



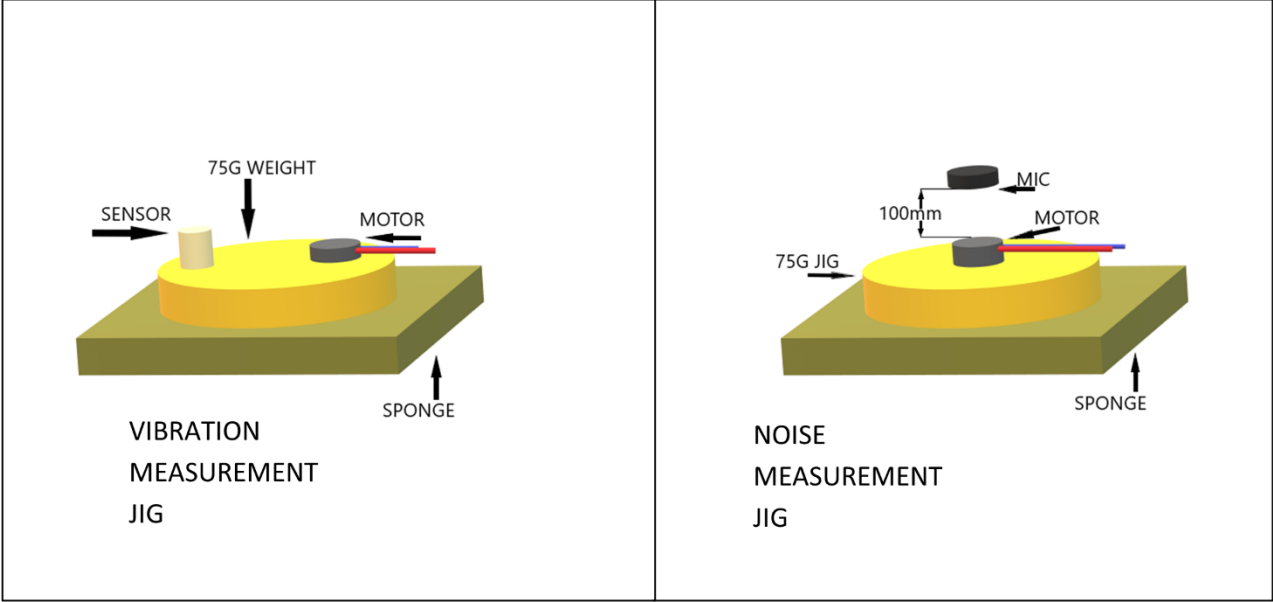
Data Sheet	HD-EMB2107-LW27
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- Features:**
- 20.5mm x 6.6mm cylindrical design
 - Coreless brush motor with lower friction and energy losses
 - 7,500 rpm rated speed
 - Lead wires and through hole mounts for easy installation


Specifications

Parameters	Values	Units
Input Voltage (DC)	1.3	V _{DC}
Starting Voltage (DC)	0.75	V _{DC}
Operating Voltage Range (DC)	0.9 ~ 1.6	V _{DC}
Direction of Rotation	CW/CCW	-
Rated Speed	7,500 ± 2,000	RPM
Rated Current (Max at 1.6 V _{DC})	80	mA
Starting Current (Max at 1.3 V _{DC})	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

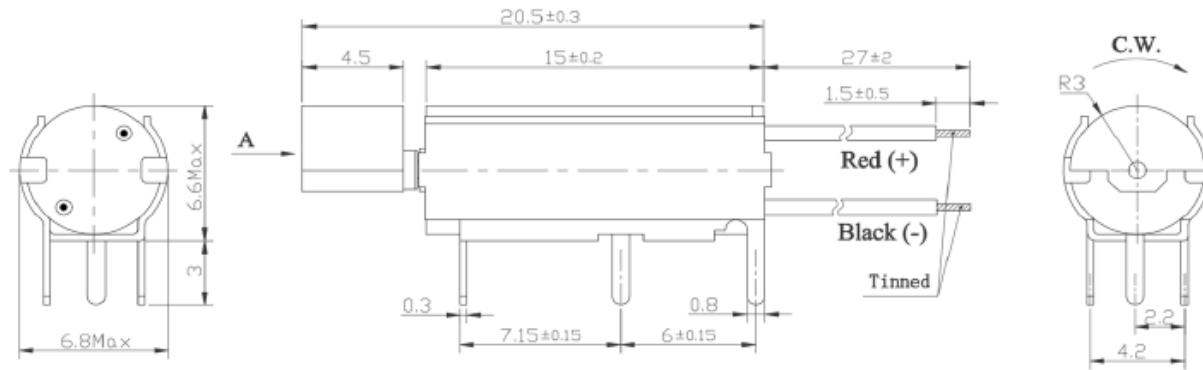


Reliability Testing

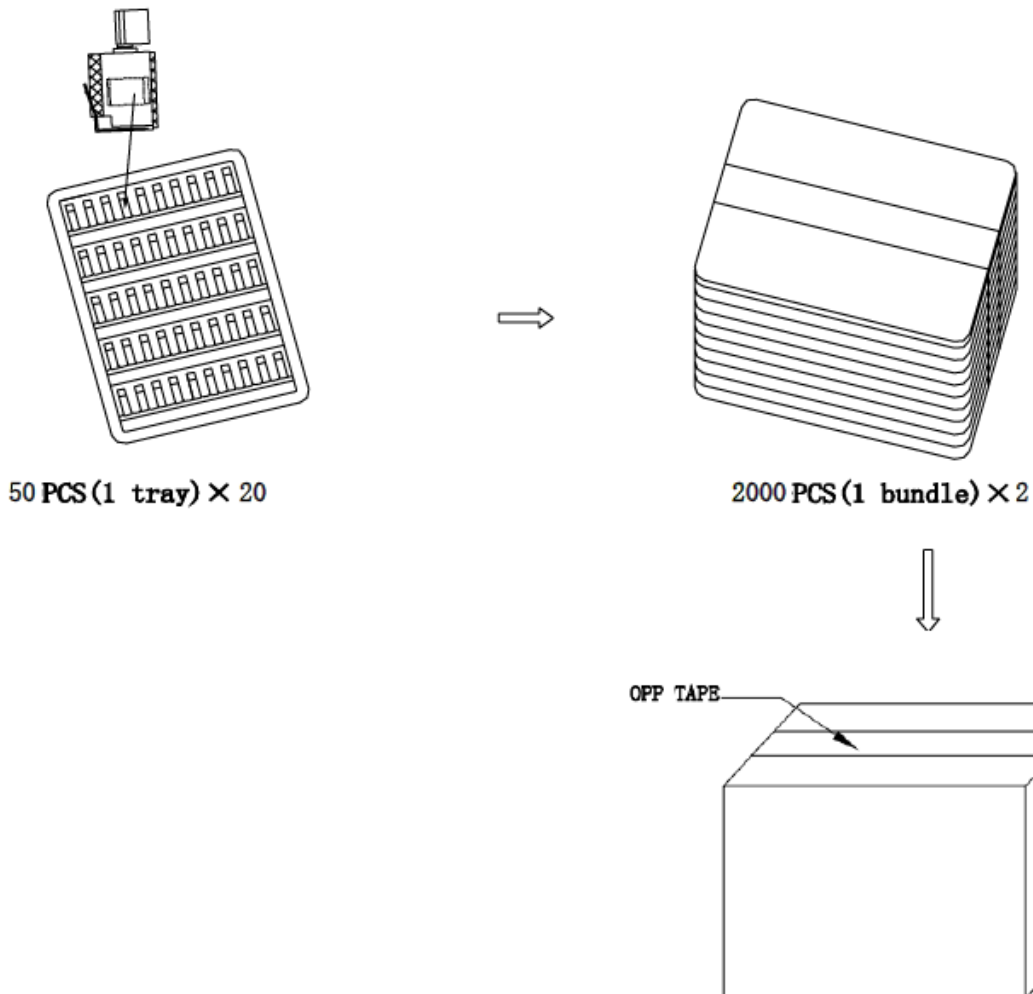
Type of Test	Test Specifications
High Temperature Test	Temperature: +60±2°C Test Duration Time: 96 hours
Low Temperature Test	Temperature: -40±2°C Test Duration Time: 96 hours
Humidity Test	Temperature: 40°C Relative Humidity: 90~95% Test Duration Time: 96 hours
Thermal Shock Test	Temperature Cycle: -30 to +70°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			
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 $\pm 0.1\text{mm}$ and angles are $\pm 3^\circ$.
 - 2. Specifications subject to change or withdrawal without notice.