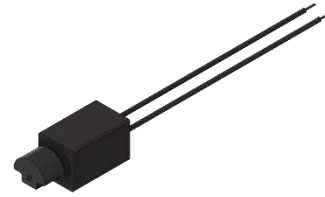




PUIaudio



Data Sheet

HD-EMB1205-2-LW30-R

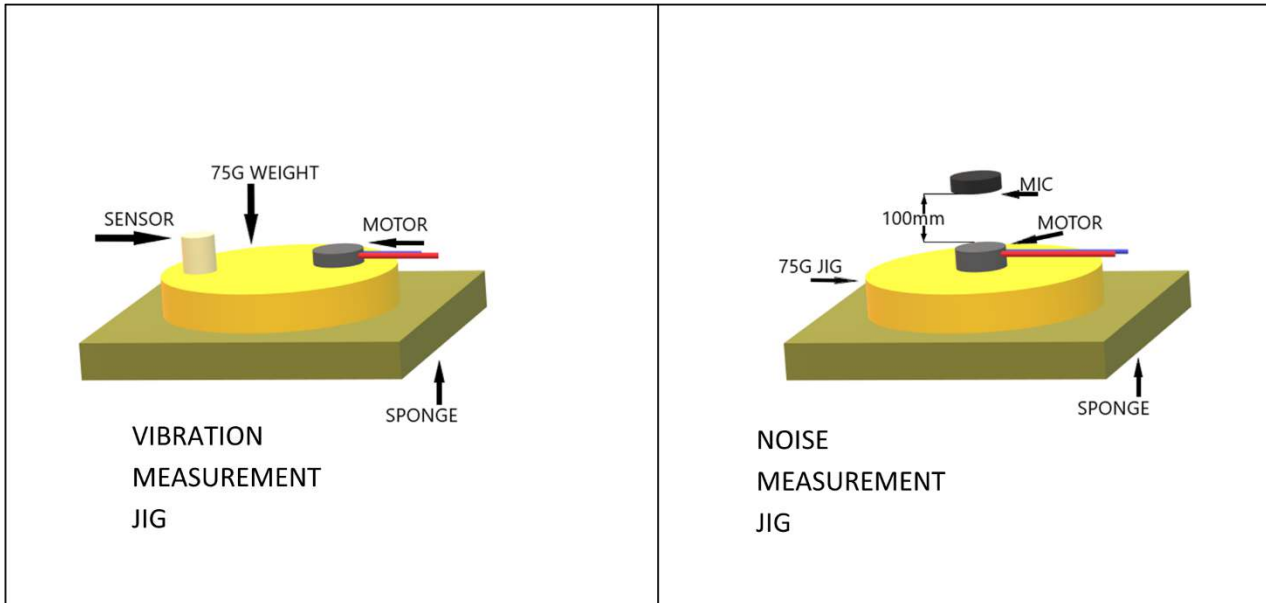
Features:

- Designed to be driven with a 3V DC signal
- Convenient 30mm lead wires for easy implementation
- Generates 13,000 rpm with less than 50dB mechanical noise

Specifications

| Parameters | Values | Units |
|--|----------------|-----------------|
| Input Voltage (DC) | 3 | V _{DC} |
| Starting Voltage (DC) | 2.4 | V _{DC} |
| Operating Voltage Range (DC) | 2.5 ~ 3.7 | V _{DC} |
| Direction of Rotation | CW/CCW | - |
| Rated Speed | 13,000 ± 3,000 | RPM |
| Rated Current (Max at 3.0 V _{DC}) | 90 | mA |
| Starting Current (Max at 2.4 V _{DC}) | 130 | mA |
| Terminal Resistance | 30 ± 10% | Ohms |
| Shaft Pull Strength (Min) | 3 | Kg |
| Shaft End Play (Max) | 0.3 | mm |
| Mechanical Noise (Max) | 50 | dBA |
| Housing Material | SPC | - |
| Environmental Compliances | RoHS/REACH | - |
| Weight | 0.8 | Grams |
| Storage Temperature | -40 ~ +85 | °C |
| Operating Temperature | -20 ~ +60 | °C |

Measurement Methods

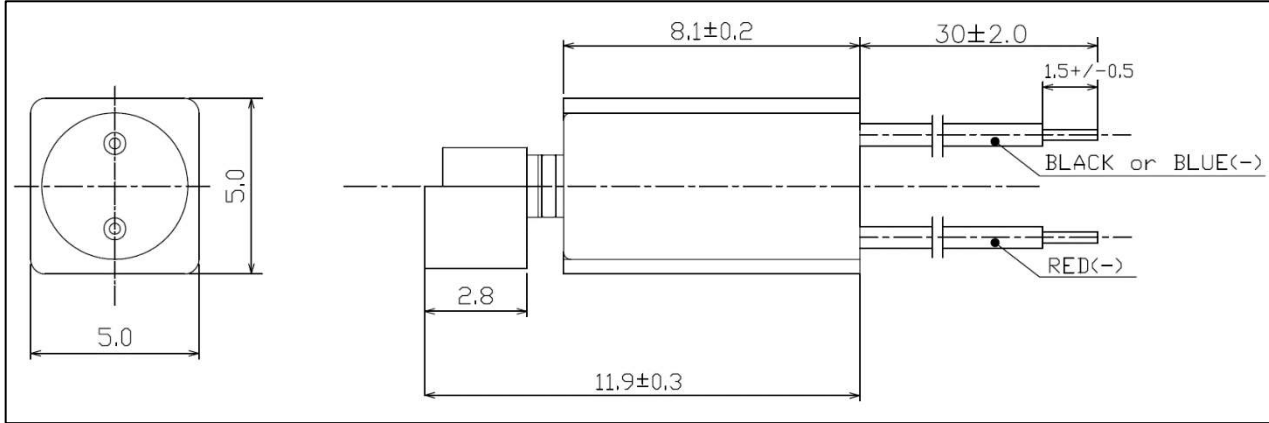


Reliability Testing

| Type of Test | Test Specifications |
|---------------------------|--|
| High Temperature Test | Temperature: +85±2°C Test Duration Time: 96 hours |
| Low Temperature Test | Temperature: -40±2°C Test Duration Time: 96 hours |
| Humidity Test | Temperature: 70°C Relative Humidity: 90% Test Duration Time: 96 hours |
| Thermal Shock Test | Temperature Cycle: -40 to +85°C Cycle Time: 1 hour Test Repetition: 24 cycles (24 hours total) |
| Temperature Cycle Testing | Drive motor for 2 seconds on, 2 seconds off Repeat cycle shown 2 times (8 hours total) |
| Vibration Test | Vibration: 3mm, 1000cpm Test Axis: XYZ Test Repetition: 10 minutes per axis (30 minutes total) |
| Drop Test | Drop Condition: 1.5m onto iron plate at weight 150g Test Repetition: 6 times per side (36 total) |
| Load Test | 200,000 operating cycles at room temperature Test Cycle: 0.5 seconds on, 0.5 seconds off |

Rated current, speed, starting voltage, and mechanical noise must meet specifications after allowing the device to rest for 12 hours after test.

Dimensions



Packaging

| Item | Tray | Inner Box | Outer Box |
|-----------|-------------------------|--------------------------|--------------------------|
| DIV. | PET | Carton box | Carton box |
| Dimension | 141(L) x 150(W) x 11(H) | 150(L) x 160(W) x 115(H) | 330(L) x 330(W) x 270(H) |
| Quantity | 50ea | 1,000ea | 8,000ea |

Specifications Revisions

| Revision | Description | Date |
|----------|---------------------------|------------|
| A | RELEASED FROM ENGINEERING | 04/08/2022 |

Note:

- Unless otherwise specified:
 - All dimensions are in millimeters.
 - Default tolerances are ± 0.5 mm and angles are $\pm 3^\circ$.
- Specifications subject to change or withdrawal without notice.