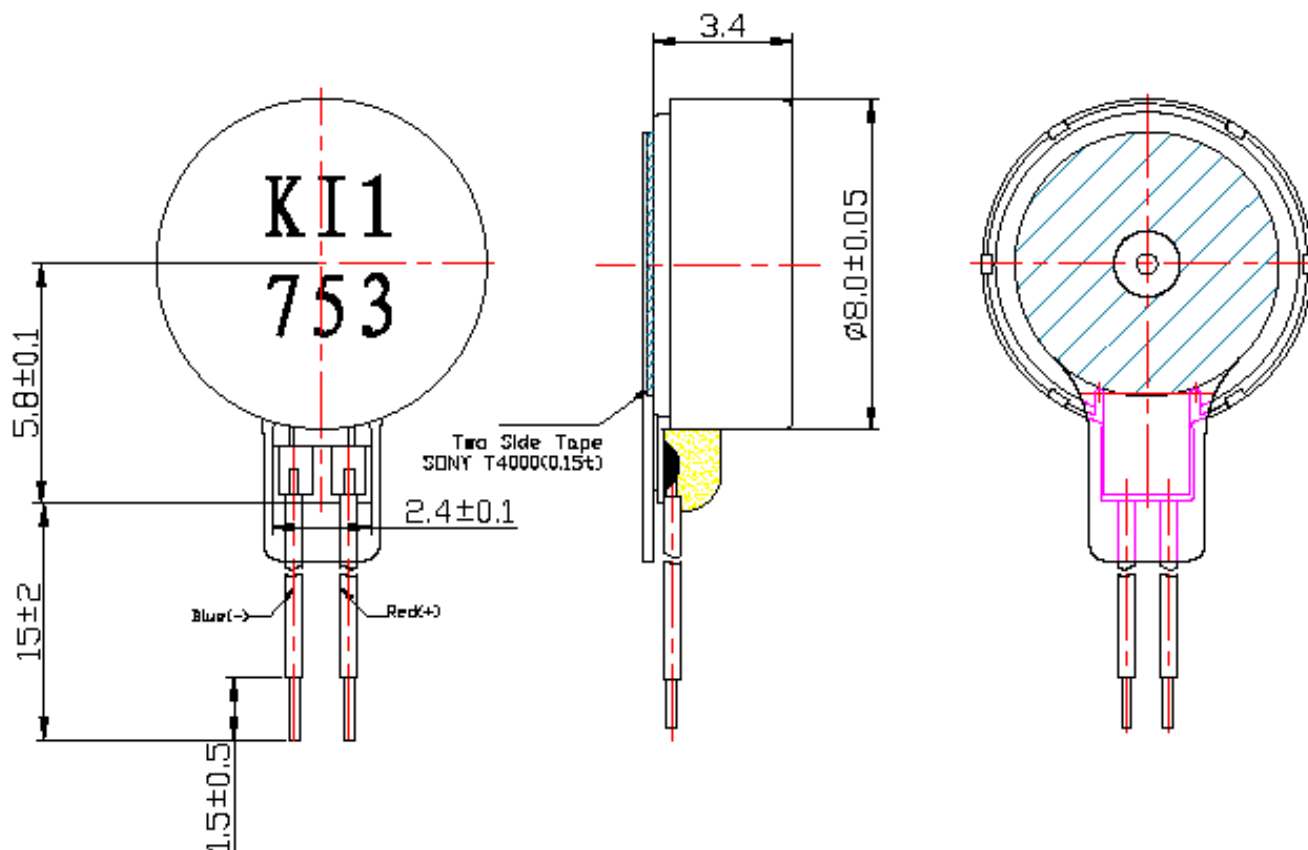




Part No. C0834B011F



1. General Description

This specification applies to coin-shape permanent-magnetic motor DC model **C0834B011F**.

2. Operating condition

Item	Specification	Conditions
2-1	Rated voltage	3.0V DC
2-2	Operating voltage	2.7~3.3V DC
2-3	Direction of vibration	CW(clockwise) or CCW(contrary clockwise)
2-4	Operating environment	-20~+60°C, Ordinary Humidity : 65± 20% RH

2-5	Storage environment	-30~+70°C, Ordinary Humidity : 65±20% RH
-----	---------------------	--

3. Condition of Measurement

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

4. Electrical initial characteristics

Item	Specification	Conditions
4-1	Rated speed	12000±3000 rpm
4-2	Rated current	100mA Max
4-3	Starting current	120 mA Max
4-4	Starting voltage	2.3V DC Max
4-5	Insulation resistance:	10MΩ Min
4-6	Terminal resistance	29Ω±15% (single posture) 48Ω±15% (compose posture)

At rated voltage

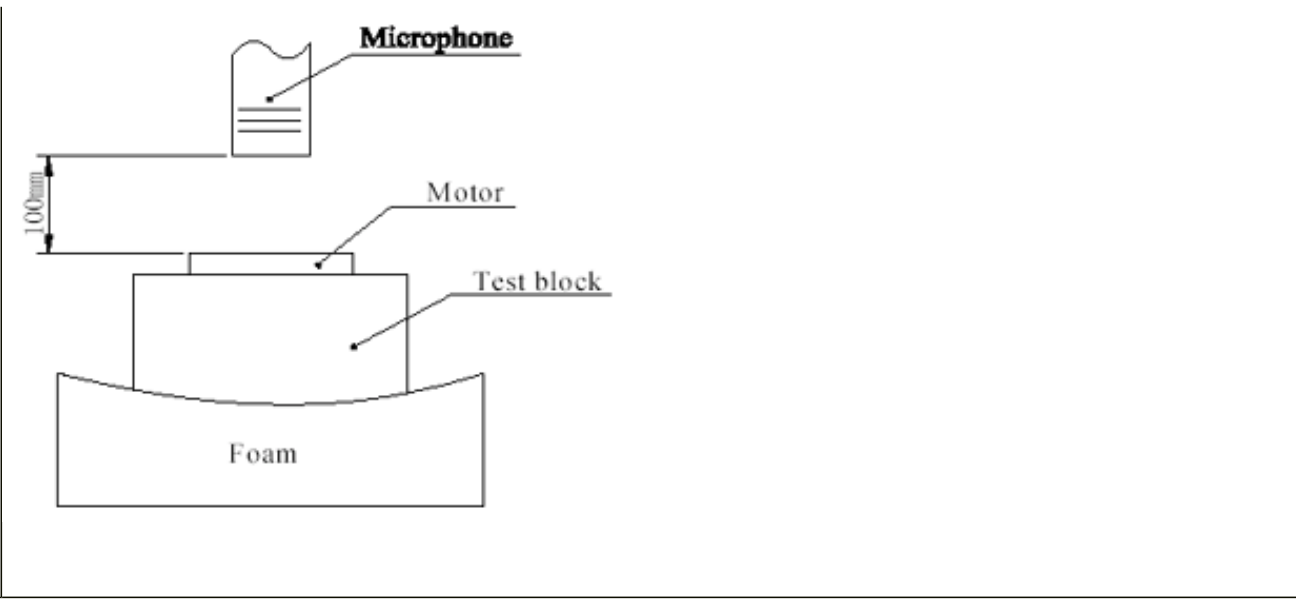
Motor is rotating at min starting voltage.

At DC 100 V between lead wire and case.

25°C
25°C

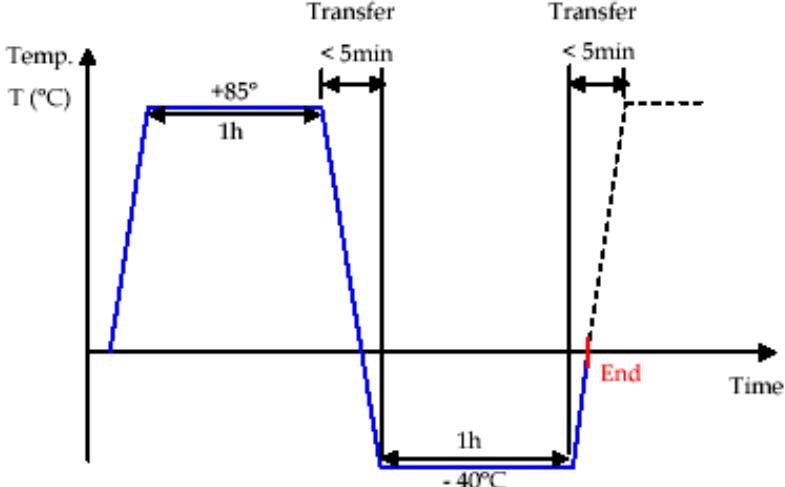
5. Mechanical characteristics

Item	Specification	Conditions
5-1	Bracket deflection strength	9.8N 9.8N or more
5-2	Mechanical noise	50dB (A) Max
		At rated voltage. Back ground noise 28dB(A) Max



6. Reliability Tests

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	After 4 hours exposure in ordinary temperature and humidity, motors shall be approved as specified in item 7-2.
6-4 Humidity exposure	Temperature : +40°C Humidity : 95%RH Exposure time : 96 h No condensation of moisture	After 4 hours exposure in ordinary temperature and humidity, motors shall be approved as specified in item 7-2.

6-5	Vibration	<p>Frequency: 10~55Hz Acceleration: 22m/s² Period: 10 Minutes log sweep (10~55~10Hz)</p> <p>Condition : Samples shall be applied for a period of 10 minutes in three axial directions.</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 Direction : ±x, ±y, ±z Number of times: Each 3 times</p>	After the test motors shall be approved as specified in item 7-2.
6-7	Thermal shock	<p>Test mode: 1 hour at -40°C, 1 hour at +85°C, as one cycle. Transfer time between extreme temperatures:•5 •/5min Test cycle: 15 cycles</p> 	After the test motors shall be approved as specified in item 7-2.

7. Judgments after Reliability Tests

Item	Specification
------	---------------

7-1	Table A	1) Rated speed: No lower than -30% of Initial data No more than +50% of Initial data 2) Rated current: No lower than -30% of Initial data No more than +50% of Initial data 3) Terminal resistance : 10MΩ Min 4) Starting voltage: 2.5V DC Max 5) Insulation resistance: 10MΩ / 10MΩ Min
7-2	Table B	1) Rated speed: No more than +20% of Initial data No less than -20% of Initial data 2) Rated current: No more than +20% of Initial data No less than -20% of Initial data 3) Starting voltage: 2.5V DC Max 4) Terminal resistance : No more than +15% of Initial data No less than -15% of Initial data

8. Caution for Use

- 8-1 Unless it is used in accordance with the specifications, the performance and life may be considerably reduced .
Due attention should be paid to voltage and range for use.
- 8-2 Avoid use or save the motor in the following environment.
1. High temperature and high humidity area
 2. Corrosive gas such as H₂S, SO₂, NO₂, Cl₂.
 3. Dusty area.
- 8-3 Due attention must be paid to the handling and working environments because such objects as iron powder if attracted by the motor magnet, will cause noise, characteristic deterioration thus reducing the reliability.
- 8-4 Please confirm enough no problem of standards and laws and ordinances on your cellular phone.
- 8-5 To handle the motor ,hold the motor case softly.
- 8-6 Rust of plate (steel) and similar edge should be OK.