



Data Sheet

HD-EMC1103-LW27

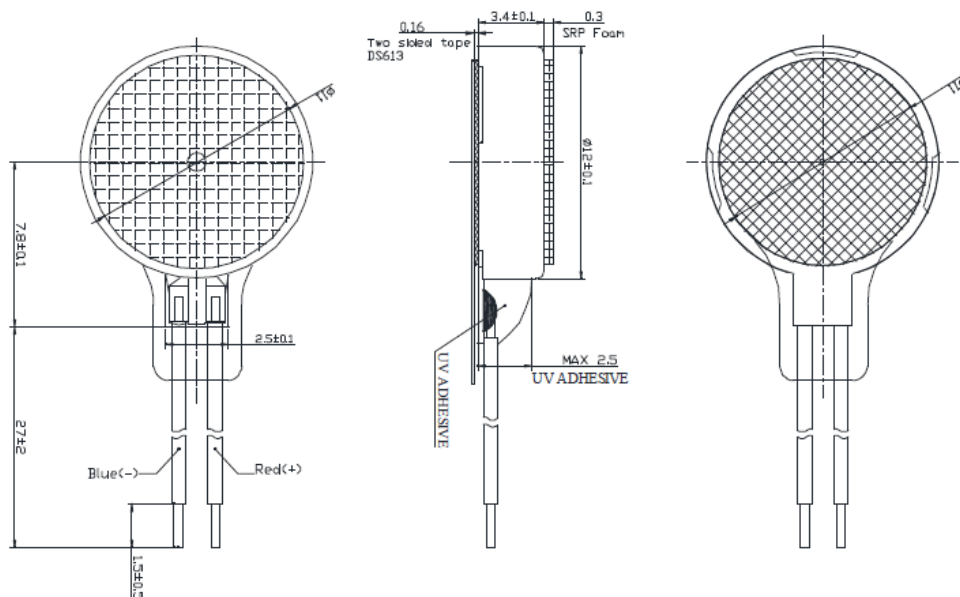
Features:

- 85mA rated current
- 8,000 rpm rated speed
- Coin style housing and lead wires for easy implementation.
- Brushless

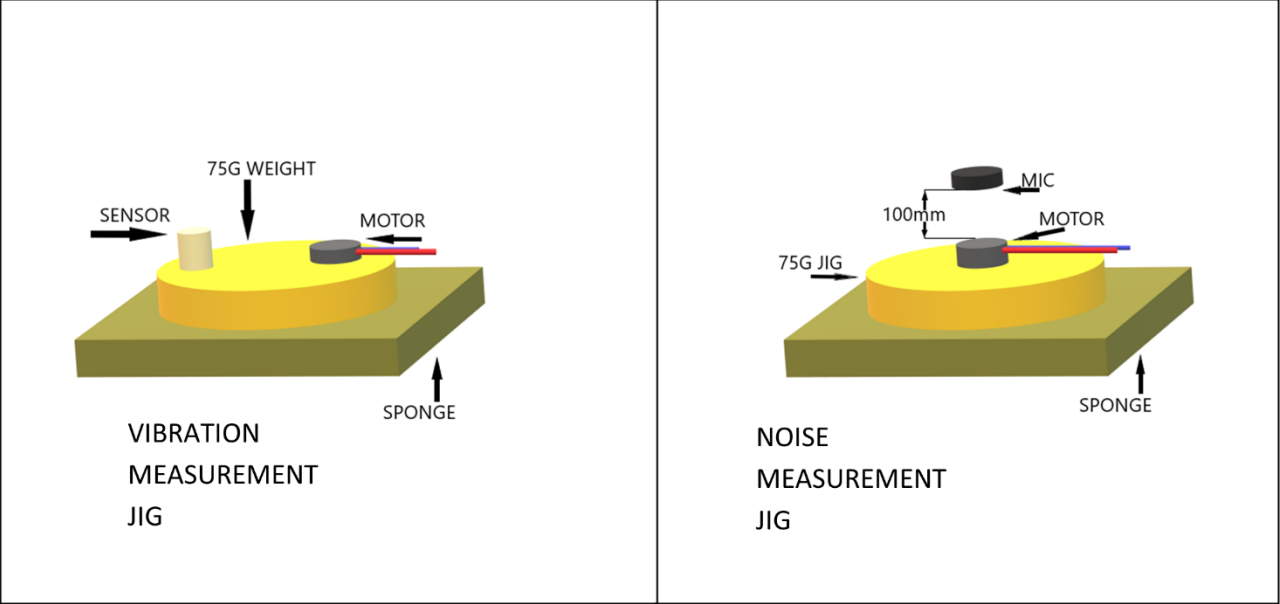
Specifications

Parameters	Values	Units
Input Voltage	3.7	V _{DC}
Operating Voltage Range (DC)	3.0 ~ 4.5	V _{DC}
Starting Voltage	2.5	V _{DC}
Direction of Rotation	CW	-
Rated Speed		
Rated Voltage, Rated Load, Motor Fixed	8,000 ± 3,000	RPM
Rated Load Current		
Maximum at 3.7 V _{DC} , Rated Load, Motor Fixed	85	mA
Starting Current		
Maximum at 2.5 V _{DC} , Rotor Locked	170	mA
Mechanical Noise	≤ 50	dB
Weight		Grams
Storage Temperature	-20 ~ +70	°C
Operating Temperature	-20 ~ +70	°C
Environmental Compliances	RoHS/REACH	-

Dimensions



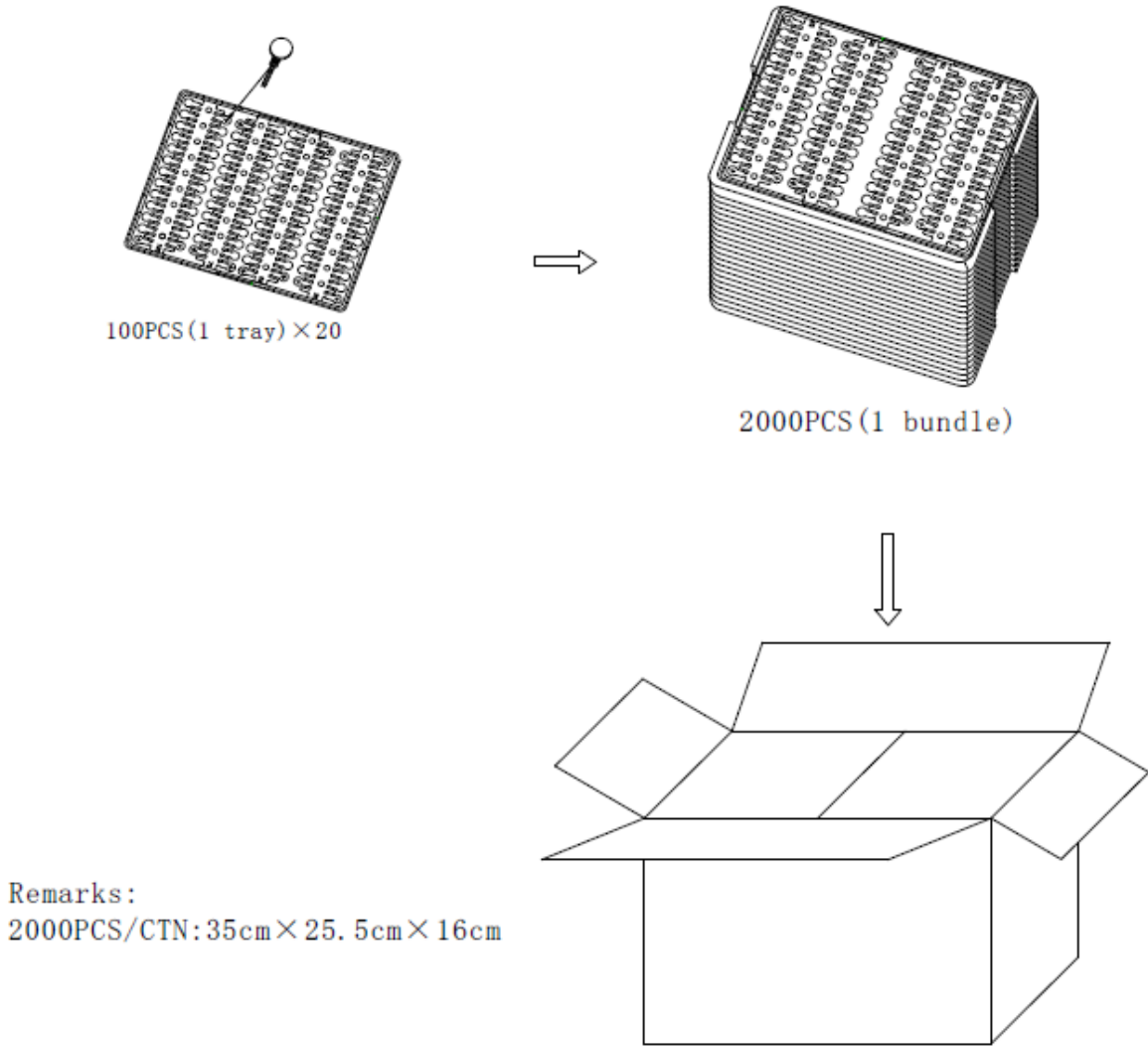
Measurement Methods (Standard Jig)



Reliability Testing

Type of Test	Test Specifications	Judgement
Life Test	At rated voltage (3.7V): Cycle: 1s on, 1s continuous Cycle Count: 1,800,000	Allow device to rest 4 hours after each test. The following specifications must be met: 1. Rotating speed (initial \pm 30%) 2. Rated Load Current (initial \pm 30%) 3. Starting Voltage (2.5V Max)
High Temperature Test	Temperature: $+80\pm2^{\circ}\text{C}$ Test Duration Time: 96 hours	
Low Temperature Test	Temperature: $-30\pm2^{\circ}\text{C}$ Test Duration Time: 96 hours	
Humidity Test	Temperature: $+65\pm2^{\circ}\text{C}$ Relative Humidity: 90~95% Test Duration Time: 96 hours	
Thermal Shock Test	Temperature Cycle: -40 to $+85^{\circ}\text{C}$ Cycle Time: 2 hours Test Repetition: 50 cycles (100 hours total)	
Vibration Test	Vibration: 10 ~ 55 Hz, 2.2G acceleration Test Axis: XYZ Test Repetition: 30 minutes per axis (90 minutes total)	
Drop Test	Drop Condition: 1.5m onto iron plate at weight 150g Test Repetition: 3 time per side (18 total)	

Packaging



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 ±0.5mm and angles are ±3°.ssw
 - 2. Specifications subject to change or withdrawal without notice.

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