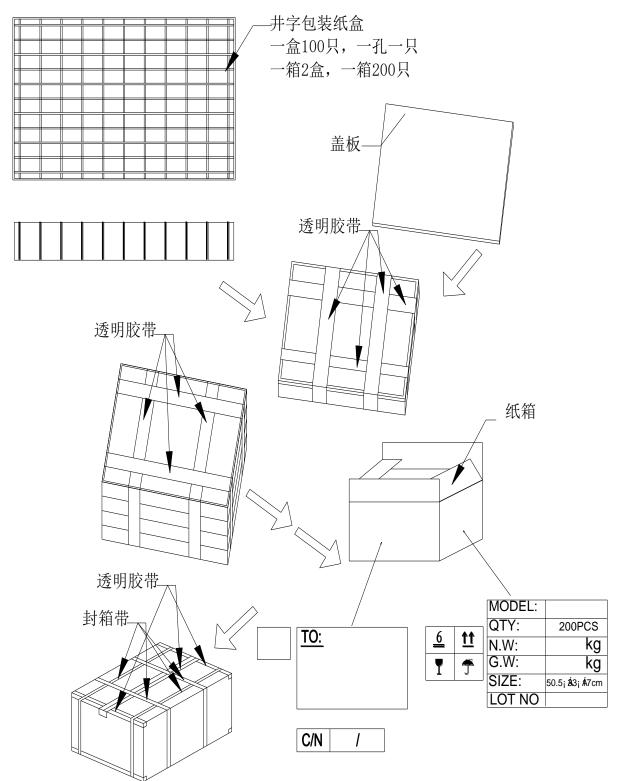
Type of Test	Test Specifications	
High Temperature Test	Keep 96 hours at $+70^{\circ}C \pm 3^{\circ}C$ and leave 3 hours in normal temperature and then check	
Low Temperature Test	Keep 96 hours at -30°C±3°C and leave 3 hours in normal temperature and then check	
Humidity Test	Keep 96 hours at + 40°C±3°C 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:

- Unless otherwise specified: 1.

  - A. All dimensions are in millimeters.
    B. Default tolerances are ±0.5mm and angles are ±3°.
- 2. Specifications subject to change or withdrawal without notice.