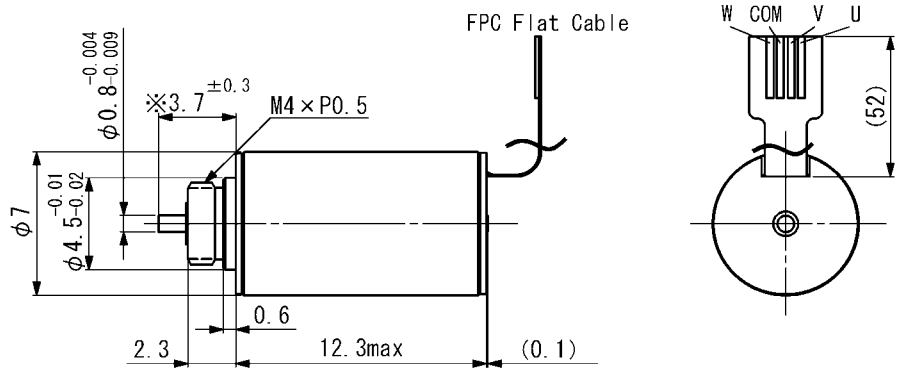
SBL07-12

Electronically commutated sensorless motor, slotless stator design



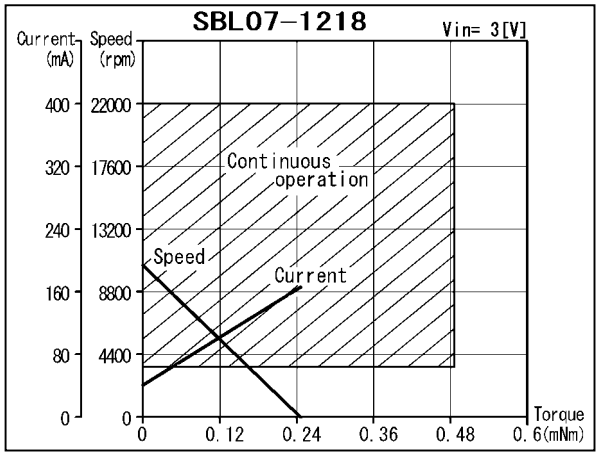
Weight 3.2 g
Dimension in mm

Note) Dimension marked ※ is measured with shaft pushed against motor.

Sensorless drive circuit SSD07
Planetary gearhead SPG07

	Ordering number				SBL07-1218	
1	Nominal voltage				3	V
2	Terminal resistance				18	Ω
3	Output power				0.07	W
4	Efficiency				25	%
5	No-load speed				10650	rpm
6	No-load current				41	mA
7	Stall torque				0.25	mNm
8	Friction torque				0.1	mNm
9	Back-EMF constant				0.21	mV/rpm
10	Torque constant				2.03	mNm/A
11	Slope of N-T curve				41977	rpm/mNm
12	Coil inductance				0.13	mH
13	Mechanical time constant (starting oscillating time neglected)				5.2	ms
14	Rotor inertia				0.012	gcm^2

	Continuous operation					
15	Speed range				3500...22000	rpm
16	Max. torque				0.49	mNm



	General specifications		
17	Operating temperature	-20...+80	°C
18	Max. coil temperature	+90	°C
19	Thermal resistances	R_{th1} = 4.4, R_{th2} = 32	K/W
20	Bearings type	Sintered sleeves	
21	Max. shaft radial load	0.27 (3.7 mm)	N
22	Max. shaft axial load	0.1	N
23	Max. axial load at standstill	20	N
24	Shaft radial play	0.015	mm
25	Shaft axial play	0.23	mm

Options: Shaft length, special coils.