

# SPECIFICATION

BMV0802H3.2



	<b>SPECIFICATION</b> Vibration Motor		
	TOTAL PAGE	07	<a href="http://www.be-star.com">www.be-star.com</a>
			RoHS

Customer		Model Name	BMV0802H3.2
Customer P/N		Product No.	210822
Date	23 Apr. 2020	Issue No.	BS/TEV01.038A1
Page	01 of 07	Issue Date	2020.04.23

## Approval:

- 1.Characteristics
- 2.Dimension
- 3.Reliability Test
- 4.Packing
- 5.Notice
- 6.History change record

Drawn by	Checked by	Approved by	Customer approved
包丽萍	李梅芳	陶红仲	

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# BMV0802H3.2

## 1.Characteristics

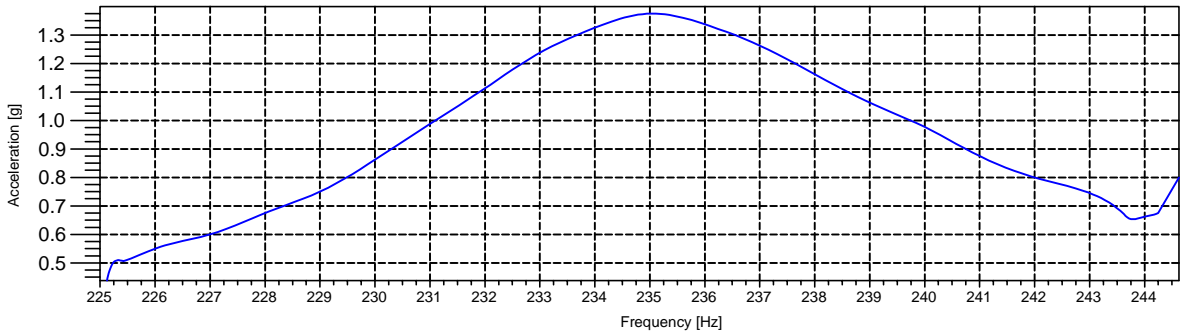
### 1.1Operating Conditions

	Parameter	Specifications
1.	Rated Voltage	1.8VrmsAC,Sine wave
2.	Operating Voltage	0.1~1.9VrmsAC
3.	Rated Frequency	235Hz
4.	*Rated Current	Max 80mArms
5.	*Rated Acceleration	1.20~1.70Grms
6.	*Acceleration at -20℃	1.0Grms Min
7.	*Rise Time	Max 50msec(run to 50% of the maximum acceleration after powering on)
8.	*Falling Time	Max 80msec(decelerate to 50% of the maximum acceleration after outage)
9.	**Insulation Resistance	10MΩ Min
10.	Resistance at (25±3)℃	230hm±10%
11.	***Noise	Max 50dB
12.	Direction of vibration	Z axis
13.	Operating Environment	-20...+60℃,65±20%RH
14.	Storage Conditions	-30...+70℃,65±20%RH
* Drived by the rated voltage and frequency( 1.8VrmsAc,Sine wave,235Hz) **At DC 100V between lead wire and case ***Drived by the rated voltage and frequency(1.8VrmsAc,Sine wave,235Hz) 10cm distance from microphone[ Back ground noise 28dB(A) Max ]		

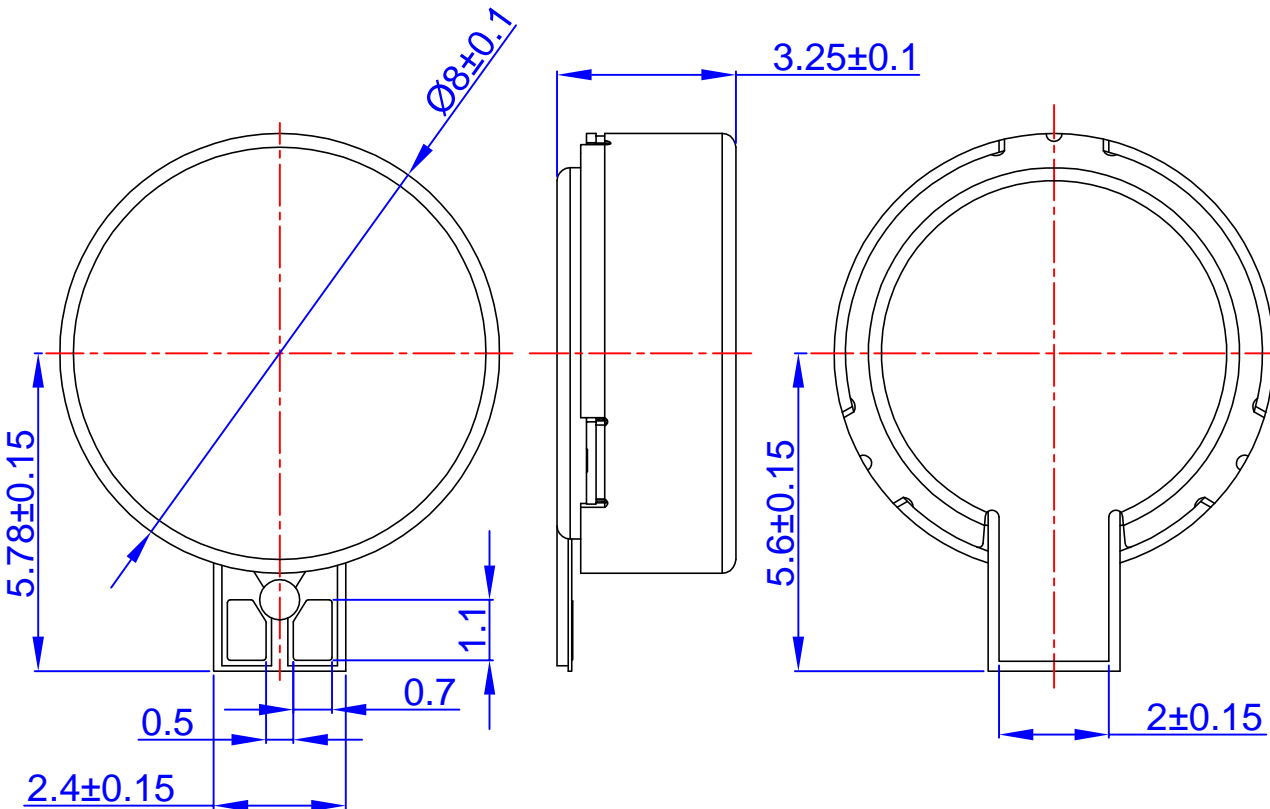
				Date:	2020.04.23	BMV0802H3.2
A1	2020.04.23	包丽萍		Drawn by:	包丽萍	
A	2017.04.24	周吕辉		Checked by:	李梅芳	Vibration Motor
Rev.	Date	Drawn	Note	Approved by:	陶红仲	
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1.2 Frequency Characteristics



2. Dimension



Unit: mm Tolerance:±0.3

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## 3. Reliability test

### 3.1 Lifetime test

- a.Input Rated voltage, Rated frequency  
b.Duration 500,000 cycles  
(2 s on, 1s off, as 1 cycle)

After the test, the product should meet the requirements of item A.

### 3.2 Low temperature storage test

- a.Temperature Condition  $-30\pm 2^{\circ}\text{C}$   
b.Duration 96hrs

After 4 hours exposure in ordinary temperature and humidity, the product should meet the requirements of item B.

### 3.3 High temperature storage test

- a.Temperature Condition  $+70\pm 2^{\circ}\text{C}$   
b.Duration 96hrs

After 4 hours exposure in ordinary temperature and humidity, the product should meet the requirements of item B.

### 3.4 Humidity storage test

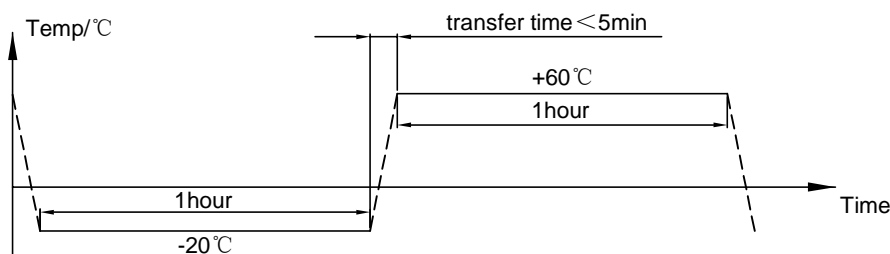
- a.Temperature Condition  $+55\pm 2^{\circ}\text{C}$   
b.Humidity Condition 95%RH  
c.Duration 96hrs  
d.No condensation of moisture

Afer 4 hours exposure in ordinary temperature and humidity, the product should meet the requirements of item B.

### 3.5 Temperature shock test

- Duration 15 cycles  
(1 hour at  $-20^{\circ}\text{C}$ , 1 hour at  $+60^{\circ}\text{C}$ , as one cycle, Transfer time between extreme temperatures:  $< 5\text{min}$ )

After 2 hours exposure in ordinary temperature and humidity, the product should meet the requirements of item B.



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## 3.6 Vibration test

- a.The motor fixed fixture weight 180g
  - b.Frequency:10~55Hz
  - c.Double amplitude:1.5mm(p-p)
  - d.Acceleration: 22m/s
  - e.Period:In the range of 10min (10~55~10Hz)
  - f.Condition:Do the test in three axial directions for one hour to the samples.
- The product should meet the requirement of item B.

## 3.7 Drop test

- a.Fix the motor on a object weighted about 180g(include the motor) and drop it to the cement floor.
  - b.Height 1.5m (to cement floor)
  - c.Direction  $\pm X$  ,  $\pm Y$  ,  $\pm Z$
  - d.Number of the test 3 times for each direction
- The product should meet the requirements of item B.

## Judgments after reliability test

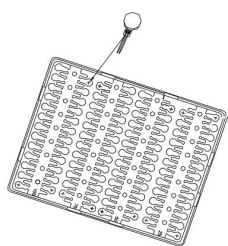
ItemA: The acceleration fluctuates in the initial value $\pm 30\%$  . The current and noise meet the specifications.

ItemB: There should be no abnormalities to happen in structure.

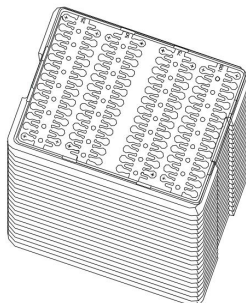
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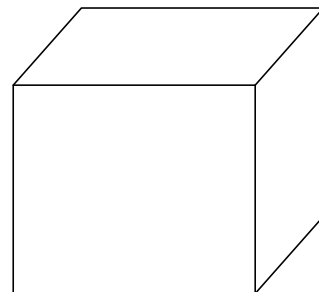
## 4. Packing



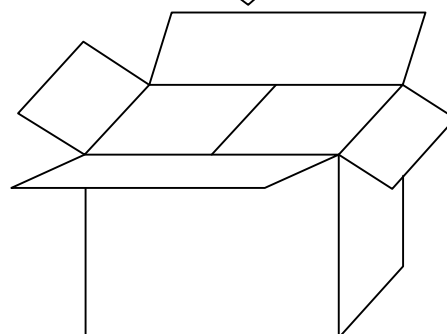
100PCS (1 tray) ×20



2000PCS (1 bundle)



1 box ×2



Packing Quantity :

4000pcs/CTN:(46\*28.5\*16)cm

8000pcs/CTN:(46\*28.5\*30.5)cm

## 5. Notice

5.1 Make sure to use the motor in accordance with the specifications, if not, the lifetime might be reduced accordingly, pay high attention to the range of the voltage.

5.2 The motor is suggested using within 6 months. Do not use or store the motor under below environments:

- a. High temperature and high humidity area;
- b. Corrosive gas such as H<sub>2</sub>S, SO<sub>2</sub>, NO<sub>2</sub>, Cl<sub>2</sub>;
- c. Dusty area;

5.3 Pay attention to the working environment of the motor, avoid any iron material sucked by the motor, or the motor might cause noise and the performance will be degraded, meanwhile, the reliability might be reduced.

5.4 Make sure the product will not violate any local relevant standards, as well as laws and regulations.

5.5 Handle with care.

5.6 A little rusty spot at the steel plate surface is allowed.

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## 6. History change record

[illegible]

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