



PUIaudio



Data Sheet

HD-EMB1205-4-SC

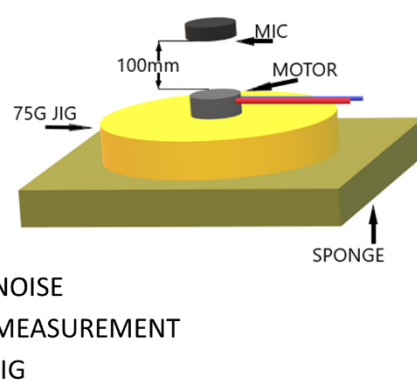
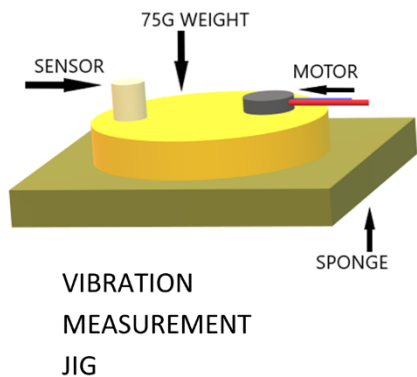
Features:

- Designed to be driven with a 3V DC signal
- Convenient spring contacts for easy implementation
- Generates 12,000 rpm with less than 50dB mechanical noise

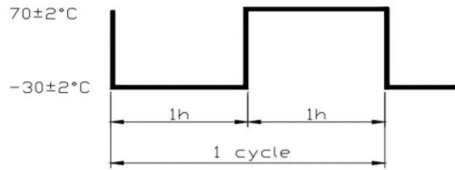
Specifications

Parameters	Values	Units
Input Voltage (DC)	3	V _{DC}
Starting Voltage (DC)	2.2	V _{DC}
Operating Voltage Range	2.2 ~ 3.6	V _{DC}
Direction of Rotation	CW/CCW	-
Rated Speed	12,000 ± 2,500	RPM
Rated Current (Max at 3.0 V _{DC})	105	mA
Starting Current (Max at 3.0 V _{DC})	130	mA
Terminal Resistance	29 ± 20%	Ohms
Shaft End Play (Max)	0.2	mm
Mechanical Noise (Max)	50	dBA
Environmental Compliances	RoHS/REACH	-
Storage Temperature	-40 ~ +80	°C
Operating Temperature	-30 ~ +70	°C

Measurement Methods

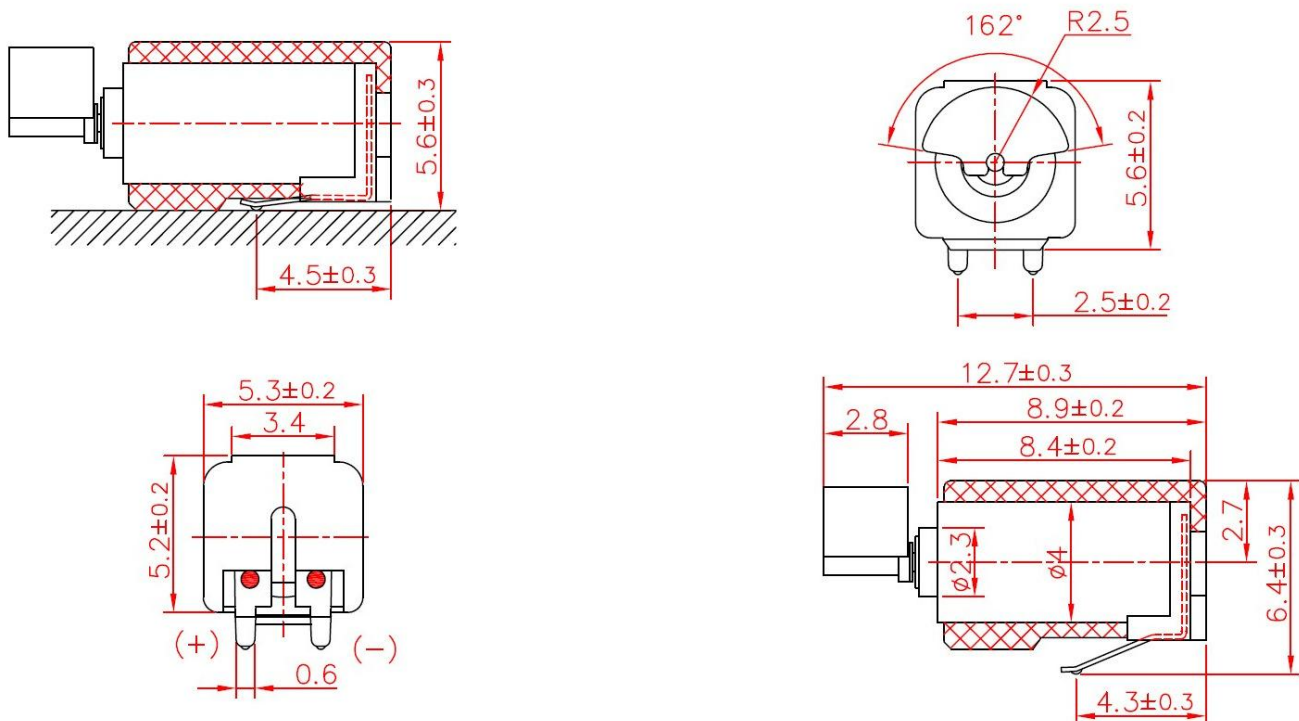


Reliability Testing

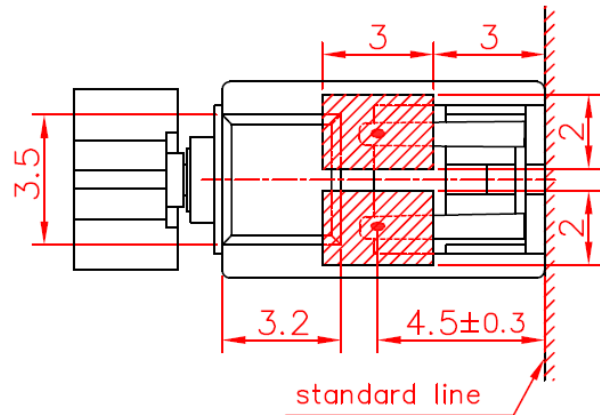
Type of Test	Test Specifications
High Temperature Test	Temperature: $+60\pm 2^{\circ}\text{C}$ Test Duration Time: 96 hours
Low Temperature Test	Temperature: $-40\pm 2^{\circ}\text{C}$ Test Duration Time: 96 hours
Humidity Test	Temperature: $40\pm 2^{\circ}\text{C}$ Relative Humidity: 90~95% Test Duration Time: 96 hours
Temperature Cycle Testing	Temperature Cycle as shown below:  Repeat cycle shown 20 times
Drop Test	Drop Condition: 1.5m onto iron plate at weight 100g Test Repetition: 2 times per side (12 total)
Load Test	200,000 operating cycles at room temperature Test Cycle: 1 seconds on, 1 second off

Rated current, rated speed, and starting voltage must meet within 30% specifications after allowing the device to rest for 2 hours after test.

Dimensions



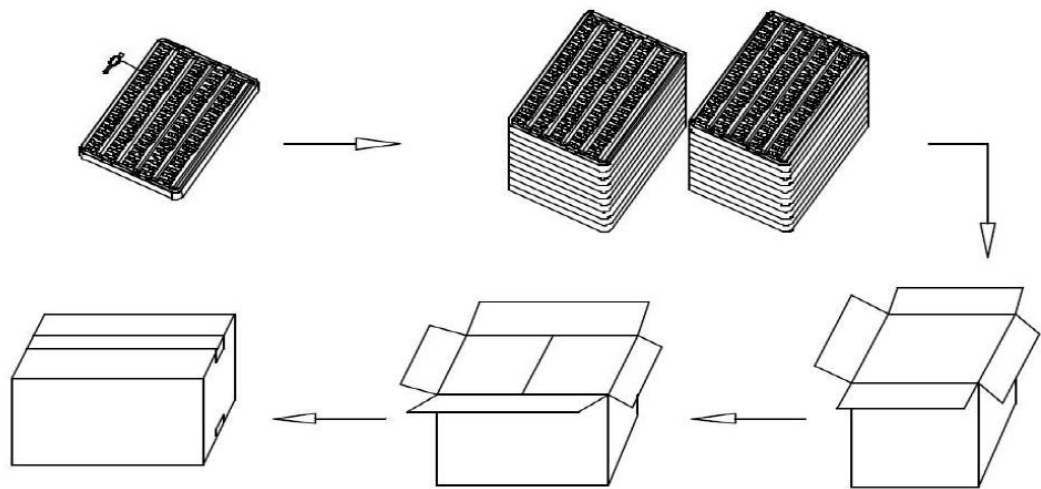
Suggested Land Pattern*



***This land pattern 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.**

Packaging

100 pcs/tray, size of tray: 230mm*158mm*15mm
20 trays/stack, 2000pcs/stack
2 stacks/inner box, 4000pcs/inner box
2 inner boxes/carton, size of carton: 360mm*260mm*170mm



Specifications Revisions			
Revision	Description	Date	Approved
A	Released from Engineering	9/8/2026	NW

- Note:
- 1. Unless otherwise specified:
 - A. All dimensions are in millimeters.
 - B. Default tolerances are ±0.5mm and angles are ±3°.
 - 2. Specifications subject to change or withdrawal without notice.