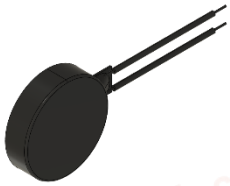
chanhvinh.com

This document contains data proprietary to PUI Audio Inc. Any use or reproduction, in any form, without prior written permission of PUI Audio Inc. is prohibited.
©2021, PUI Audio Inc.

PUIaudio



Data Sheet	HD-EMC1003-2-LW15-R

Features:

- Designed to be driven with a 3.0V DC signal
- Convenient 15mm lead wires and double-sided tape for easy implementation
- Generates 13,000 rpm with less than 50dB mechanical noise

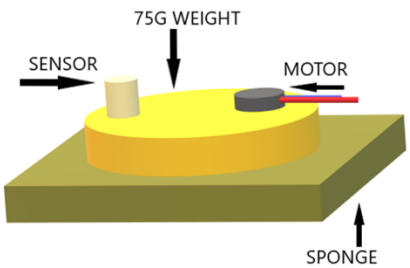
Specifications

Parameters	Values	Units
Input Voltage (DC)	3.0	V_{DC}
Starting Voltage (DC)	2.4	V_{DC}
Operating Voltage Range (DC)	2.5 ~ 3.6	V_{DC}
Direction of Rotation	CW/CCW	-
Rated Speed	13,000 ± 3,000	RPM
Rated Current (Max at 3.0 V_{DC})	85	mA
Starting Current (Max at 2.4 V_{DC})	140	mA
Terminal Resistance	Phase 1: 28 ± 20% Phase 2: 56 ± 20%	Ohms
Shaft Pull Strength (Min)	1	Kg
Mechanical Noise (Max)	50	dBA
Environmental Compliances	RoHS/REACH	-
Weight	(approx.) 1	Grams
Storage Temperature	-40 ~ +85	°C
Operating Temperature	-30 ~ +70	°C

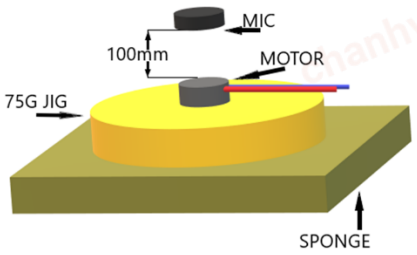
chanhvinh.com

This document contains data proprietary to PUI Audio Inc. Any use or reproduction, in any form, without prior written permission of PUI Audio Inc. is prohibited.
©2021, PUI Audio Inc.

Measurement Methods (Temperature: 25±2°C; RH: 45 ~ 85%; Motor Position: Horizontally locked)

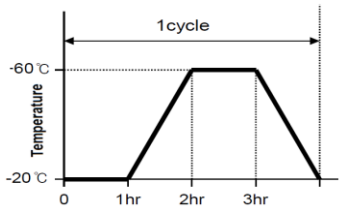


VIBRATION MEASUREMENT JIG



NOISE MEASUREMENT JIG

Reliability Testing

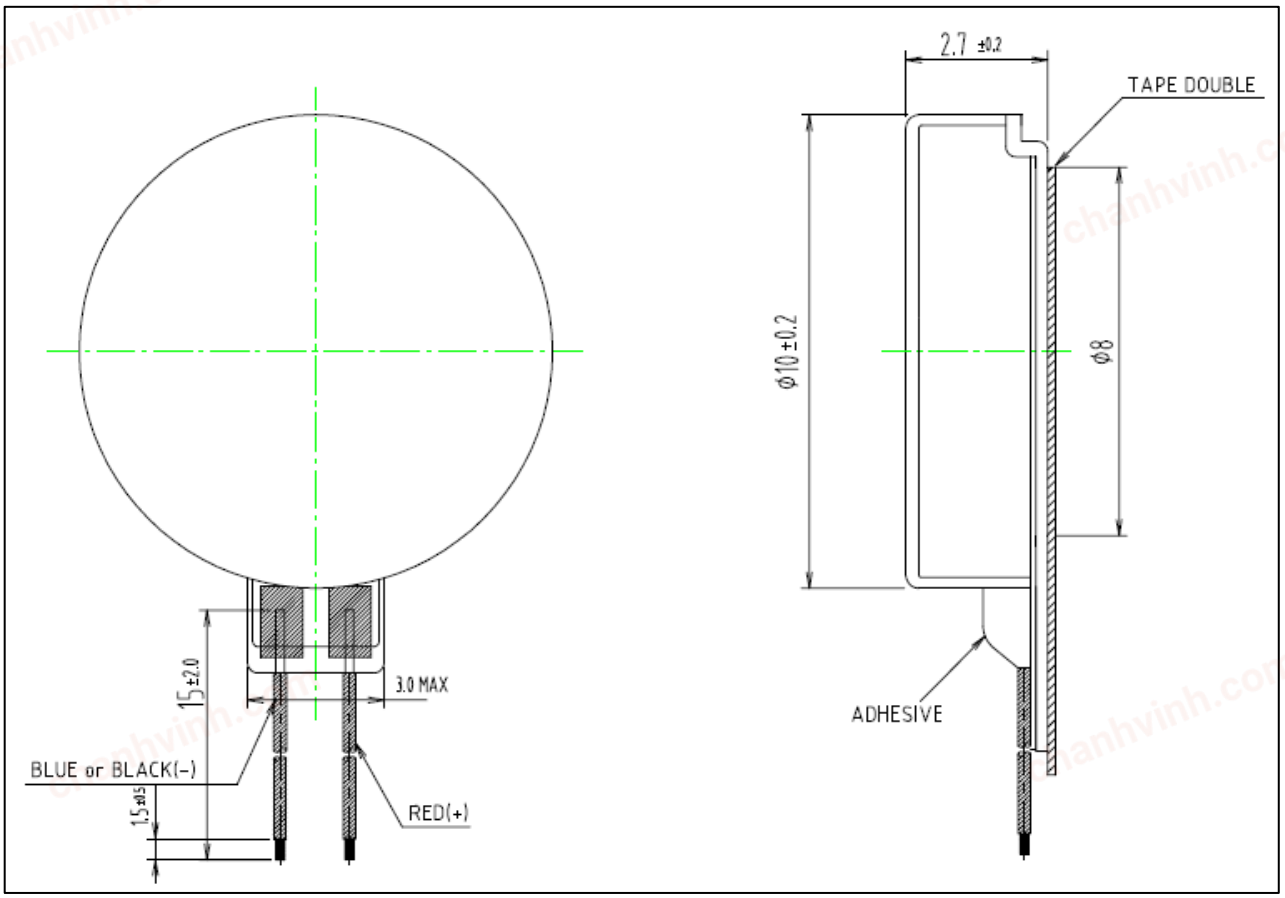
Type of Test	Test Specifications
High Temperature Test	Temperature: +85°C Test Duration Time: 96 hours
Low Temperature Test	Temperature: -40°C Test Duration Time: 96 hours
Humidity Test	Temperature: 70°C Relative Humidity: 90% Test Duration Time: 96 hours
Thermal Shock Test	Temperature Cycle: -40 to +85°C Cycle Time: 1 hour Test Repetition: 24 cycles (24 hours total)
Temperature Cycle Testing	Drive motor for 2.0 seconds on, 2.0 seconds off at rated voltage Repeat cycle shown 2 times (8 hours total) 
Vibration Test	Vibration: 3mm, 1000cpm Test Axis: XYZ Test Repetition: 10 minutes per axis (30 minutes total)
Drop Test	Drop Condition: 1.5m onto iron plate at weight 150g Test Repetition: 6 times per side (36 total)
Load Test	100,000 operating cycles at room temperature Test Cycle: 2.0 seconds on, 2.0 seconds off

Rated current, speed, starting voltage, and mechanical noise must meet specifications after allowing the device to rest for 12 hours after test.

chanhvinh.com

This document contains data proprietary to PUI Audio Inc. Any use or reproduction, in any form, without prior written permission of PUI Audio Inc. is prohibited.
©2021, PUI Audio Inc.

Dimensions



Packaging

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	04/08/2022

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.