



PUI audio



Data Sheet

HD-EMC1203-LW20-R

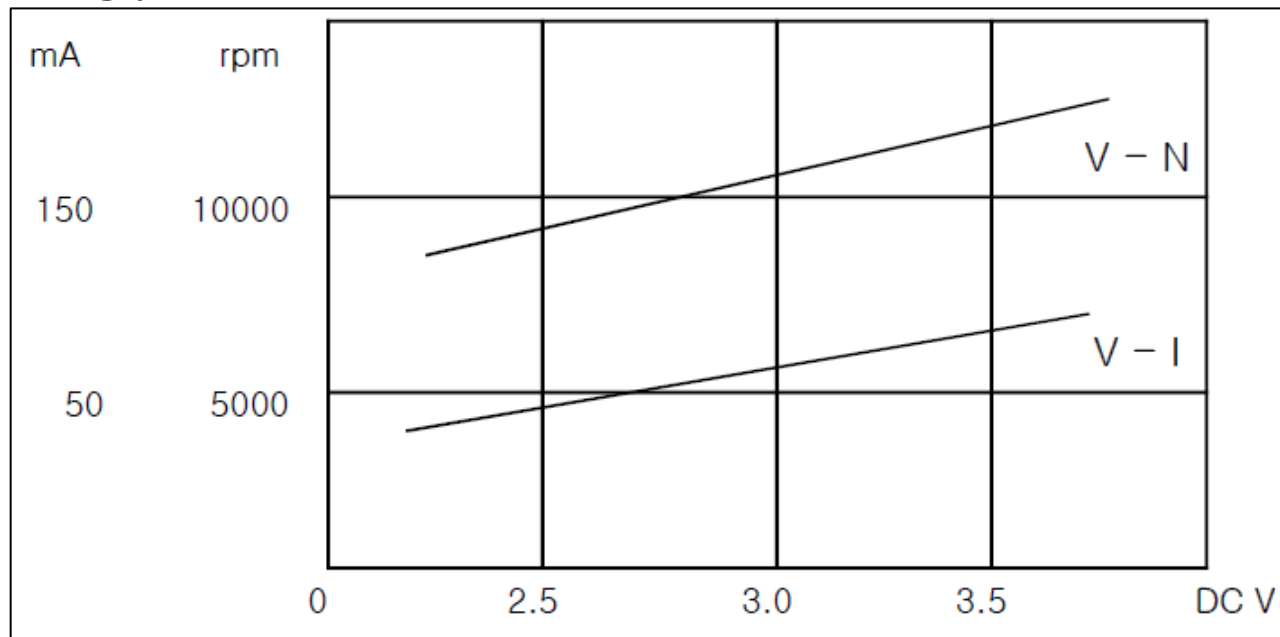
Features:

- Designed to be driven with a 3.0V DC signal
- Convenient coin style and 20mm lead wires for easy implementation
- Efficiently generates 12,000 rpms

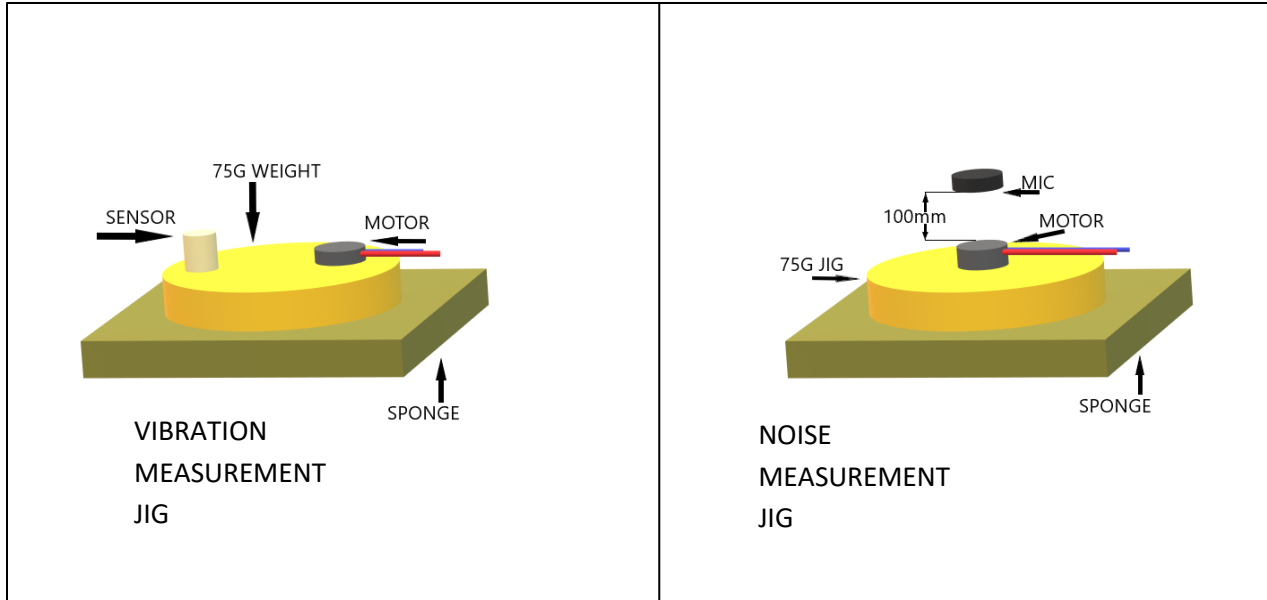
Specifications

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	$12,000 \pm 2,500$	RPM
Rated Current	85	mA
Starting Current (Max at 3.0 V_{DC})	140	mA
Terminal Resistance (single-phase)	$26 \pm 10\%$	Ohms
Terminal Resistance (double-phase)	$50 \pm 10\%$	Ohms
Environmental Compliances	RoHS/REACH	-
Weight	1.3	Grams
Storage Temperature	-30 ~ +75	$^{\circ}C$
Operating Temperature	-20 ~ +60	$^{\circ}C$

Voltage/Current vs RPM



Measurement Methods

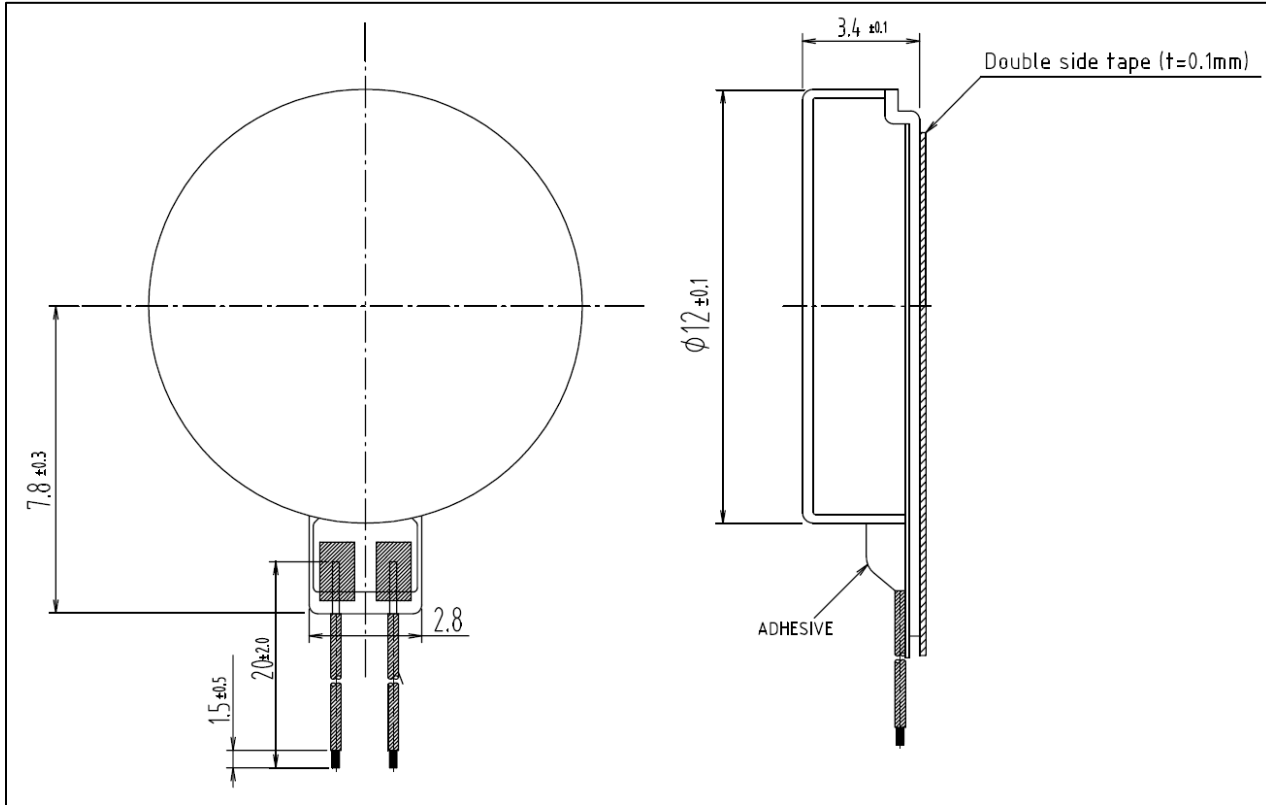


Reliability Testing

Type of Test	Test Specifications
High Temperature Test	Temperature: +85°C Test Duration Time: 168 hours
Low Temperature Test	Temperature: -40°C Test Duration Time: 168 hours
Humidity Test	Temperature: 50°C Relative Humidity: 95% Test Duration Time: 120 hours
Thermal Shock Test	Temperature Cycle: -30 to +75°C Cycle Time: 2 hours Test Repetition: 10 cycles (20 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.

Dimensions



Packing

Item	Tray	Inner Box	Outer Box
DIV.	PET	No inner box 1 bundle 215(L) x 170(W) x 60(H) 1,000ea	Outer box size is different one by packing quantity
Dimension	215(L) x 170(W) x 11(H)		
Quantity	100ea		

Specifications Revisions

Revision	Description	Date
A	RELEASED FROM ENGINEERING	04/12/2022
B	Revised Resistance Values	03/10/2023

Note:

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