Mini Vibration Motor

Operating conditions

Items		Specifications	Condition & Remarks			
R	ated voltage	3.0V DC				
R	ated load	Counter weight	As specified in the outline drawing.			
R	lotation	C.W. (clockwise)				
Μ	lotor position	All positions				
0	perating voltage	2.2~3.6V DC				
0	perating conditions	-30 ~ 70°C ordinary humidity	No condensation of moisture.			
S	torage conditions	-40 ∼ 80°C, ordinary humidity	No condensation of moisture.			

Mechanical specifications

Item	s	Specifications	Condition & Remarks			
	Configuration	As specified in outline drawing				
	11	There shall be no evidence of mechanical damage and shall not have inadequate corrosion, etc.	Visual examination: Inspection carried out on samples.			
	Shaft end play	0.05 mm ~ 0.2 mm Max				
	Mass	1.23g approx.				
	Holding strength of vibration weight	49N (5kgf)				



Performance and characteristics

Items	Specifications	Condition & Remarks					
Rated speed	12,000 @ 2,500 rpm	At rated voltage and rated load (vibration weight).					
Rated current	90mA max	-					
Stall current	120mA max	At rated voltage.					
Starting voltage	2.0V DC max	At rated load (vibration weight) any position of rotor.					
Insulation resistance	1MΩ min	At DC 100V between the lead wires and motor body					
Terminal resistance	2Ω approx.	At 20c					
Mechanical noise	50db (A) max						
	Measured at rated voltage and rated load (vibration weight). Background noise: 28db (A) max. @ 10cm.						
Measuring instrume	Measuring instruments: B & K.						
The weight of jig: 70							

Caution and Matters

8-1 Warnings: In a motor near the end its life, or under breakdown conditions, short circuits can develop between commutator segments. Uncontrolled voltage may then leak into the power source circuit. Motors may overheat or fail if run continuously with its rotor locked condition or under excessive loads.

Seeed Studio Works

8-2 Destructive atmospheres: Do not use and store the motor in the corrosive gas atmosphere (H2S, SO2, NO2, Cl2, etc.), or substances that can emit toxic gases, such as organic silicon, cyanide, formalin, or phenol compounds. The motor may get serious damages.

8-3 Condensation: Condensation on the electrical circuits can destroy the motor or control circuits. Monitor the environment and undertake measures to prevent condensation, such as installing condensation sensors to cut power when necessary.

8-4 Be aware of the following factors and perform necessary tests to check a motor capability to adopt with your mechanism and applications: Motor life, electric noise, mechanical noise, vibration, static-electrical noise resistance, power-source noise resistance, drift of rpm, electrical resonance between control circuit and motor, mechanical resonance between subassembly and motor malfunction due to motor noise, electrical magnetic interference, malfunction due to magnetic flux leakage, destruction due to lightning-related power surge, grounding.

8-5 Some particular plastic materials can crack and fail after exposure to motor bearing oil. Perform test the motor in/on the subassembly to check the influence of the oiled plastic parts.

8-6 Avoid connecting a serial resistor to the motor if at all possible, as this can negatively affect reliability. If this is unavoidable, keep resistance as low as possible and test thoroughly for reliability before using.

8-7 When testing for UL, CSA or other safely standards, apply for approval for the entire subassembly.8-8 Do not store motors under conditions of extreme temperatures or high humidity, or for longer than six months even room conditions. When removing out of packaging after storage, take precautions to prevent condensation.

8-9 Connections: Complete soldering operations within three seconds to prevent damage to leads and terminals. Make sure that the soldering tip does not exceed 350c. Be gentle with terminals; dents or pressure on them can lock up the motor.

8-10 Please consults us in advance when design considerations call for forcefully stalling the motor using a short circuit at the terminal or reverse voltage. Such operations can shorten product life.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Seeed Studio Accessories category:

Click to view products by Seeed Studio manufacturer:

Other Similar products are found below :

101990565 101990564	101020003	101020004	101020025	101020028	101020038	101020058	101020472	101020580	101990029
101990058 101990061	101990065	102020143	102070002	102070004	102070007	102070008	102070011	102991175	102991176
103010002 103020005	103020007	103020008	103020010	103020012	103020030	103020133	103020135	103020136	103020137
103020252 103020272	103030005	103030009	103030075	103030275	103030276	103030335	103100063	103990183	103990445
104020006 104020048	104020108	104020109	104030001	104030009					