

**pui
audio**™ inc
a projects unlimited company

AS04004PR-R 40mm Speaker

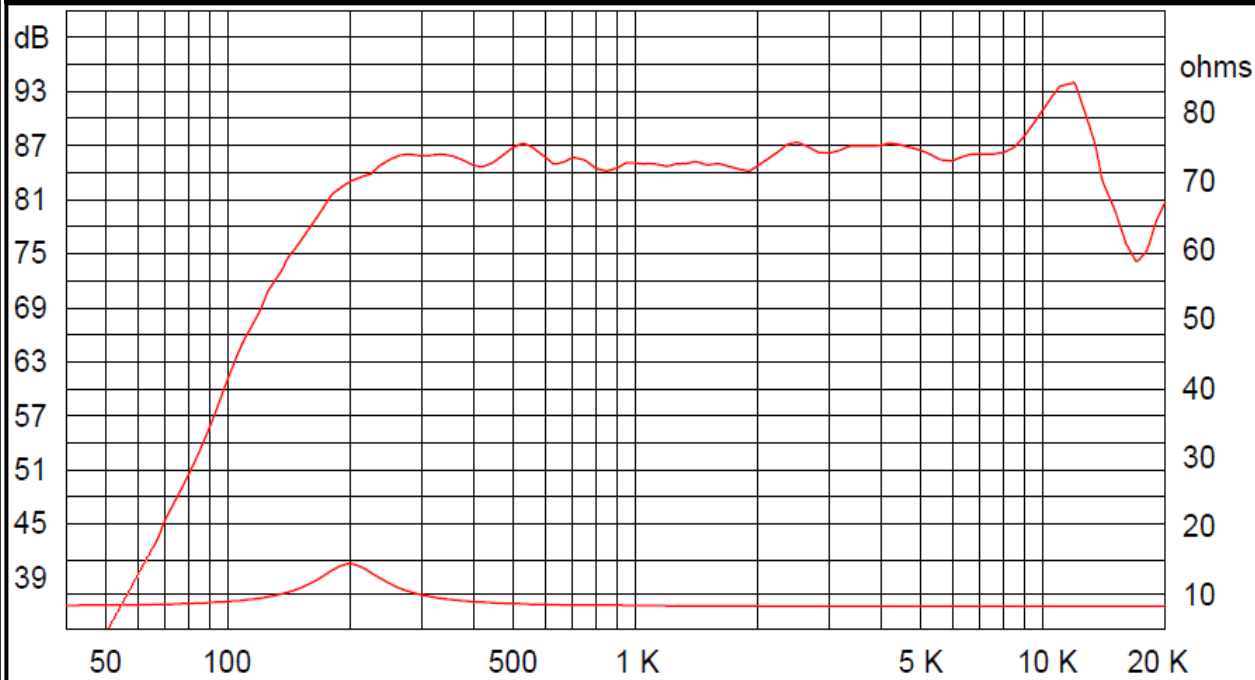


3541 Stop Eight Road • Dayton, Ohio 45414

Product Overview

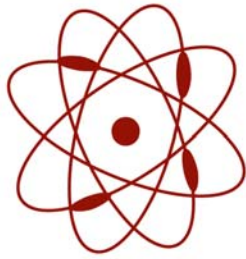
- 40mm diameter speaker with Neodymium magnet for 86 dB sensitivity
- 3W continuous, 4W maximum power handling and 4Ω impedance
- Rubber surround and treated paper cone for weather resistance

Frequency Response (1W @ 0.5 meters) and Impedance Graph



2011-01-01 to 2015-01-01





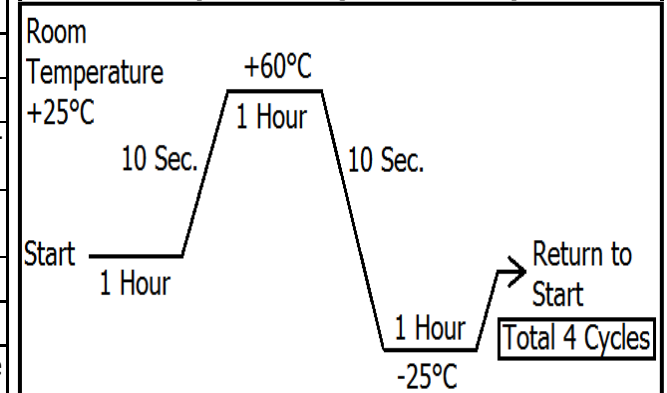
pui audio™ inc
a projects unlimited company

AS04004PR-R 40mm Speaker

Mechanical and Environment Testing

Test Description	Test Condition
High Temperature	60°C (±2°C) with random humidity for 96 hours
Low Temperature	-25°C (±2°C) with random humidity for 96 hours
Humidity	40°C (±2°C) with 90% to 95% relative humidity for 48 hours
Vibration	1.5 mm movement modulated at 30 Hz (±15 Hz) for 3 hours
Drop Test	75 cm free fall onto concrete floor, 10 cycles
After tests, speaker shall rest for 1 hour. SPL shall not deviate ±3 dB from pre-test measurement.	
Temperature Cycle Test	-25°C to 60°C, 4 cycles (refer to Temperature Cycle Test Graph)
After test, speaker shall rest for 1 hour. SPL shall not deviate ±3 dB from pre-test measurement.	

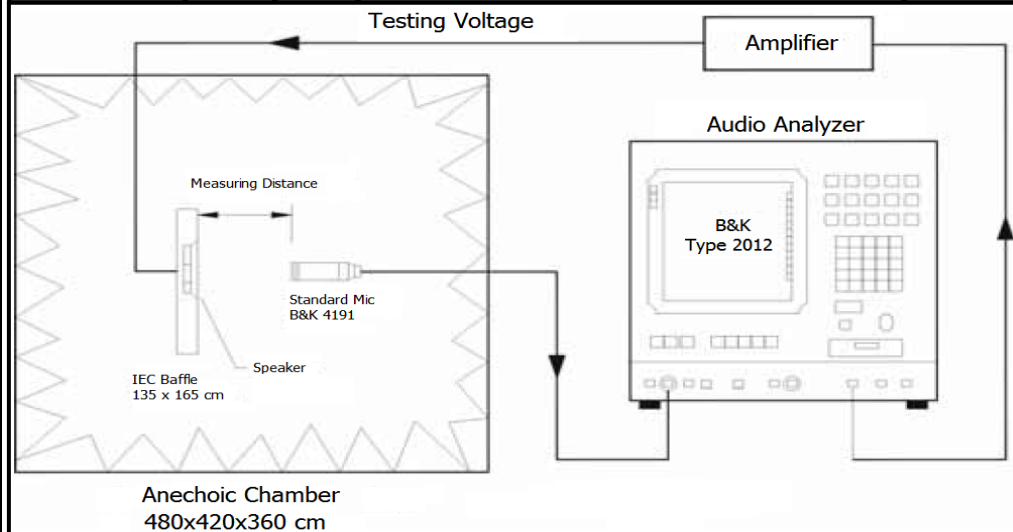
Temperature Cycle Test Graph



Thiele-Small Parameters

Specification	AS04004PR-R
Fo (Hz)	199
Qes	1.08
Qms	5.86
Qts	0.91
Vas (W²/V² s⁴)	134
Sd (mm²)	922
Mms (mg)	900
Xmax (mm)	0.8
Re (ohm)	4.13
SPL (dB) 1W/1M	80.5
BL (T)	1.5

Frequency Response and SPL Measurement Setup



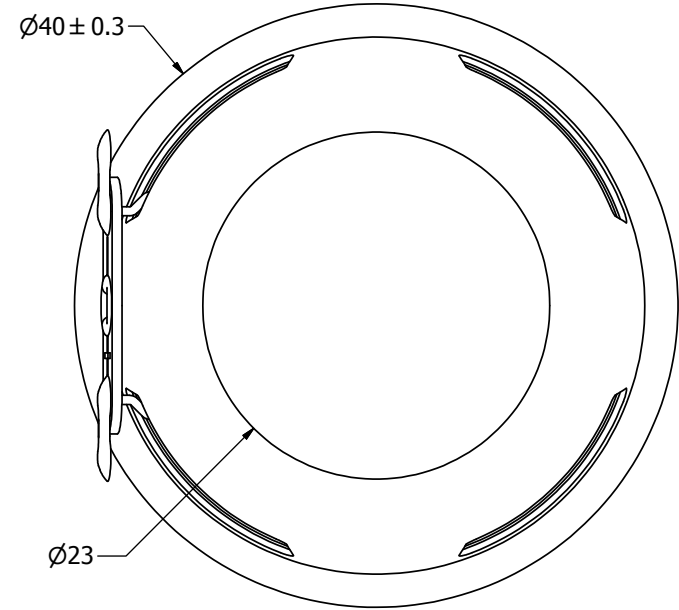
SPECIFICATIONS

PARAMETERS	VALUES	UNITS
RATED INPUT POWER	3	W
MAX INPUT POWER	4	W
IMPEDANCE	4 ± 15%	OHM
OUTPUT SPL @ 1W/0.5M (AT 0.6, 0.8, 1.0, 1.2 kHz)	86 ± 3	dBA
DISTORTION (MAX.)	5%	-
RESONANT FREQUENCY	180 ± 20%	Hz
FREQUENCY RANGE	100 ~ 20,000	Hz
HOUSING MATERIAL	METAL	-
CONE MATERIAL	PAPER	-
MAGNET MATERIAL	RARE EARTH	-
OPERATING TEMPERATURE	-40 ~ +85	°C
WEIGHT	25	grams

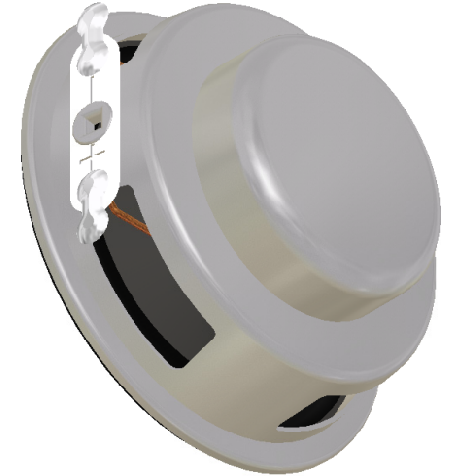
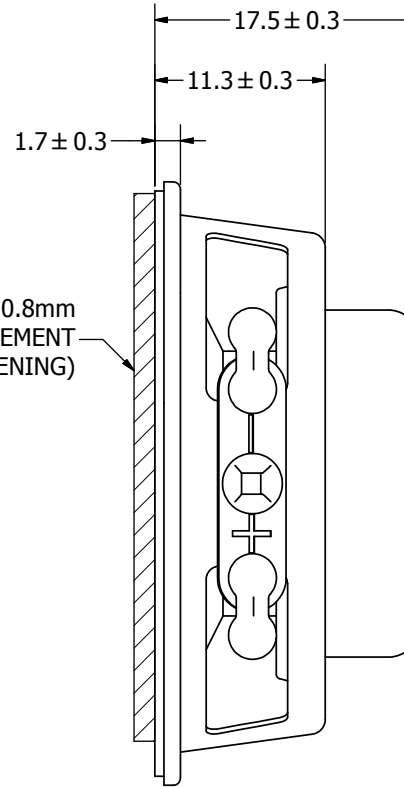
THIS DOCUMENT CONTAINS DATA PROPRIETARY TO PROJECTS UNLIMITED, INC. ANY USE OR REPRODUCTION, IN ANY FORM, WITHOUT PRIOR WRITTEN PERMISSION OF PROJECTS UNLIMITED, INC. IS PROHIBITED.
©2003, Projects Unlimited Inc.

REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	5/4/2010	
A	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	6/15/2010	B.R.




ALLOW AT LEAST 0.8mm FOR DIAPHRAGM MOVEMENT (Ø35.6 BAFFLE OPENING)



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. SPECIFICATIONS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE.
3. THIS PART IS RoHS 2002/95/EC COMPLIANT.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS, TOLERANCES ARE ±0.5 AND ANGLES ARE ±3°.	SIZE A3	Designed by	Date	Checked by	Date	Approved by	Date	Drawn Date	
		J.D.	5/4/2010	C.W.	5/4/2010	B.R.	5/4/2010	6/15/2010	
AS04004PR-R.idw				AS04004PR-R					
				Speaker				Edition	Sheet
								-	1 / 1