

**pui  
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## AS04004PO-2-WR-R 40 x 28.5mm Water Resistant Speaker

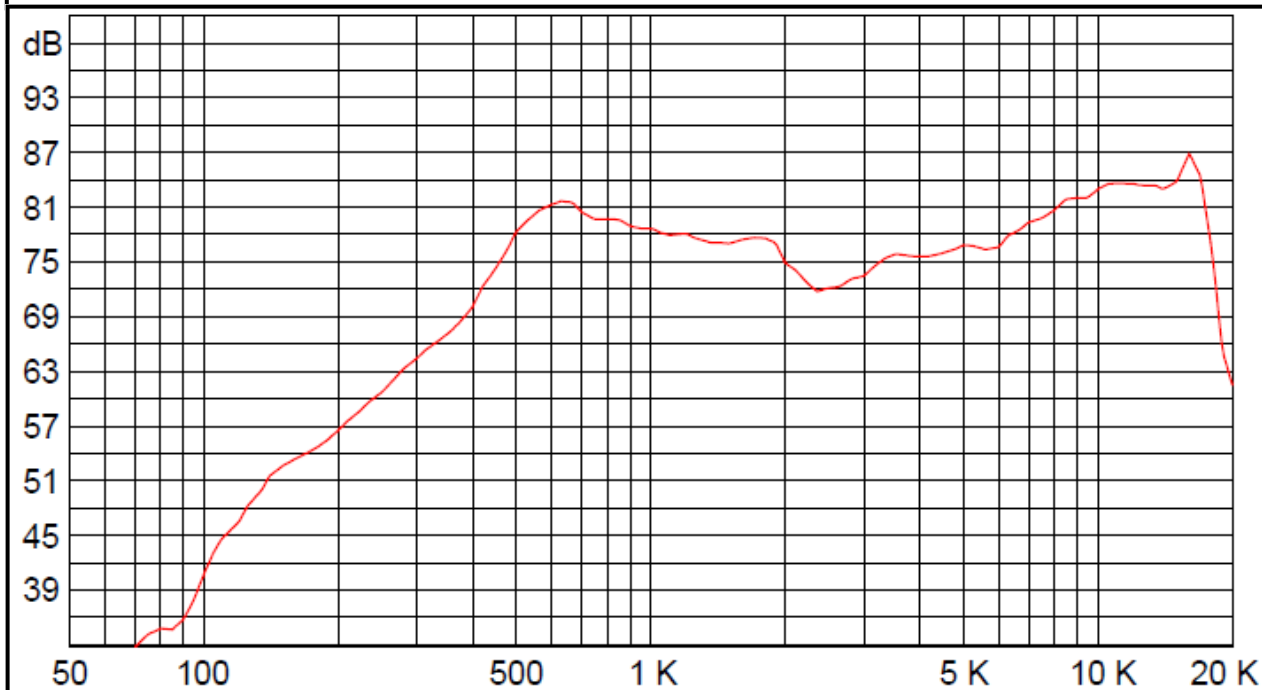


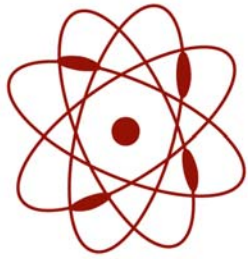
3541 Stop Eight Road • Dayton, Ohio 45414

### Product Overview

- 40 x 28.5mm oval speaker with Neodymium magnet for 82 dB sensitivity
- 3W continuous, 4W maximum power handling and 4Ω impedance
- Proprietary water resistant cone with natural sounding frequency response

Frequency Response (1W @ 0.5 meters)





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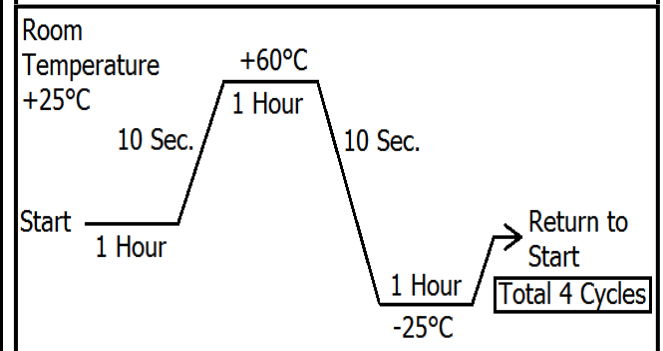
## AS04004PO-2-WR-R 40 x 28.5mm Water Resistant Speaker

### 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 with 90% to 95% relative humidity for 96 hours
Vibration	1.5 mm movement modulated at 10 to 55 Hz for 2 hours
Drop Test	75 cm free fall onto concrete floor, 10 cycles
Temperature Cycle Test	-25°C to 60°C, 4 cycles (refer to Temperature Cycle Test Graph)

After tests, speaker shall rest for 1 hours. SPL shall not deviate ±4 dB from pre-test measurement.

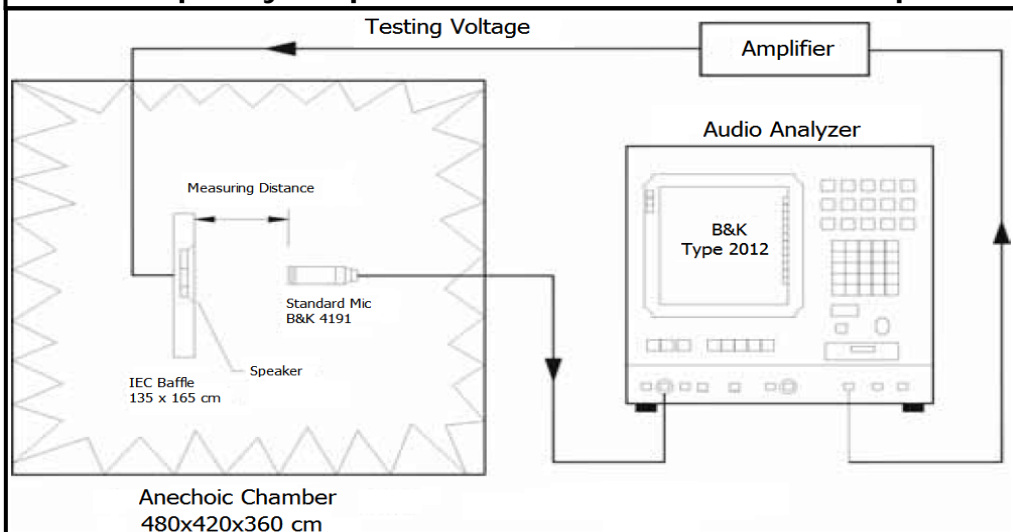
### Temperature Cycle Test Graph



### Thiele-Small Parameters

Specification	AS04004PO-2-WR-R
Fo (Hz)	420
Qes	4.509
Qms	4.414
Qts	2.231
Vas (mm <sup>3</sup> )	19.2k
Sd (mm <sup>2</sup> )	599
Mms (g)	0.309
Xmax (mm)	0.6
Re (ohm)	4.26
SPL (dB) @ 1W/1m	82
BL (T)	0.925

### Frequency Response and SPL Measurement Setup



# SPECIFICATIONS

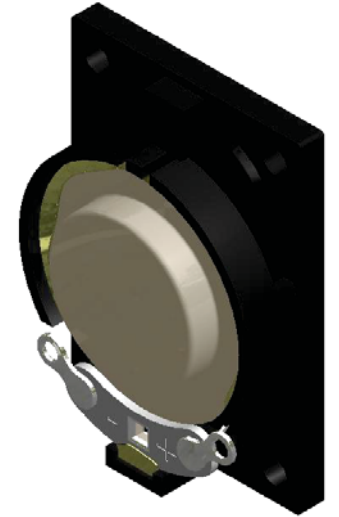
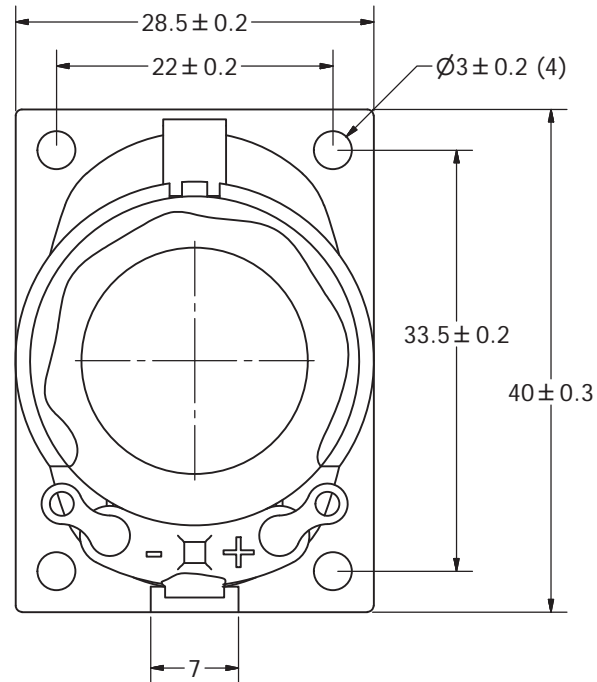
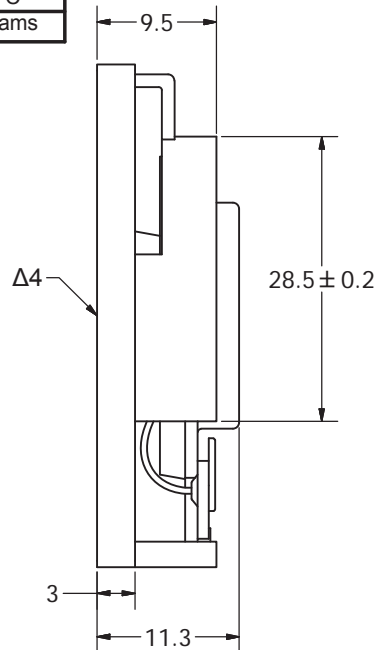
PARAMETERS	VALUES	UNITS
RATED INPUT POWER	3	W
MAX INPUT POWER	4	W
IMPEDANCE	4 ± 15%	OHM
OUTPUT SPL @ 1W/1M (AT 1.0, 1.2, 1.5, 2.0 kHz)	82 ± 3	dB
DISTORTION (MAX.)	5%	-
RESONANT FREQUENCY	420 ± 20%	Hz
FREQUENCY RANGE	200 ~ 20,000	Hz
HOUSING MATERIAL	ABS	-
CONE MATERIAL	TREATED PAPER	-
MAGNET MATERIAL	RARE EARTH	-
OPERATING TEMPERATURE	-10 ~ +55	°C
WEIGHT	11.9	grams

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# REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	12/7/2005	
A	REVISED TO INVENTOR 3-D DRAWING TEMPLATE	6/27/2008	B.R.
B	ADDED NOTE 5	8/11/2011	B.R.



## NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS.
- SPECIFICATIONS SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE.
- THIS PART IS RoHS 2002/95/EC COMPLIANT.
- Δ4. CONE HAS BEEN TREATED FOR WATER RESISTANCE.
- BASE SPEAKER PUI# AS04004PO-2-R.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS, TOLERANCES ARE ±0.5 AND ANGLES ARE ±3°.	SIZE	Designed by	Date	Checked by	Date	Approved by	Date	Drawn Date
	A3	J.D.	12/6/2005	B.R.	12/6/2005	E.P.	12/6/2005	6/27/2008
	AS04004PO-2-WR-R.idw				AS04004PO-2-WR-R			
Speaker						Edition	Sheet	
						-	1 / 1	