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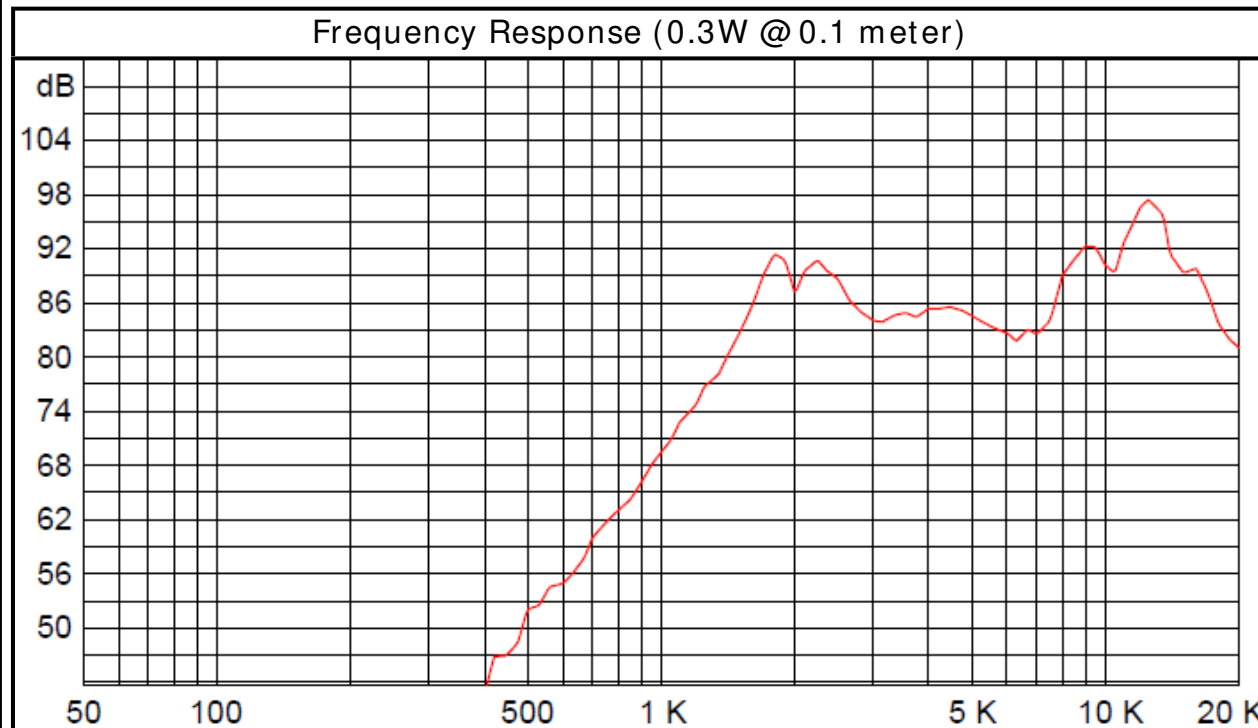
## AST-01508MR-R 15mm Speaker



3541 Stop Eight Road • Dayton, Ohio 45414

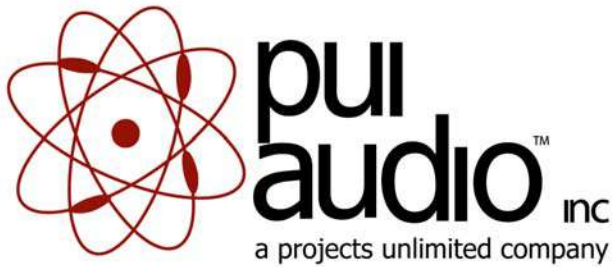
### Product Overview

- 15mm diameter speaker with Neodymium magnet for 87 dB sensitivity
- 0.3W continuous, 0.5W maximum power handling and 8Ω impedance
- Mylar cone for wide frequency response
- Thru hole design and wave solderable for PCB mount



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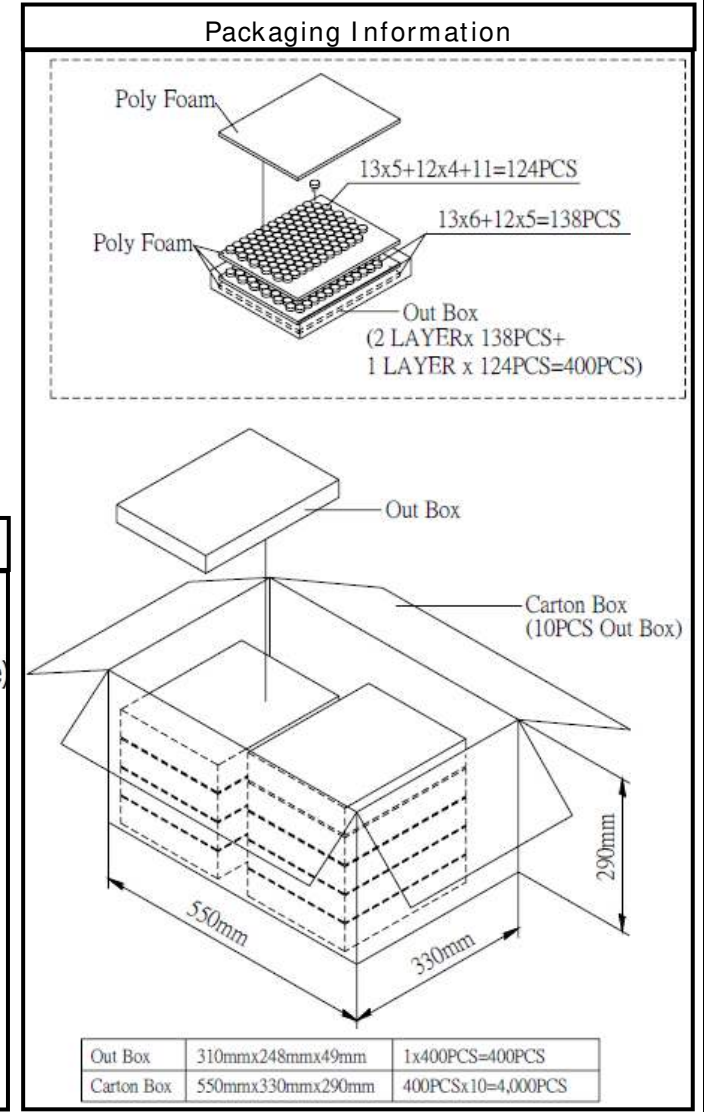
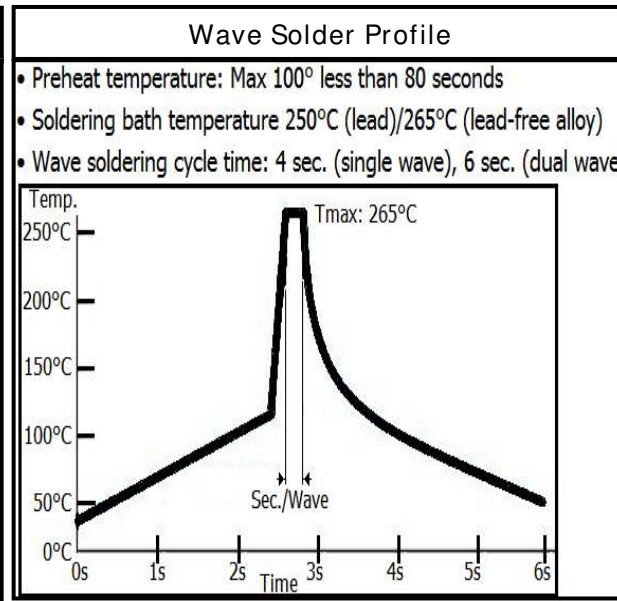
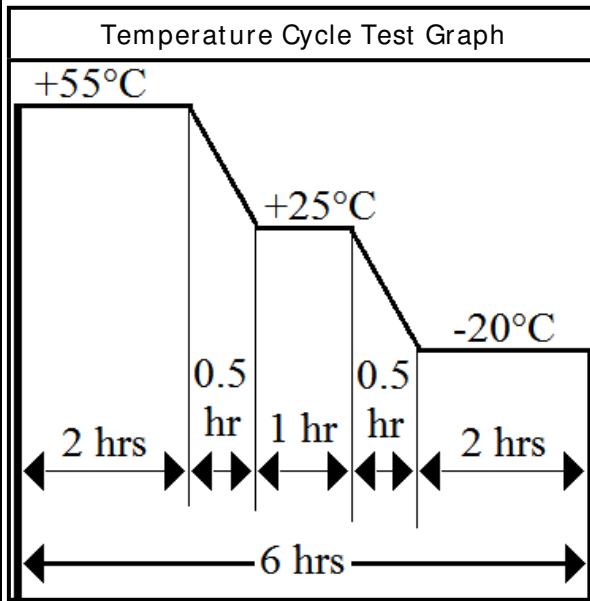




# AST-01508MR-R 15mm Speaker

| Mechanical and Environment Testing |   |
|------------------------------------|---|
| Test Description                   | Test Condition  |
| High Temperature                   | 55°C with random humidity for 96 hours                          |
| Low Temperature                    | -20°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 40 mm thick board, 10 cycles               |
| Temperature Cycle Test             | -20°C to 55°C, 5 cycles (refer to Temperature Cycle Test Graph) |

After tests, speaker shall rest for 1 hours. SPL shall not deviate  $\pm 3$  dB from pre-test measurement.



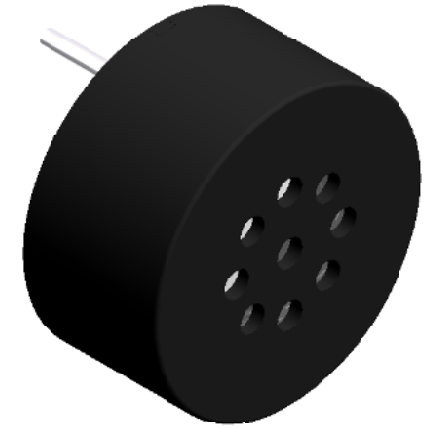
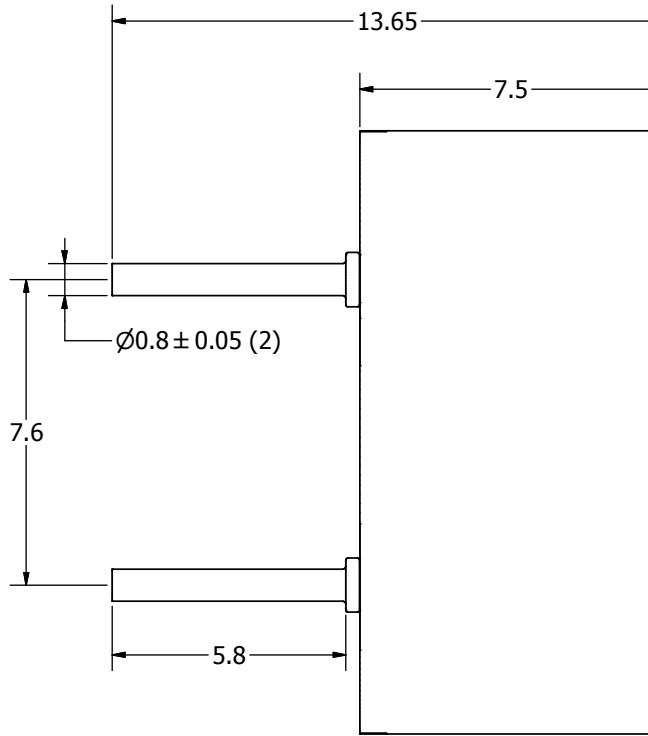
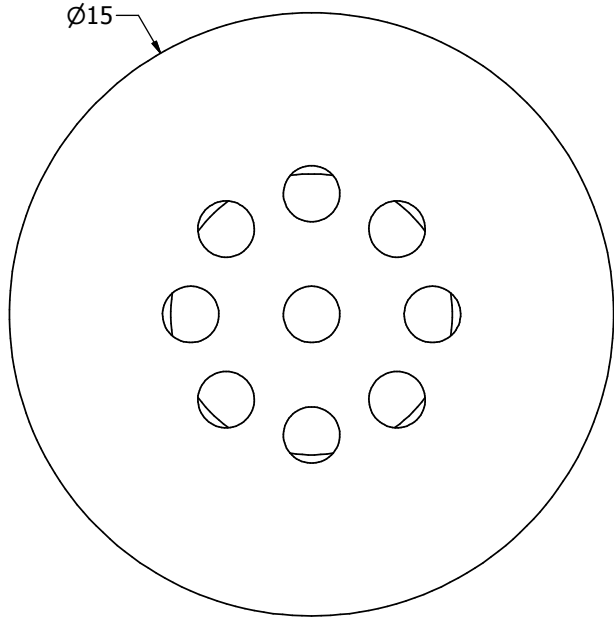
# SPECIFICATIONS

| PARAMETERS  | VALUES         | UNITS |
|---|----------------|-------|
| RATED INPUT POWER                                     | 0.3            | W     |
| MAX INPUT POWER                                       | 0.5            | W     |
| IMPEDANCE   | 8 ± 15%        | OHM   |
| OUTPUT SPL @ 0.3W/0.1M<br>(AT 2.0, 2.5, 3.0, 4.0 kHz) | 87 ± 3         | dBA   |
| DISTORTION (MAX.)                                     | 5%             | -     |
| RESONANT FREQUENCY                                    | 1,700 ± 20%    | Hz    |
| FREQUENCY RANGE                                       | 1,700 ~ 20,000 | Hz    |
| HOUSING MATERIAL                                      | PBT+20% GLASS  | -     |
| CONE MATERIAL   | MYLAR          | -     |
| MAGNET MATERIAL                                       | Nd-Fe-B        | -     |
| OPERATING TEMPERATURE                                 | -20 ~ +55      | °C    |
| WEIGHT  | 1.83           | grams |

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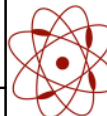
# REVISION HISTORY

| LTR | DESCRIPTION                              | DATE       | APPROVED |
|-----|--|------------|----------|
| -   | RELEASED FROM ENGINEERING                | 12/31/2007 |          |
| A   | ADDED OVERALL HEIGHT DIMENSION           | 2/23/2009  | B.R.     |
| B   | REVISED TO INVENTOR 3-D DRAWING TEMPLATE | 2/24/2009  | B.R.     |
| C   | REVISED WEIGHT OF PART                   | 6/8/2010   | B.R.     |
| D   | REVISED HOUSING MATERIAL                 | 7/27/2010  | B.R.     |
| E   | REVISED HOUSING MATERIAL                 | 3/1/2017   | M.V.     |



### NOTES:

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

|  |                   |  |           |                                 |           |             |           |            |
|--|-------------------|--|-----------|---------------------------------|-----------|-------------|-----------|------------|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN MILLIMETERS,<br>TOLERANCES ARE ±0.5 AND ANGLES ARE ±3°. | SIZE<br><b>A3</b> | Designed by  | Date      | Checked by                      | Date      | Approved by | Date      | Drawn Date |
|  |                   | J.A.F.   | 12/8/2005 | B.R.                            | 12/8/2005 | E.P.        | 12/8/2005 | 2/24/2009  |
| AST-01508MR-R.idw  |                   |  <b>pui audio</b><br>a projects unlimited company |           | <b>AST-01508MR-R</b><br>Speaker |           |             | Edition   | Sheet      |
|  |                   |  |           |                                 |           |             | -         | 1 / 1      |