



# PUIaudio



Data Sheet

HD-EMC1004-SC

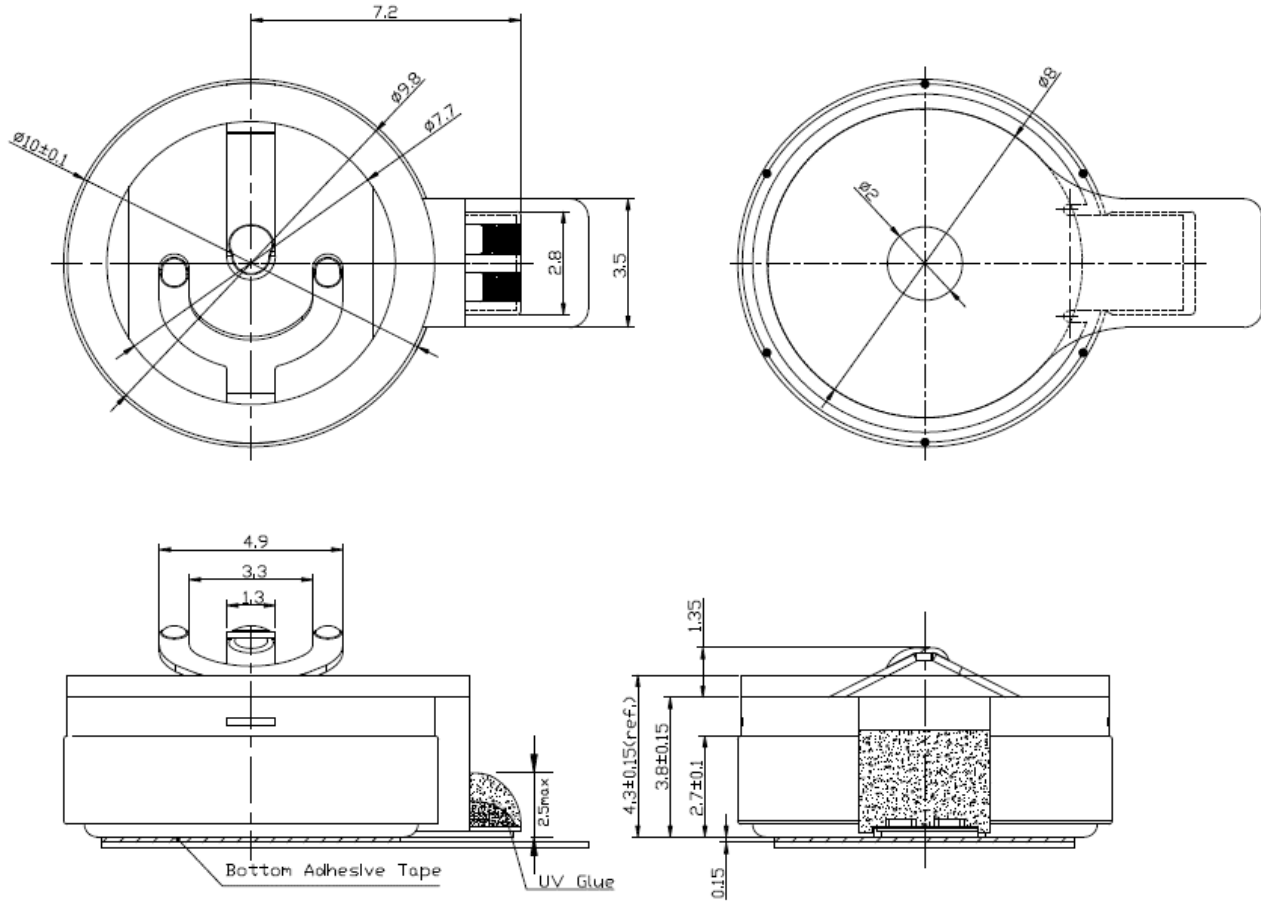
## Features:

- 80mA rated current
- 9,000 rpm rated speed
- Coin style housing and spring contacts for easy implementation.

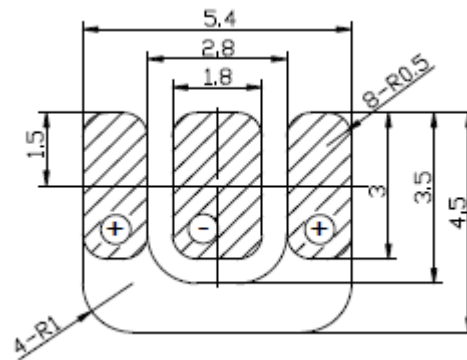
## Specifications

| Parameters   | Values        | Units           |
|--|---------------|-----------------|
| Input Voltage  | 3.0           | V <sub>DC</sub> |
| Operating Voltage Range (DC)   | 2.4 ~ 3.6     | V <sub>DC</sub> |
| Starting Voltage   | 2.3           | V <sub>DC</sub> |
| Direction of Rotation  | CW            | -               |
| Rated Speed<br>Rated Voltage, Rated Load, Motor Fixed                          | 9,000 ± 3,000 | RPM             |
| Rated Load Current<br>Maximum at 3.0 V <sub>DC</sub> , Rated Load, Motor Fixed | 80            | mA              |
| Starting Current<br>Maximum at 2.4 V <sub>DC</sub> , Rotor Locked              | 100           | mA              |
| Mechanical Noise   | ≤ 50          | dB              |
| Weight   | 1.0 ± 0.3     | Grams           |
| Storage Temperature  | -30 ~ +70     | °C              |
| Operating Temperature  | -20 ~ +60     | °C              |
| Environmental Compliances  | RoHS/REACH    | -               |

## Dimensions

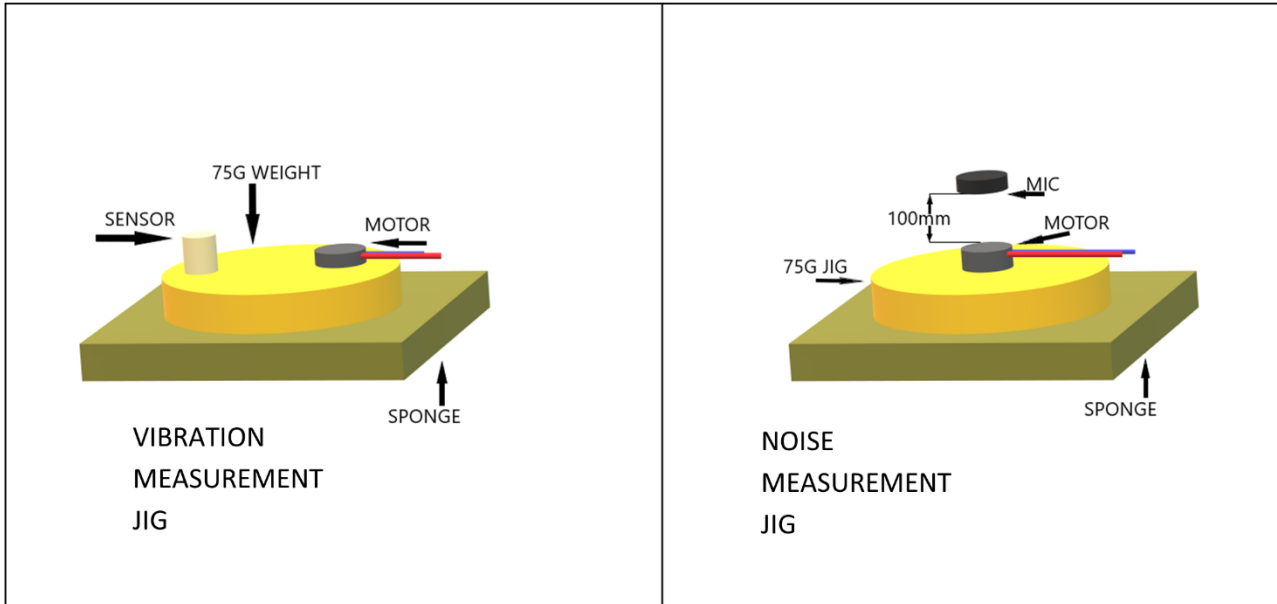


## Suggested Electric Contact Area\*



\*This electric contact area is advisory only and its use or adaptation is entirely voluntary. PUI Audio disclaims all liability of any kind associated with the use, application, or adaptation of this land pattern.

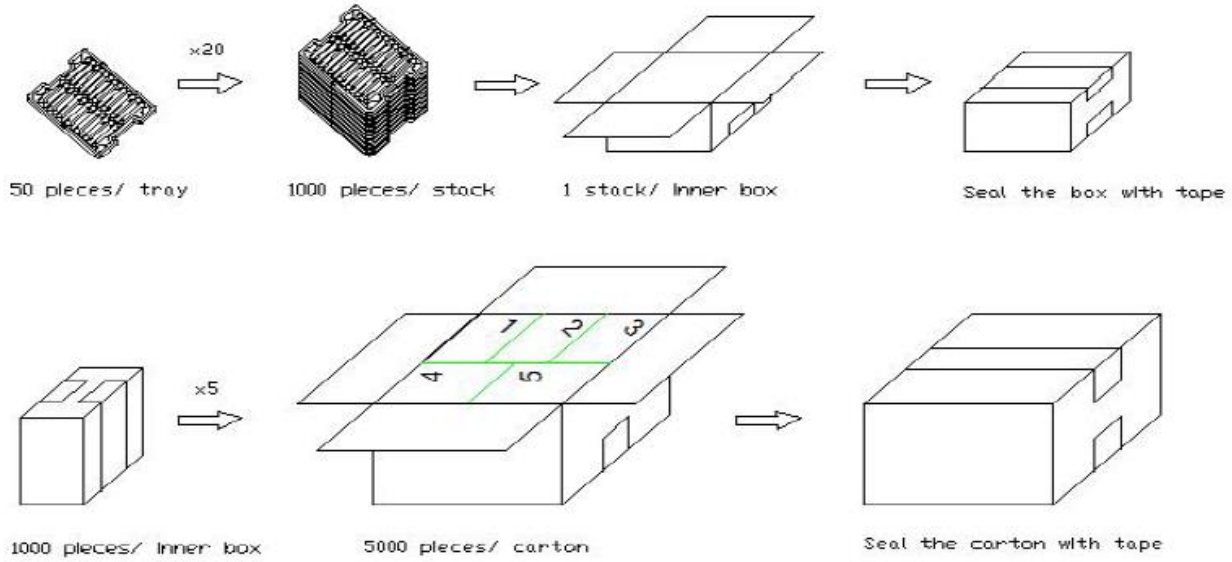
## Measurement Methods (Standard Jig)



## Reliability Testing

| Type of Test          | Test Specifications   | Judgement  |
|-----------------------|---|--|
| Life Test             | At rated voltage (3V):<br>Cycle: 2s on, 2s off continuous<br>Cycle Count: 50,000                      | Allow device to rest 4 hours after each test. The following specifications must be met: <ol style="list-style-type: none"> <li>1. Rotating speed (initial <math>\pm 30\%</math>)</li> <li>2. Rated Load Current (initial <math>\pm 30\%</math>)</li> <li>3. Starting Voltage (2.5V Max)</li> </ol> |
| High Temperature Test | Temperature: +70°C<br>Test Duration Time: 72 hours  |  |
| Low Temperature Test  | Temperature: -30 $\pm$ 2°C<br>Test Duration Time: 72 hours  |  |
| Humidity Test         | Temperature: +40°C<br>Relative Humidity: 95%<br>Test Duration Time: 72 hours                          |  |
| Thermal Shock Test    | Temperature Cycle: -20 to +70°C<br>Cycle Time: 4 hours<br>Test Repetition: 10 cycles (40 hours total) |  |
| Drop Test             | Drop Condition: 1.5m onto iron plate at weight 100g<br>Test Repetition: 3 times per side (6 total)    |  |

## Packaging



### Specifications Revisions

| Revision | Description               | Date       | Approved |
|----------|---------------------------|------------|----------|
| A        | RELEASED FROM ENGINEERING | 12/13/2024 | JD       |

Note:

1. Unless otherwise specified:
  - A. All dimensions are in millimeters.
  - B. Default tolerances are  $\pm 0.5\text{mm}$  and angles are  $\pm 3^\circ$ .ssw
2. Specifications subject to change or withdrawal without notice.