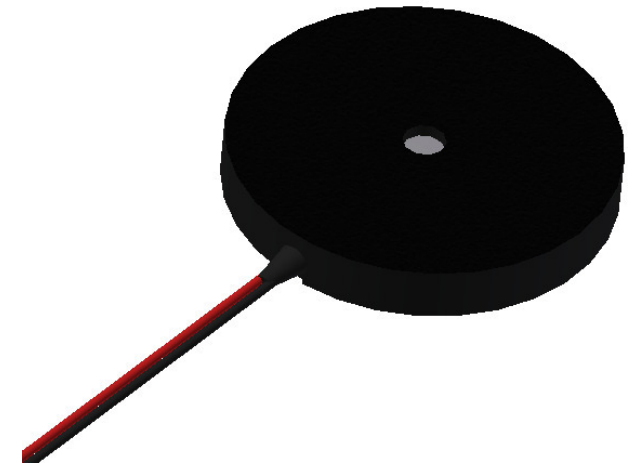


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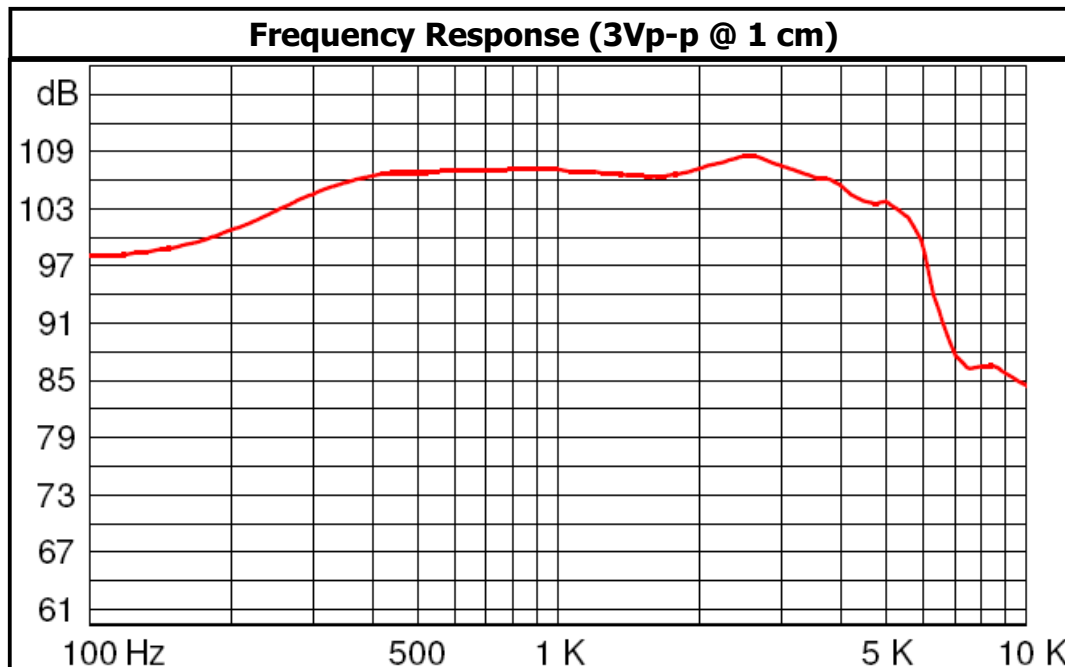
## AT-2310-T-LW100-R 22.5mm Transducer



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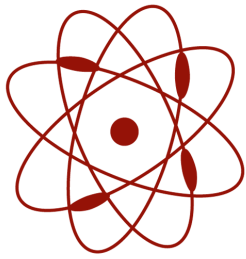
### Product Overview

- 22.5mm diameter piezo-electric transducer
- 108 dBA minimum output (3 Vp-p @ 1 cm) and 2,000 Hz resonant frequency
- Thin 3.2mm ABS housing for space-limited applications
- 100mm UL1571 32 AWG lead wires for quick connection



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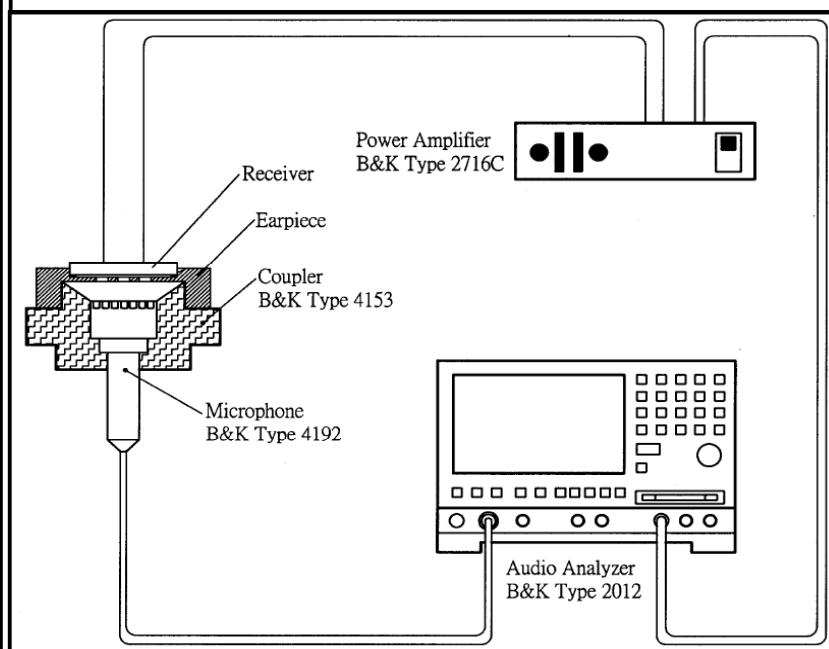
# AT-2310-T-LW100-R 22.5mm Transducer

## Mechanical and Environment Testing

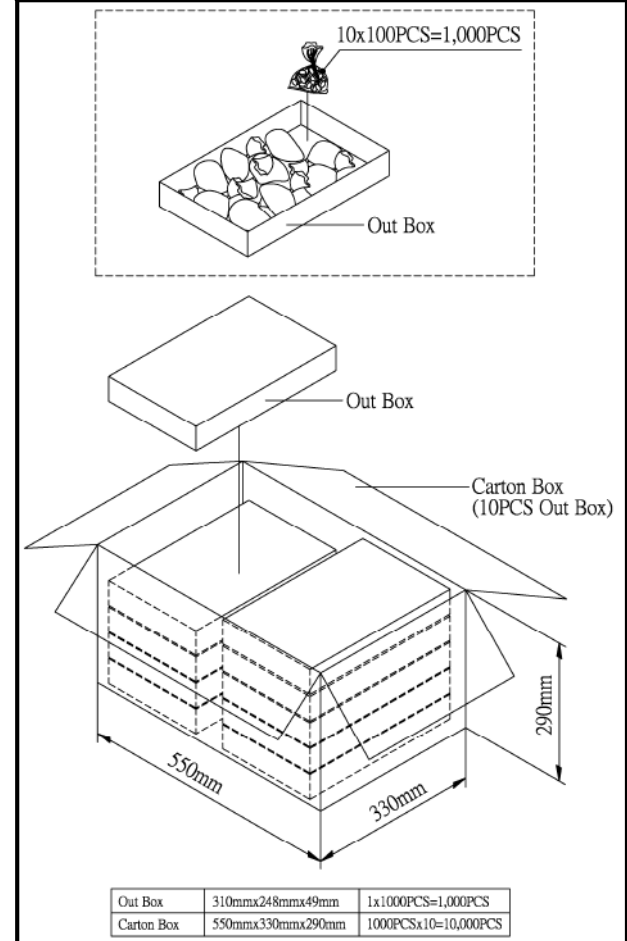
| Test Description | Test Condition  |
|------------------|---|
| High Temperature | 95°C (±2°C) with random humidity for 240 hours                    |
| Low Temperature  | -40°C (±2°C) with random humidity for 240 hours                   |
| Humidity         | 40°C (±2°C) with 95% relative humidity for 240 hours              |
| Vibration        | 1.5 mm movement modulated at 10-55 Hz in 3 directions for 2 hours |
| Drop Test        | 75 cm free fall onto wood board, 10 cycles                        |

After tests, part shall rest for 2 hours. SPL shall not deviate more than ±3.5 dB.

## Frequency Response and SPL Measurement Setup



## Packaging



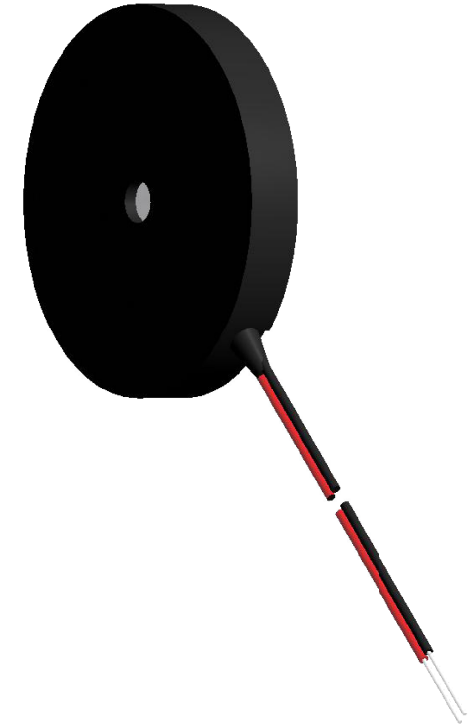
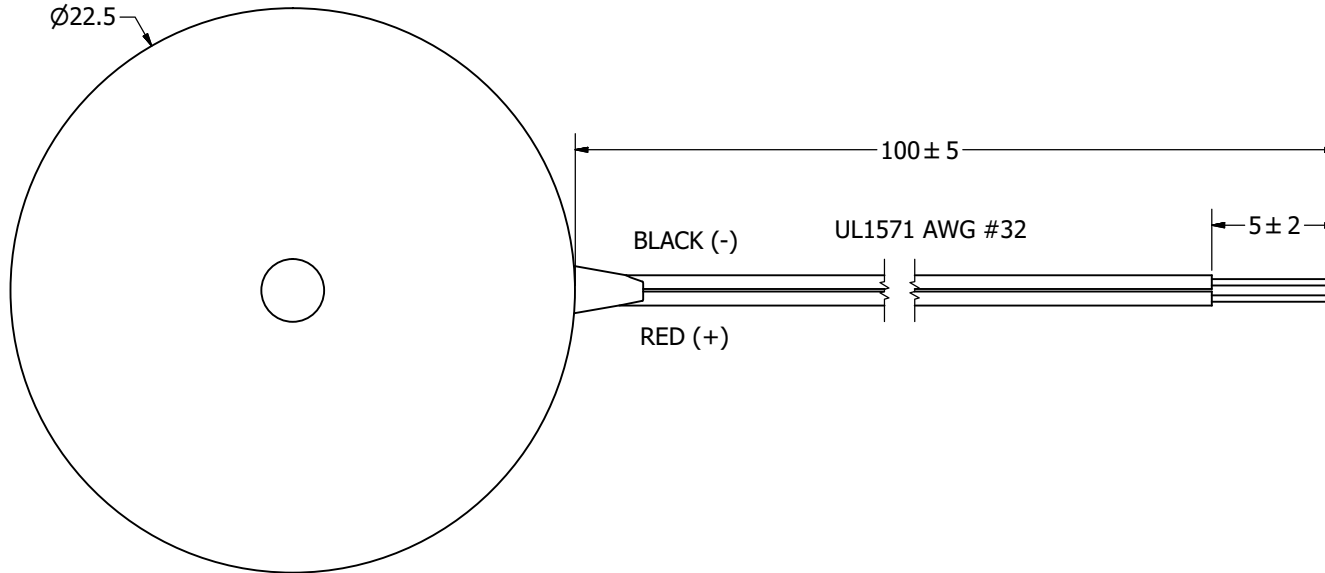
# SPECIFICATIONS

| PARAMETERS              | VALUES       | UNITS |
|-------------------------|--------------|-------|
| RATED VOLTAGE           | 3            | Vp-p  |
| OPERATING VOLTAGE RANGE | 1 ~ 12       | Vp-p  |
| RATED CURRENT (MAX)     | 3            | mA    |
| CAPACITANCE             | 90,000 ± 30% | pF    |
| MINIMUM SPL @ 1 CM      | 108±3        | dBA   |
| RESONANT FREQUENCY      | 2,000 ± 500  | Hz    |
| OPERATING TEMPERATURE   | -30 ~ +85    | °C    |
| STORAGE TEMPERATURE     | -40 ~ +95    | °C    |
| HOUSING MATERIAL        | ABS          | -     |
| TERMINAL MATERIAL       | LEAD WIRE    | -     |
| WEIGHT                  | 1.1          | grams |

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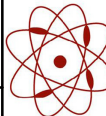
# REVISION HISTORY

| LTR | DESCRIPTION                              | DATE       | APPROVED |
|-----|--|------------|----------|
| -   | RELEASED FROM ENGINEERING                | 10/25/2006 |          |
| A   | REVISED RESONANT FREQUENCY               | 6/16/2008  | B.R.     |
| B   | REVISED RATED VOLTAGE AND SPL            | 1/5/2010   | B.R.     |
| C   | REVISED TO INVENTOR 3-D DRAWING TEMPLATE | 6/8/2010   | B.R.     |
| D   | REVISED SPL DISTANCE                     | 5/27/2010  | B.R.     |



### 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.D.   | 10/26/2006 | R.W.   | 10/25/2006 | B.R.        | 10/26/2006 | 6/8/2010   |
| AT-2310-T-LW100-R.idw  |                   |  <b>pui audio</b><br>a projects unlimited company |            | <b>AT-2310-T-LW100-R</b><br>Transducer (Piezo) |            |             | Edition    | Sheet      |
|  |                   |  |            |  |            | -           | 1 / 1      |            |