



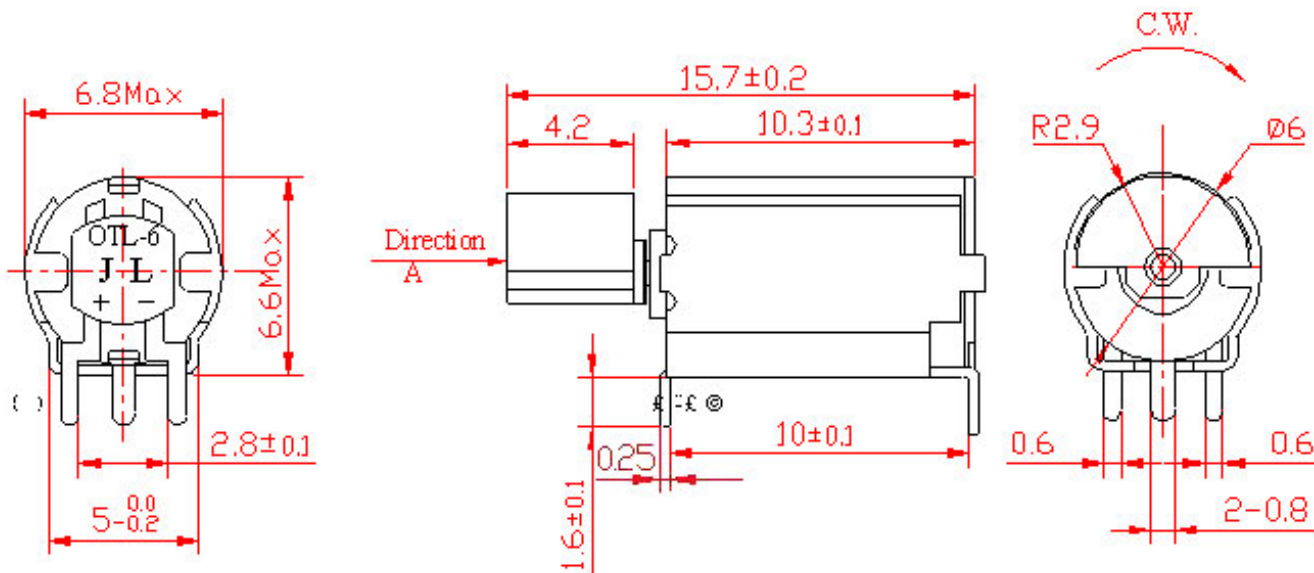
JinLong Machinery

VibratorMotor.com

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Part No. Z6SC0B0150081 (Old Part Number : 6SH-1708B)



1. General scope

1-1 The specifications apply to the coreless cylindrical permanent magnetic micro vibration motor DC model **Z6SC0B0170081**.

2. Operating conditions

Items	Specifications	Condition & Remarks
2-1 Rated voltage	3.0V DC	
2-2 Rated load	Vibration weight	As specified in the outline drawing.
2-3 Rated speed	8000±2000rpm	
2-4 Rotation	C.W. (clockwise)	
2-5 Motor position	All positions	
2-6 Operating voltage	2.0 ~ 3.8 V DC	
2-7 Operating conditions	-30 ~ 70°C, ordinary humidity	No condensation of moisture.
2-8 Storage conditions	-40 ~ 80°C, ordinary humidity	No condensation of moisture.

3. Measuring conditions

Items	Specifications	Condition & Remarks
3-1 Temperature	20±2°C	
3-2 Humidity	(63 ~ 67%) RH	
3-3 Motor position	Shaft horizontal	Lock the motor in a test fixture.

3-4 All data are based on the measuring conditions: Temperature, 20°C; Humidity, 65% RH. If any disagreement occurs, such test conditions are available: Temperature, 5~35°C; Humidity, 45 ~ 85% RH.

4. Mechanical specifications

Items	Specifications	Condition & Remarks
4-1 Configuration	As specified in outline drawing	Outline drawing No: Z6SC0B0170081 .
4-2 Appearance	There shall be no evidence of mechanical damage and shall not have inadequate corrosion, etc.	Visual examination: Inspection carried out on samples.
4-3 Shaft end play	0.1 ~ 0.3mm	
4-4 Weight of motor	2.5g approx.	
4-5 Holding strength of vibration weight	49N (5kgf)	

5. Performance and characteristics

Items	Specifications	Condition & Remarks
5-1 Rated speed	8000±2500rpm	At rated voltage and rated load (vibration weight).
5-2 Rated current	70mA max	
5-3 Stall current	100mA max	At rated voltage.
5-4 Starting voltage	1.7 V DC max	At rated load (vibration weight) any position of rotor.
5-5 Insulation resistance	1M• min	At DC 100V between the lead wires and motor body.
5-6 Terminal resistance	1• approx.	At 20°C.
Mechanical noise	35db (A) max	

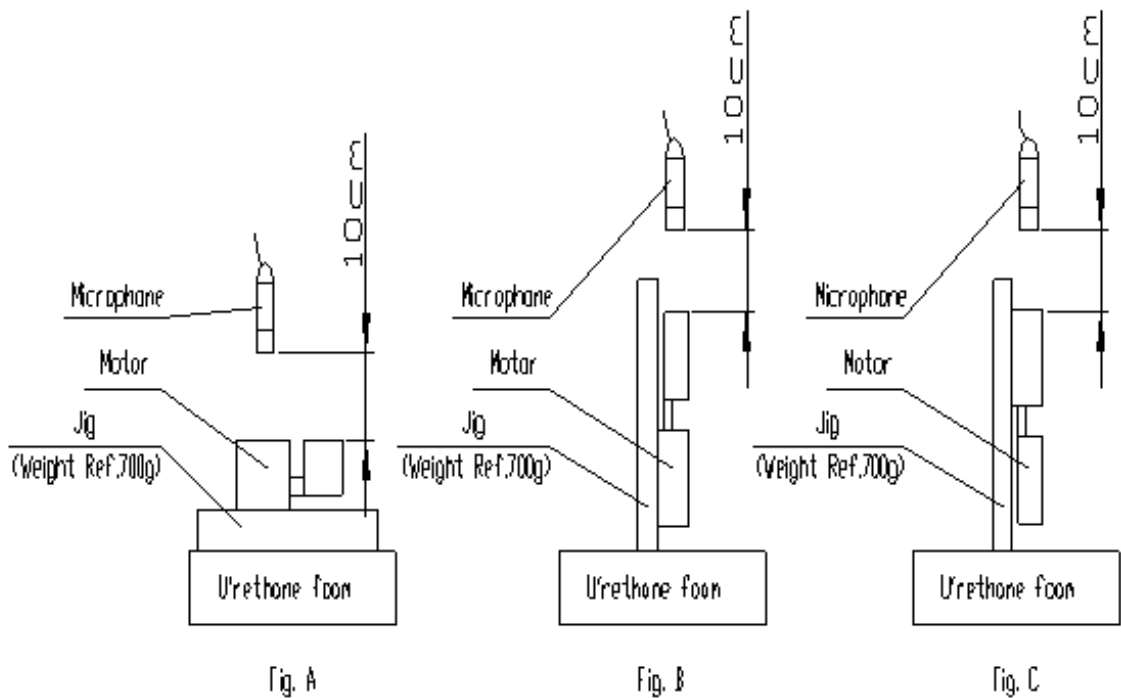
Measured at rated voltage and rated load (Counterweight).

Background noise: 28db (A) max.

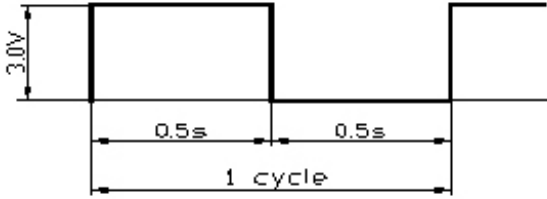
Measuring instruments: B & K.

The weight of jig: 700g.

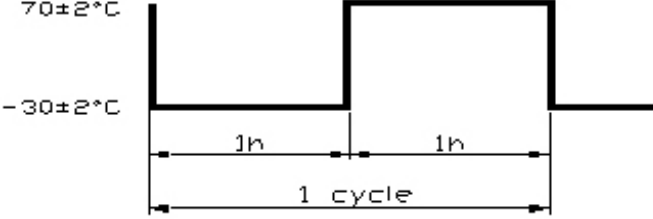
5-7



6. Reliability Test

Items	Standard test conditions	Condition & Remarks																		
6-1 Life test	 <table border="1" data-bbox="428 968 1230 1066"> <thead> <tr> <th>Position</th> <th>Voltage</th> <th>Load</th> <th>Temperature</th> <th>Humidity</th> <th>Life</th> </tr> </thead> <tbody> <tr> <td>Horizontal</td> <td>Rated</td> <td>Counter weight</td> <td>20 °C</td> <td>65 %</td> <td>200,000 cycles</td> </tr> <tr> <td></td> <td></td> <td></td> <td>40 °C</td> <td>90 %</td> <td>40,000 cycles</td> </tr> </tbody> </table>	Position	Voltage	Load	Temperature	Humidity	Life	Horizontal	Rated	Counter weight	20 °C	65 %	200,000 cycles				40 °C	90 %	40,000 cycles	After 2 hours exposure in ordinary Motors shall be approved as specified in item 7-1.
Position	Voltage	Load	Temperature	Humidity	Life															
Horizontal	Rated	Counter weight	20 °C	65 %	200,000 cycles															
			40 °C	90 %	40,000 cycles															
6-2 Low temperature exposure test	Temperature: $-40 \pm 2^\circ\text{C}$ Time: 96 hrs																			
6-3 High temperature exposure test	Temperature: $60 \pm 2^\circ\text{C}$ Time: 96 hrs	After 2 hours exposure in ordinary Motors shall be approved as specified in item 7-2.																		
6-4 High humidity exposure test	Temperature: $40 \pm 2^\circ\text{C}$ Humidity: 90 ~ 95% RH Exposure time: 96hrs Dry time: 4hrs No condensation of moisture																			
6-5 Vibration test	Displacement: 1.5mm (p-p) Frequency: 10 ~ 55Hz Period: 20 Mins log sweep (10 ~ 55 ~ 10Hz) Direction: x, y, z Time: Every 2 hours	After the test motors shall be approved as specified in item 7-2.																		

6-6 Drop test	<p>Test state: Set the motor to the approximately 75 g (include the motor) weight of block drop the motor on the concrete floor.</p> <p>Height: 1.5 m</p> <p>Direction: $\pm x, \pm y, \pm z$</p> <p>Number of times: Twice each</p>	After the test motors shall be approved as specified in item 7-2.
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6-7 Heat stock test	 <p>70±2°C</p> <p>-30±2°C</p> <p>1h</p> <p>1h</p> <p>1 cycle</p>	After the test motors shall be approved as specified in item 7-2.
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7. Post environmental

Items	Requirements
7-1 Table A	<p>1) Rated speed: Initial data -30 % min.; Initial data +60 % max.</p> <p>2) Rated current: Initial data ± 30 % max.</p> <p>3) Insulation resistance: 1 MΩ min.</p> <p>4) Starting voltage: 1.7 V DC max.</p> <p>5) Current waveform: Normal</p>
7-2 Table B	<p>1) Rated speed: Initial data -30 % min.; Initial data +60 % max.</p> <p>2) Rated current: Initial data ± 30 % max.</p> <p>3) Starting voltage: 1.7 V DC max.</p>

8. Matters to be paid attention to when using motor

8-1 Please lay the motors carefully in transportation to avoid any damage to the motor body or its electric function because of collision.

8-2 Please do not leave the motors in the environment of high temperature, high humidity and gas that will cause rust and corrosion. Please don't store the motors for over 6 months.

8-3 Please do not lock the motor shaft when the electric power is supplied.

8-4 Please do not touch the weights when motor is rotating.