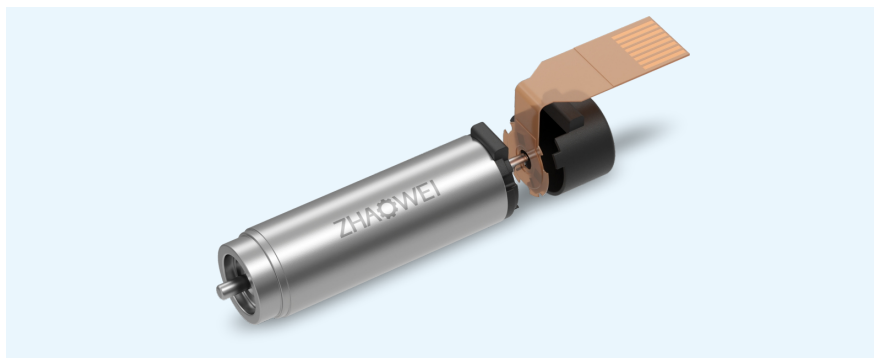


MC0623-01

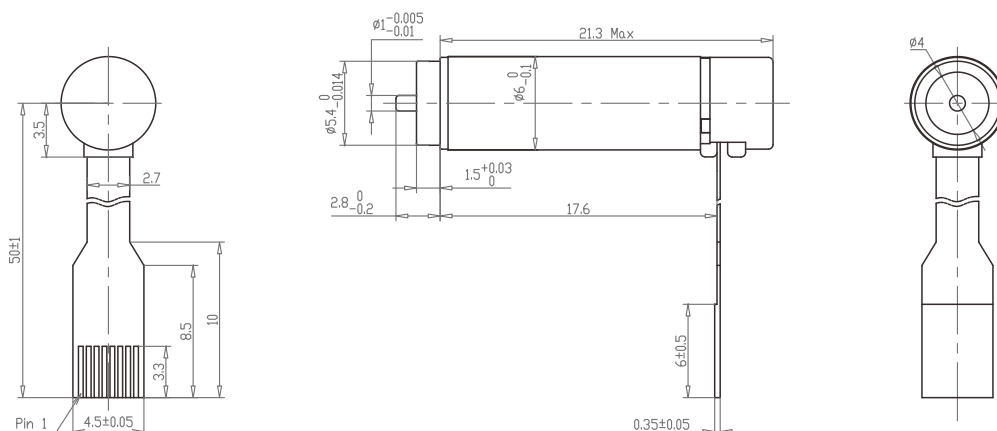
Φ6mm Brushless Coreless Motor

Key Features

- Two magnetic pole
- 2W
- 46800rpm
- 0.4mNm



Dimensional Drawing



Motor Data (Rated)

Rated voltage (V)	12
No-Load Speed (rpm)	63400 ± 10%
No-Load Current (A)	37 ± 50%
Rated speed (rpm)	46800 ± 10%
Rated torque (mNm)	0.4
Rated current(A)	0.256 ± 50%
Stall torque(mNm)	1.5 ± 7%
Stall current(A)	0.85 ± 20%
Max. efficiency(%)	63 ± 7%

Motor Constant (Rated)

Phase-to-Phase Resistance (Ω)	14.4 ± 10%
Phase-to-Phase inductance (mH)	0.1 ± 10%
Torque constant (mNm/A)	1.73 ± 20%
Speed constant (rpm/V)	5523 ± 20%
Speed/torque gradient (rpm/mNm)	45972 ± 20%
Mechanical time constant (ms)	2.84 ± 20%
Rotor inertia (gcm ²)	0.007 ± 20%

Thermal Data

Thermal resistance housing-ambient (K/W)	67.9
Thermal resistance winding-housing (K/W)	15.2
Thermal time constant winding (s)	1.54
Thermal time constant motor (s)	71.5
Ambient temperature (°C)	-20 ~ +100
Max. winding temperature (°C)	125

Mechanical Data (Ball Bearing)

Max. allowable speed (rpm)	100 000
Max. axial play (mm)	< 0.15 N 0 > 0.15 N 0.06 (max)
Radial play	preloaded
Max. axial load dynamic(N)	0.1
Max. force for press fits (static) (N)	10
Max. radial load (2 mm from flange) (N)	2

Note: Specifications can be customized per customer requirements.

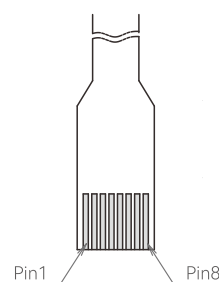
Terminal Type

Molex 52745-0897 52207-0460

FCI SFV8R-2STBE1HLF SFW4R-2STGE1LF

Note: Specifications can be customized per customer requirements.

Terminal Definition



pin 1	Motor Winding 1
pin 2	Motor Winding 2
pin 3	Motor Winding 3
pin 4	VHall (3.3-24 VDC)
pin 5	Grounding
pin 6	Hall sensor 1
pin 7	Hall sensor 2
pin 8	Hall sensor 3