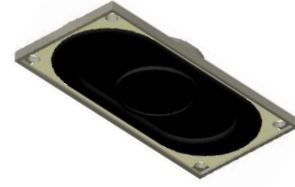




# PUI audio



Data Sheet

AS04008CO-R

## Features:

- 40mm x 20mm x 5.8mm rectangular shape
- 8  $\Omega$  impedance, 2 W rated input power

## Specifications

Parameters	Values	Units
Rated Input Power	2	Watts
Max Input Power	3	Watts
Impedance	8 $\pm$ 15%	Ohms
Output SPL at 1W/50cm (At 0.8, 1.0, 1.2, 1.5 kHz)	83 $\pm$ 3	dB
Resonant Frequency (Without Baffle)	500 $\pm$ 20%	Hz
Frequency Range	200 ~ 20,000	Hz
THD (1W, 1kHz input)	< 5%	-
Frame Material	Metal	-
Magnet Material	NdFeB	-
Diaphragm Material	Cloth	-
Weight	7.6	Grams
Acceptable Soldering Methods	Hand Solder	-
Polarity	Cone will move forward with positive (+) DC current applied to positive terminal	-
Storage Temperature	-30 ~ +70	$^{\circ}$ C
Operating Temperature	-20 ~ +60	$^{\circ}$ C
Environmental Compliances	ROHS/REACH	-

## Measurement Method

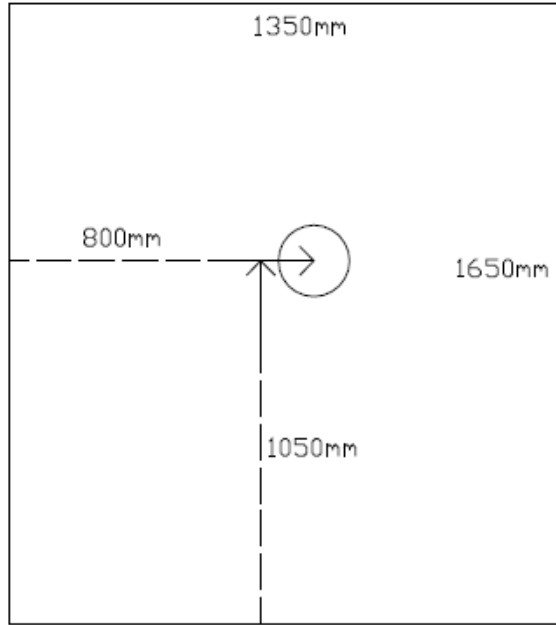
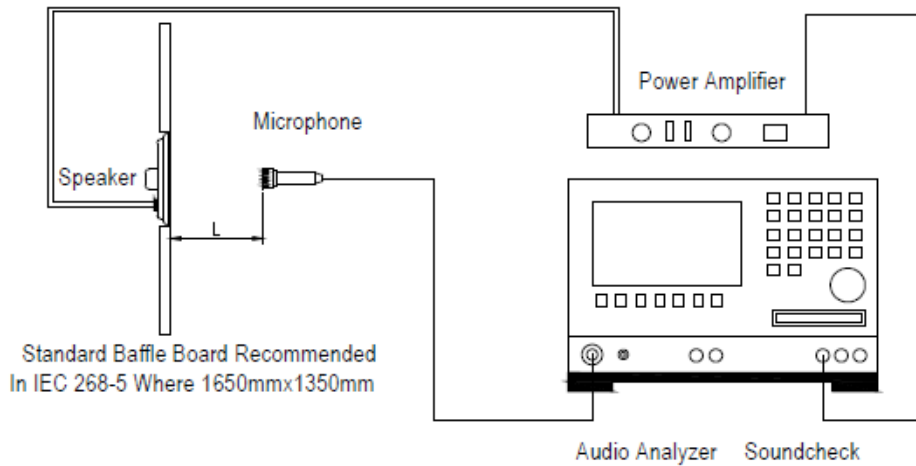


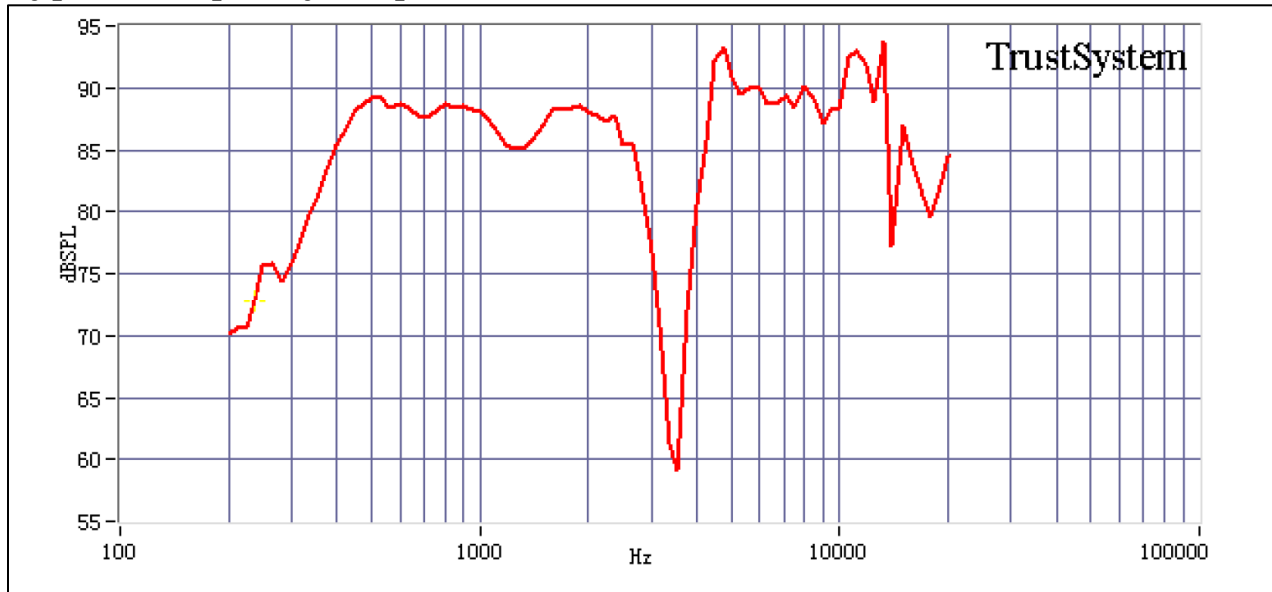
Fig. 1 Block Diagram for Measurement Method

### Standard test condition of speaker



**L=50cm**

## 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	7.4 $\Omega$	DC resistance
Le		Inductance @ 10 kHz
Fs	405.442 Hz	Resonant Frequency
Mms	110.258 mg	Moving Mass
Bl	574.293 Tm	Magnet Force Factor
Qms	3.261	Mechanical Q-factor
Qes	6.302	Electrical Q-factor
Qts	2.149	Total Q-factor
Vas	.039798 l	Equivalent Air Volume of Suspension
Xmax		One-Way Voice Coil Travel

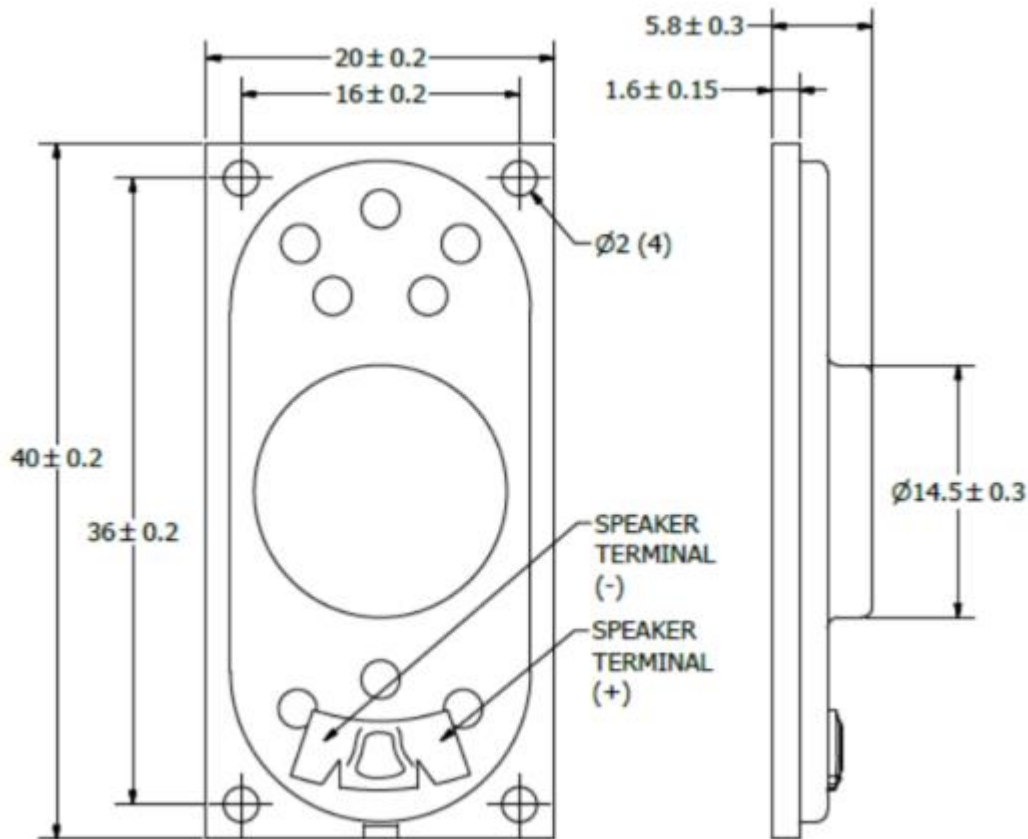
## Reliability Testing

Type of Test	Test Specifications
High Temperature Test	96 hours at +65°C $\pm$ 3°C with random humidity
Low Temperature Test	96 hours at -20°C $\pm$ 3°C with random humidity
Humidity Test	48 hours at +40°C $\pm$ 3°C with relative humidity between 90~95%
Temperature Cycle Testing	Part subjected to 5 cycles 

Vibration Test	30 ± 15 Hz, 1.5mm amplitude vibration applied for 3 hours
Drop Test	100cm free fall onto concrete floor, 2 times
Load Test	White-noise source at rated power applied for 96 hours
Terminal Strength Test	3.0N (0.306kg) horizontal force applied for 10 seconds 2.0N (0.204kg) vertical force applied for 10 seconds

**After any of the above tests, part should conform to the original performance within ±3dB with rated power, after a recovery period of 6 hours.**

**Dimensions** (Positive terminal indicated by “+” marking)



**Specifications Revisions**

Revision	Description	Date
-	RELEASED FROM ENGINEERING	2/21/2006
A	REVISED POWER RATINGS, SPL & FREQ	3/6/2006
B	REVISED TO INVENTOR 3D DRAWING TEMPLATE	12/22/2008
C	REVISED RESONANT FREQUENCY	9/25/2012

Note:

- Unless otherwise specified:
  - All dimensions are in millimeters.
  - Default tolerances are ±0.5mm and angles are ±3°.
- Specifications subject to change or withdrawal without notice.
- This part is ROHS 2015/863/EU compliant.