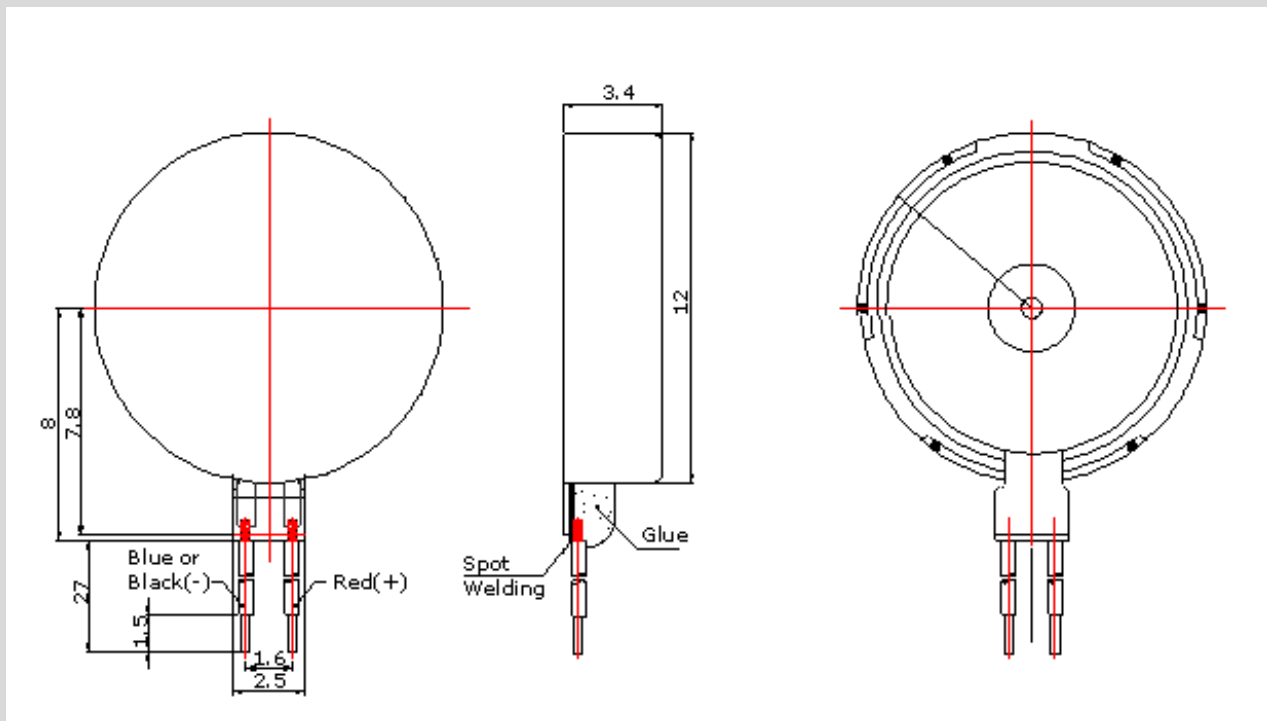




C1234B016F

(Old Part Number : C1234L-38)



1. General Description

This specification applies to coin-shape permanent-magnetic motor DC model **C1234B016F**.

2. Operating condition

Item	Specification	Conditions
2-1	Rated voltage	3.0V DC

2-2	Operating voltage	2.5~4.0V DC
2-3	Direction of vibration	CW(clockwise) or CCW(contrary clockwise)
2-4	Operating environment	-20~+60°C, Ordinary Humidity
2-5	Storage environment	-30~+70°C, Ordinary Humidity

3. Measuring condition

Item	Specification	Conditions
3-1	Temperature	25±3°C
3-2	Humidity	65±20% RH
3-3	Power supply	DC power supply or battery 3.0V

4. Electrical initial characteristics

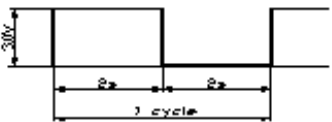
Item	Specification	Conditions
4-1	Rated speed: 9000 rpm Min	At rated voltage
4-2	Rated current: 80mA Max	
4-3	Starting current: 120 mA Max	
4-4	Starting voltage: 2.3V DC Max	Motor is rotating at min starting voltage.
4-5	Insulation resistance: 10MΩ Min	At DC 100 V between lead wire and case.

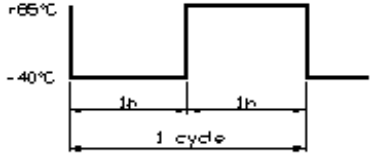
5. Mechanical characteristics

Item	Specification	Conditions
5-1	Shaft pull strength	9.8N or more
5-2	Bracket deflection strength	9.8N or more

5-3	Mechanical noise	50dB (A) Max At rated voltage Back ground noise 28dB(A) Max
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6. Reliability characteristics

Item		Specification	Requirements
6-1	Life test	 <p>Test cycle 50,000 cycles</p>	After the test, motors shall be approved as specified in item 7-1.
6-2	Low temperature exposure	Temperature : -30°C Time : 96 h	After 4 hours exposure in ordinary temperature and humidity, motors shall be approved as specified in item 7-2.
6-3	High temperature exposure	Temperature : +70°C Time : 96 h	
6-4	Humidity exposure	Temperature : +40°C Humidity : 95%RH Exposure time : 96 h No condensation of moisture	

6-5	Vibration	<p>Frequency: 10~55Hz</p> <p>Acceleration: 22m/s²</p> <p>Period: 10 Minutes log sweep (10~55~10Hz)</p> <p>Condition : This motion shall be applied for a period of 10 minutes in each of 3 mutually perpendicular axes.</p>	After the test motors shall be approved as specified in item 7-2.
6-6	Free fall	<p>Set the motor to the approx. 100g (include the motor) weight of block, and drop the motor onto the concrete floor.</p> <p>Height :1.5m</p> <p>Direction : ±x, ±y, ±z</p> <p>Number of times: Each 3 times</p> <p>Shock: 29420m/s² (equivalently 3000G)</p>	After the test motors shall be approved as specified in item 7-2.
6-7	Heat stock test	 <p>Test cycle: 15 cycles.</p>	After the test motors shall be approved as specified in item 7-2.

7. Post environment

Item		Specification
7-1	Table A	1) Rated speed: Initial data-30% Min / Initial data+50% Max 2) Rated current: Initial data-30% Min Initial data+50% Max 3) Insulation resistance : 10MΩ Min 4) Starting voltage: 2.5V DC Max
7-2	Table B	1) Rated speed: Initial data ±20% Max 2) Rated current: Initial data ±20% Max 3) Starting voltage: 2.5V DC Max

8. Matters to be paid attention to when using motor

8-1 Do not give direct force to the top of shaft.

8-2 Avoid use the motor in the following environment.

High temperature and high humidity area;

Corrosive gas such as H₂S, SO₂, NO₂, Cl₂; Dusty area.

8-3 Please use this motor within 3 months as avoiding as possible.

Do not stock under conditions as described in items (8-2).

8-4 Please assure the quality after confirming enough lift tests and matching in your cellular.

8-5 Please confirm enough no problems of standards and laws and ordinances on your cellular.

8-6 There is leakage of flux about 0.045T at the bracket side in front of this motor, so please install casing (stamping) side on housing of your cellular,

if it happens to outside by escaping magnetic force.

8-7 Rust of plate (steel) and similar edge should be OK.

8-8 This motor does not include the flame retardant by Bromine.

8-9 Because there is error of the measurement equipment, permit the standard of the rotational frequency to $\pm 5\%$.