



# PUIaudio



Data Sheet

HD-EMB2107-LW27

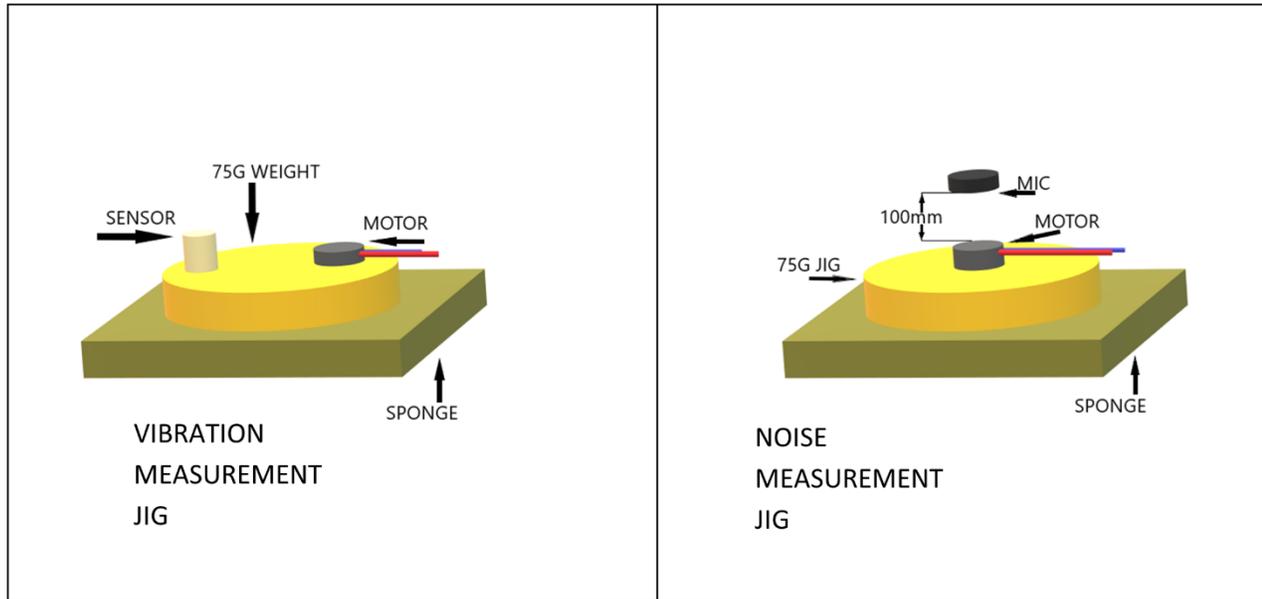
## Features:

- 20.5mm x 6.6mm cylindrical design
- Coreless brush motor with lower friction and energy losses
- 7,500 rpm rated speed
- Lead wires and through hole mounts for easy installation

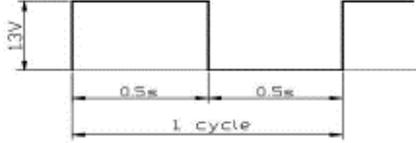
## Specifications

Parameters	Values	Units
Input Voltage (DC)	1.3	V <sub>DC</sub>
Starting Voltage (DC)	0.75	V <sub>DC</sub>
Operating Voltage Range (DC)	0.9 ~ 1.6	V <sub>DC</sub>
Direction of Rotation	CW/CCW	-
Rated Speed	7,500 ± 2,000	RPM
Rated Current (Max at 1.6 V <sub>DC</sub> )	80	mA
Starting Current (Max at 1.3 V <sub>DC</sub> )	0.75	mA
Terminal Resistance	11 ± 20%	Ohms
Shaft End Play (Max)	0.3	mm
Mechanical Noise (Max)	50	dBA
Environmental Compliances	RoHS/REACH	-
Weight	0.8	Grams
Storage Temperature	-40 ~ +85	°C
Operating Temperature	-20 ~ +60	°C

## Measurement Methods

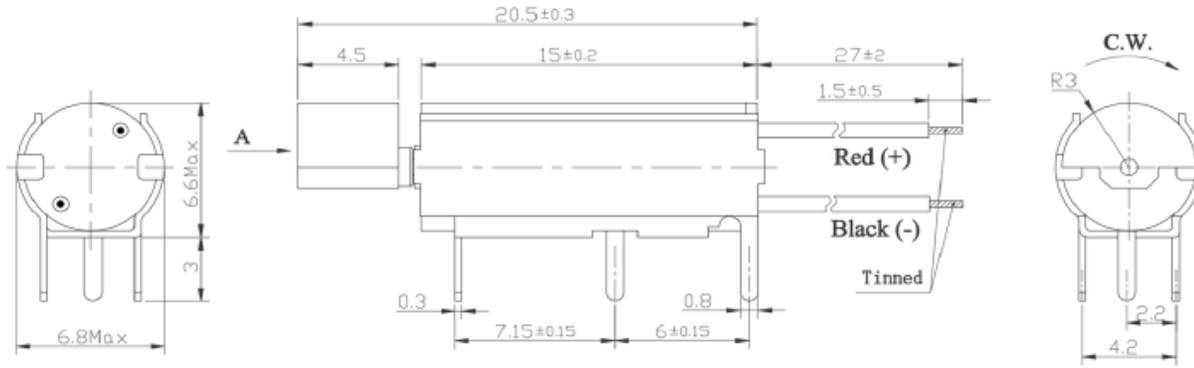


## Reliability Testing

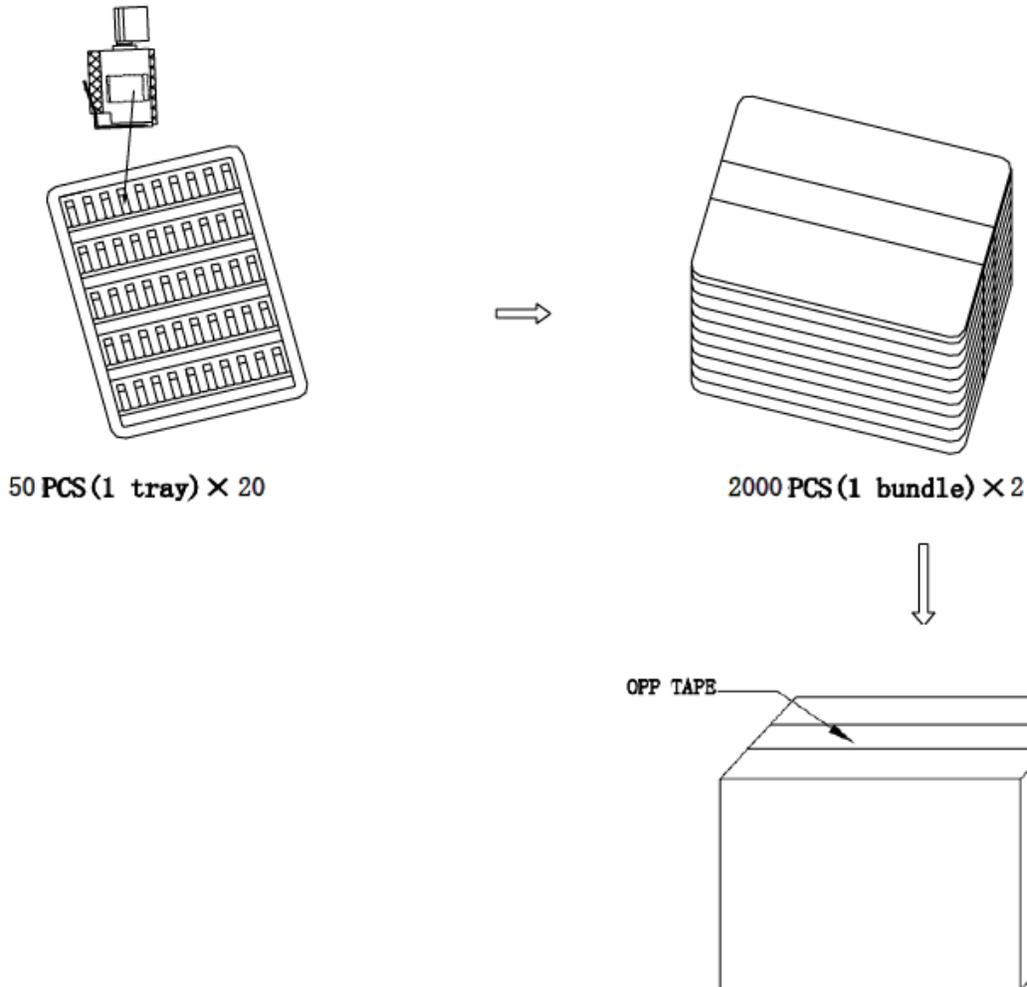
Type of Test	Test Specifications
High Temperature Test	Temperature: $+60\pm 2^{\circ}\text{C}$ Test Duration Time: 96 hours
Low Temperature Test	Temperature: $-40\pm 2^{\circ}\text{C}$ Test Duration Time: 96 hours
Humidity Test	Temperature: $40^{\circ}\text{C}$ Relative Humidity: 90~95% Test Duration Time: 96 hours
Thermal Shock Test	Temperature Cycle: $-30$ to $+70^{\circ}\text{C}$ Cycle Time: 2 hours Test Repetition: 20 cycles (40 hours total)
Lifetime test	Voltage: 1.3 Vdc Test Mode: 0.5sec On, 0.5sec Off, as 1 cycle Total Cycles: 200,000 
Drop Test	Drop Condition: 1.5m onto iron plate at weight 75g Test Repetition: 2 times per side (6 total)
Load Test	200,000 operating cycles at room temperature Test Cycle: 0.5 seconds on, 0.5 seconds off
Vibration Test	Displacement: 1.5mm; Frequency: 10 to 55 Hz Direction: X, Y, and Z; Duration: 2 hours each direction

**Rated current, speed, starting voltage, and mechanical noise must meet specifications after allowing the device to rest for 2 hours after test.**

## Dimensions



## Packaging



**Remarks:**  
4000PCS/CTN: 44\*22\*27.5cm

**Specifications Revisions**

<b>Revision</b>	<b>Description</b>	<b>Date</b>	<b>Approved</b>
A	RELEASED FROM ENGINEERING	12/13/2024	JD

Note:

1. Unless otherwise specified:
  - A. All dimensions are in millimeters.
  - B. Default tolerances are  $\pm 0.1\text{mm}$  and angles are  $\pm 3^\circ$ .
2. Specifications subject to change or withdrawal without notice.