

Data Sheet

HD-LA0803-LW10-R

PUI Audio's 8mm diameter by 3mm high **HD-LA0803-LW10-R** is a coin-style linear resonant actuator haptic device that employs a spring and mass system for fast response times and strong vibration in a small package.

Features:

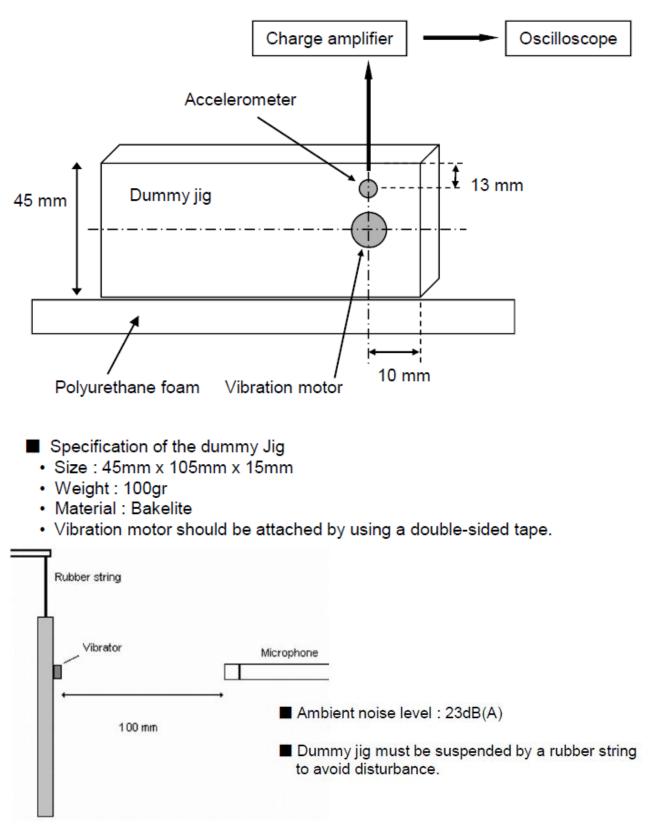
- Designed to be driven with a 235 Hz sinewave
- Convenient lead wires and double-sided tape for easy implementation
- Generates 1.5Gs with no more than 45 dBA acoustic noise

Parameters	Values	Units
Input Voltage (AC Sinewave)	2	Vrms
Operational Frequency	235	Hz
Coil Resistance	25 ±15%	Ohms
Vibration	1.5 ±0.3	Gs RMS
Max Current Draw (at 2 VRMS)	90	mA
Rise Time (50% of steady state)	50	mS
Fall Time (50% of steady state)	80	mS
Magnet Material	NdFeB	-
Acoustic Noise (Max)	45	dBA
Housing Material	SPC	-
Acceptable Soldering Methods	Hand Solder	-
Environmental Compliances	RoHS/REACH	-
Weight	1	Grams
Storage Temperature	-40 ~ +80	°C
Operating Temperature	-20 ~ +70	°C

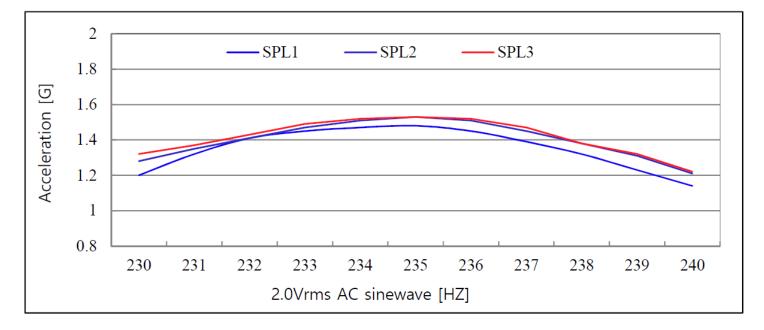
Specifications

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Measurement Methods



Typical Frequency Response Characteristics

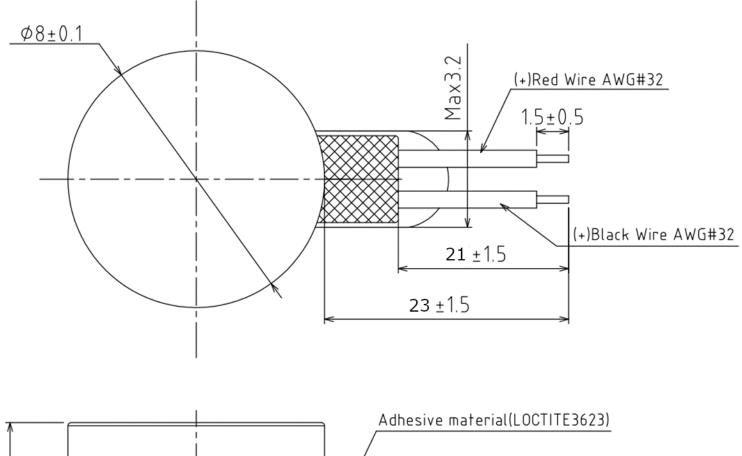


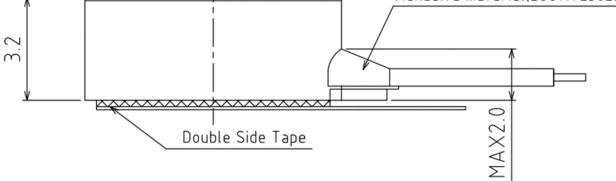
Reliability Testing

Type of Test	Test Specifications
High Temperature Test	96 hours at 80°C
Low Temperature Test	96 hours at -40°C
H2S Corrosion Resistance Test	Concentration: 3 ±1 PPM Test Environment: 40°C, humidity 80% RH Test Duration Time: 240 hours
	Temperature: -40°C to +80°C
Temperature Cycle Testing	Test Duration: 30 minutes Test Cycles: 15 cycles
Vibration Test	3mm deflection at 1000 cycles per minute, for 10 minutes in each axis (X, Y, Z).
	Weight: Set the linear vibration motor to the around 100g (include the linear vibration motor) weight of block.
	Drop Height: 150cm
	Floor Material: Steel
	Direction: ±X, ±Y, ±Z; total 6 faces
Drop Test	Number of Times: Each face 3 Times
	100,000 operating cycles in room temperature
Load Test	Cycle test condition: 2 seconds on, 1 second off

Acceleration, resistance, rated current and noise must meet specifications after allowing the device to rest for 4 hours after test.

Dimensions (Red wire is positive)





Specifications	Revisions	

Revision	Description	Date
А	Released from Engineering	4/6/2021
В	Updated Lead Wire Length	7/12/2022

Note:

1. Unless otherwise specified:

- A. All dimensions are in millimeters.
- B. Default tolerances are ± 0.5 mm and angles are $\pm 3^{\circ}$.
- 2. Specifications subject to change or withdrawal without notice.