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#### Data Sheet

#### HD-EMB1005-LW25-R

#### **Features:**

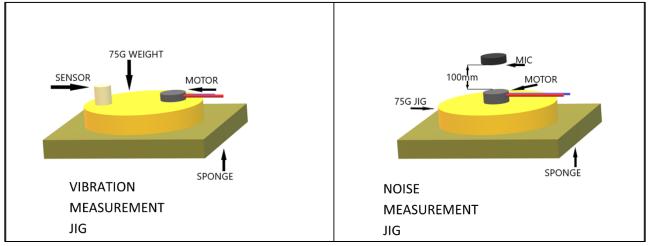
- Designed to be driven with 3 VDC
- 25mm lead wires for easy implementation
- Generates 17,000 RPMs with no more than 50 dBA acoustic noise

## **Specifications**

Parameters	Values	Units
Rated Voltage	3	VDC
Operating Voltage Range	2.5 ~ 3.7	VDC
Direction of Rotation	CW/CCW	-
Terminal Resistance	43 ± 20%	Ohms
Rated Speed (at 3 VDC)	17,000 ± 3,000	RPMs
Rated Current (at 3 VDC)	50	mA
Locked Current (Max)	90	mA
Shaft Pull Strength	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

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## **Measurement Methods**



# **Reliability Testing**

Type of Test	Test Specifications	
	Temperature: 85°C	
High Temperature Test	Test Duration Time: 96 hours	
	Temperature: -40°C	
Low Temperature Test	Test Duration Time: 96 hours Temperature: 70°C	
	Room Humidity: 90%	
Humidity Test	Test Duration Time: 96 hours	
	Run for two cycles with the motor driving for 0.5 seconds on 0.5 seconds off:	
Temperature Cycle Testing	Temperature $-20\degree$ 0 1hr 2hr 3hr	
Vibration Test	3mm deflection at 1000 cycles per minute, for 10 minutes in each axis (X, Y, Z).	
Drop Test	Weight: Set linear vibration motor to ~100g (including linear vibration motor) weight of block. Drop Height: 150cm Floor Material: Steel Test Axis: ±X, ±Y, ±Z; total 6 faces Test Repetition: 2 time per face (12 total)	
Load Test	1,000,000 operating cycles at room temperature Test Cycle: 0.5 seconds on, 0.5 second off	

Acceleration, resistance, rated current and noise must meet specifications after allowing the device to rest for 12 hours after test.