pui audio™ inc
a projects unlimited company

3541 Stop Eight Road • Dayton, Ohio 45414

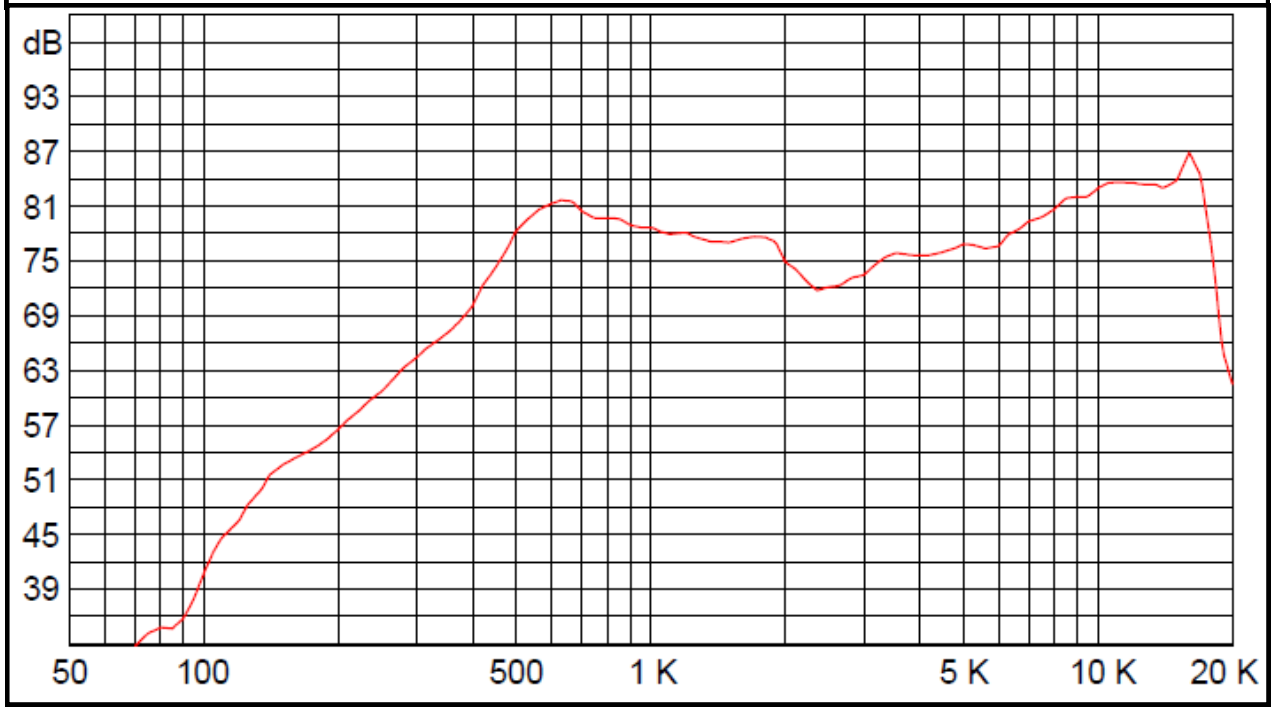
AS01808MR-LW152-R
18mm Speaker



Product Overview

- 18mm diameter speaker with Neodymium magnet for 80 dB sensitivity
- 1W continuous, 1.5W maximum power handling and 8Ω impedance
- Mylar cone with polyurethane surround for durability and moisture resistance
- 152 mm long UL1571 26 AWG lead wires

Frequency Response (1W @ 0.5 meters)



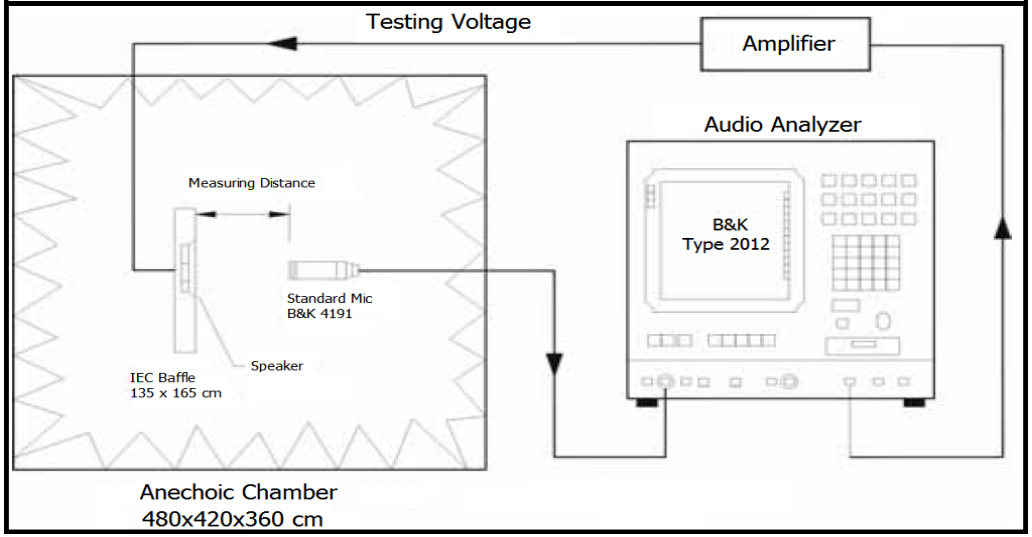
PUI Audio Inc. engages in continuous product improvement. All specifications are subject to change without notice. www.puiaudio.com. Copyright © 2016. Last Revised 9/16.

AS01808MR-LW152-R
18mm Speaker

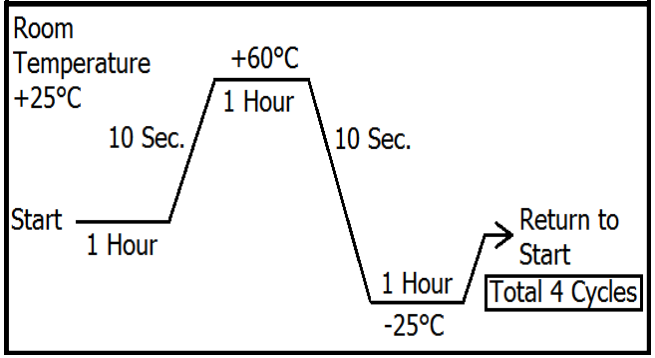
Mechanical and Environment Testing

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, 5 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.	

Frequency Response and SPL Measurement Setup



Temperature Cycle Test Graph



Thiele-Small Parameters

Specification	AS01808MR-R
Fo (Hz)	505.9
Qes	3.695
Qms	2.302
Qts	1.418
Vas (mm^3)	3.1k
Sd(mm^2)	156
Mms(g)	0.110
Xmax (mm)	1.5
Re (ohm)	8.39
SPL (dB) @ 1W/1m	72.39
BL (T)	0.89

PUI Audio Inc. engages in continuous product improvement. All specifications are subject to change without notice. www.puiaudio.com. Copyright © 2016. Last Revised 9/16.

SPECIFICATIONS

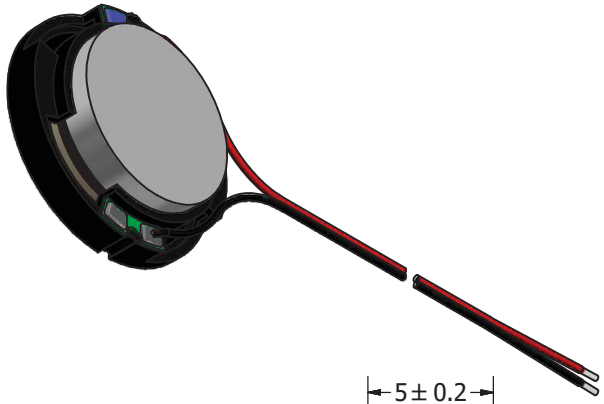
PARAMETERS	VALUES	UNITS
RATED INPUT POWER	1	W
MAX INPUT POWER	1.5	W
IMPEDANCE	8 ± 15%	OHM
OUTPUT SPL @ 1W/0.5M (AT 0.8, 1.0, 1.2, 1.5 kHz)	80 ± 3	dBA
DISTORTION (MAX.)	5%	-
RESONANT FREQUENCY	550~745	Hz
FREQUENCY RANGE	250 ~ 20,000	Hz
HOUSING MATERIAL	ABS	-
CONE MATERIAL	MYLAR	-
MAGNET MATERIAL	RARE EARTH	-
OPERATING TEMPERATURE	-25 ~ +60	°C
WEIGHT	2.8	grams

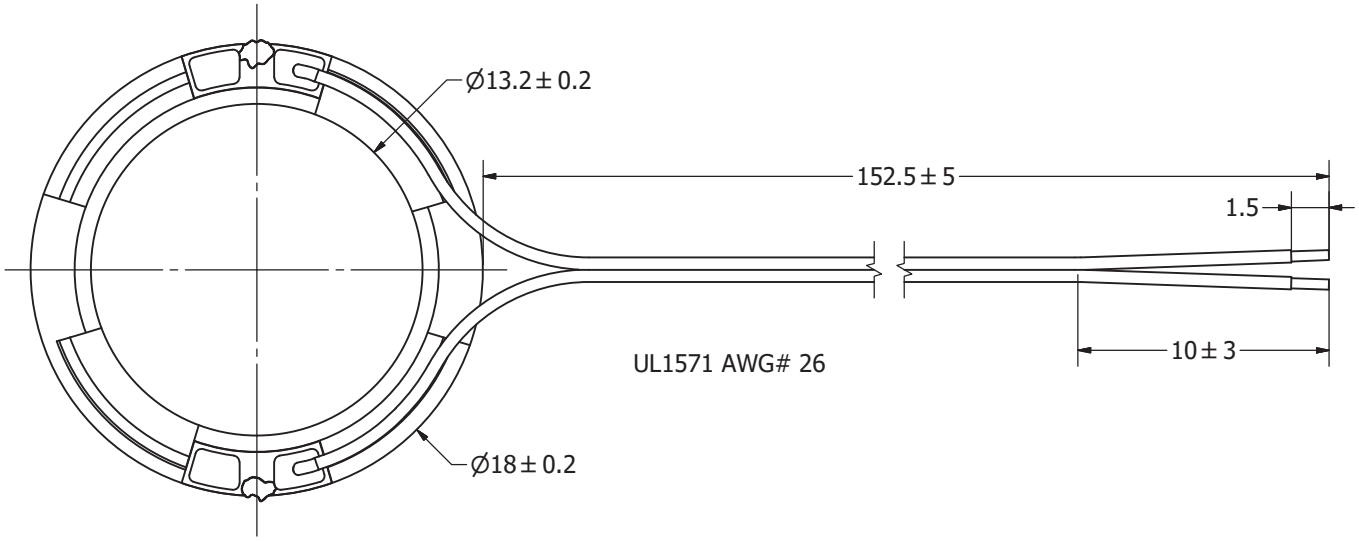
THIS DOCUMENT CONTAINS DATA PROPRIETARY TO PROJECTS UNLIMITED, INC. ANY USE OR REPRODUCTION, IN ANY FORM, WITHOUT PRIOR WRITTEN PERMISSION OF PROJECTS UNLIMITED, INC. IS PROHIBITED.

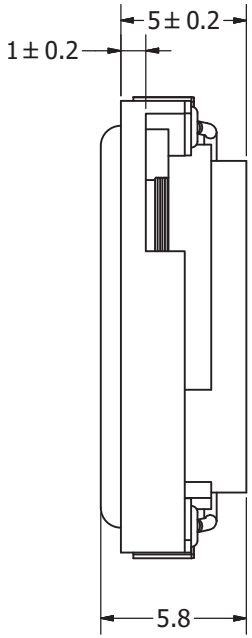
©2003, Projects Unlimited Inc.

REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED FROM ENGINEERING	1/28/2014	
A	REVISED RESONANT FREQUENCY	8/25/2017	M.V.







NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. SPECIFICATIONS SUBJECT TO CHANGE OR WITHDRAWL WITHOUT NOTICE.
3. THIS PART IS RoHS 2011/65/EU COMPLIANT.

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
		J.D.	1/28/2014	M.L.	1/28/2014	B.R.	1/28/2014	1/28/2014
AS01808MR-LW152-R.idw	A3	pui audio inc a projects unlimited company		AS01808MR-LW152-R				
				Speaker			Edition -	Sheet 1 / 1