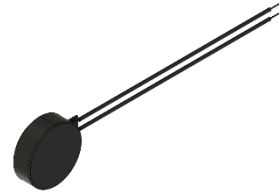




PUIaudio



Data Sheet

HD-EMC1003-LW40-R

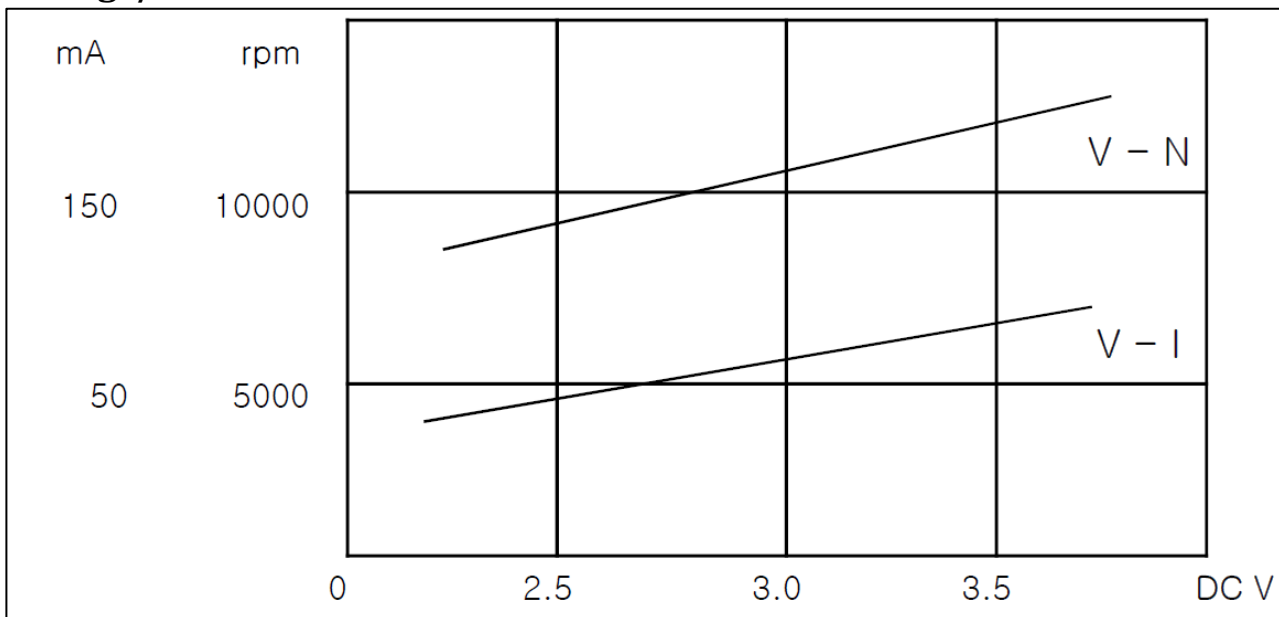
Features:

- Designed to be driven with a 3.0V DC signal
- Coin style housing and 40mm lead wires for easy implementation
- Efficiently generates 12,000 rpm

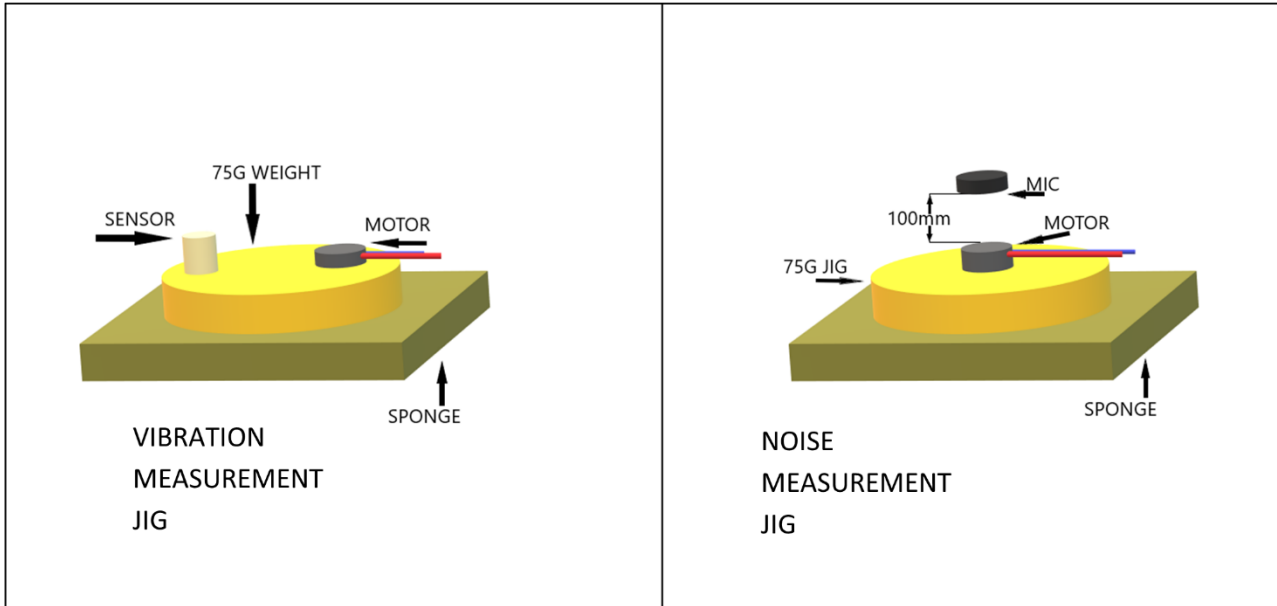
Specifications

Parameters	Values	Units
Input Voltage (DC)	3.0	V _{DC}
Starting Voltage (DC)	2.4	V _{DC}
Operating Voltage Range (DC)	2.5 ~ 3.5	V _{DC}
Direction of Rotation	CW/CCW	-
Rated Speed	12,000 ± 3,000	RPM
Rated Current (Max at 3.0 V _{DC})	85	mA
Locked Current (Max at 2.4 V _{DC})	140	mA
Terminal Resistance (single-phase)	26 ± 10%	Ohms
Terminal Resistance (double-phase)	52 ± 10%	Ohms
Environmental Compliances	RoHS/REACH	-
Weight	1.3	Grams
Storage Temperature	-40 ~ +85	°C
Operating Temperature	-20 ~ +70	°C

Voltage/Current vs RPM



Measurement Methods



Reliability Testing

Type of Test	Test Specifications
High Temperature Test	Temperature: +85°C Test Duration Time: 168 hours
Low Temperature Test	Temperature: -40±2°C Test Duration Time: 168 hours
Humidity Test	Temperature: 50°C Relative Humidity: 95% Test Duration Time: 120 hours
Thermal Shock Test	Temperature Cycle: -40 to +85°C Cycle Time: 2 hours Test Repetition: 15 cycles (30 hours total)
Vibration Test	Vibration: 10 ~ 55 Hz, 2.2G acceleration, 100g weight Test Axis: XYZ Test Repetition: 10 minutes per axis (30 minutes total)
Drop Test	Drop Condition: 1.5m onto iron plate at weight 100g Test Repetition: 1 time per side (6 total)
Load Test	57,600 operating cycles at room temp. & rated voltage 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 4 hours after test.