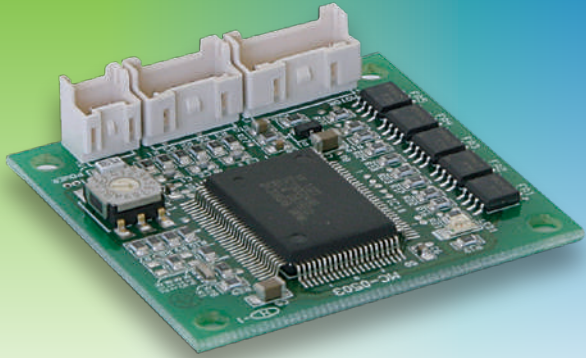


DC5V Input 5 Phase Microstep Driver

MC-0503/0503-3

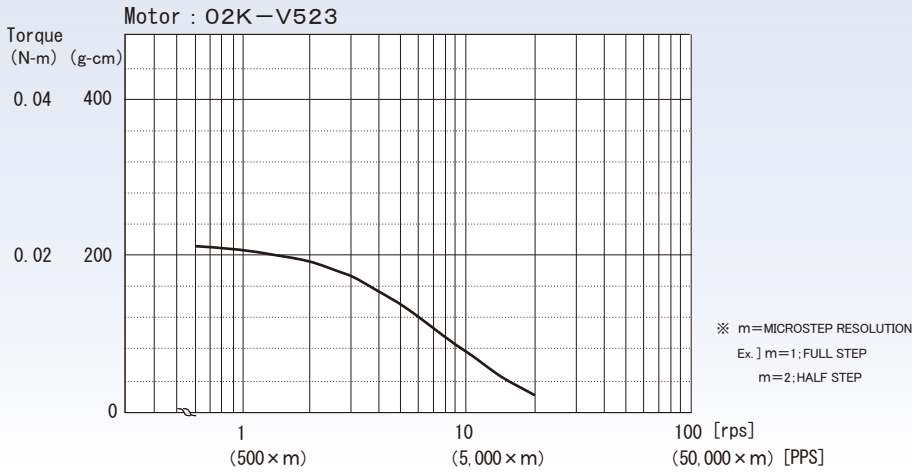


RoHS

FEATURE

- The MC-0503 is an ultra-small 5-phase micro stepping driver with 5 Vdc.
- ※The drive motor is our V series 5-phase stepping motor.

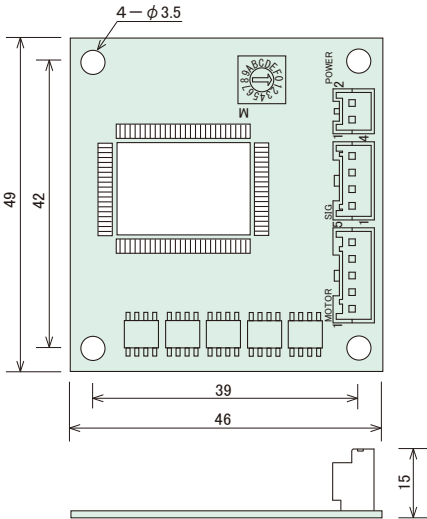
TORQUE CHARACTERISTIC



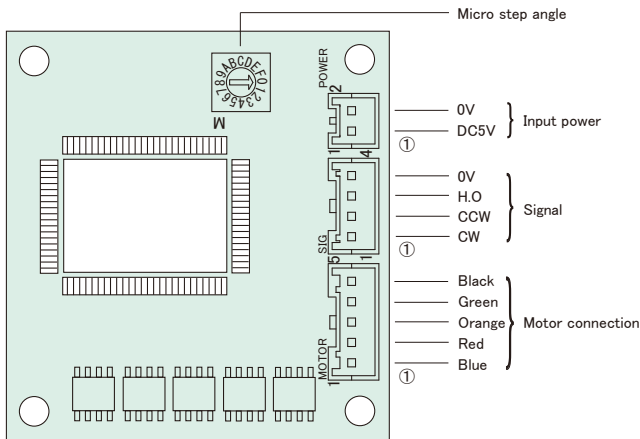
SPECIFICATION

Name	5-phase stepping motor driver	
Model	MC-0503 , MC-0503-3	
Drive motor	Our V series 5-phase stepping motor	
Driving method	Micro stepping driver	
Input power	DC5V ±10% 1.8A Max.	
Division	MC-0503	1, 2, 4, 5, 8, 10, 16, 20, 25, 40, 50, 80, 100, 125, 200, 250
	MC-0503-3	1, 2, 3, 6, 12, 18, 24, 32, 36, 48, 60, 72, 120, 160, 180, 240
Maximum frequency	200 kpps	
Inputsignal	C-MOS input [1]:0~1V , [0]:4~5V CW, CCW, H.O	
Function	2-pulse input system ,Step angle change-over	
Operating temperature range	0 to 40°C (32~104°F) Non-freezing	
Operating humidity range	0 to 85% Non-condensing	
Weight	15g (0.53oz)	

DIMENSIONS (unit:mm)



NAME AND FUNCTION

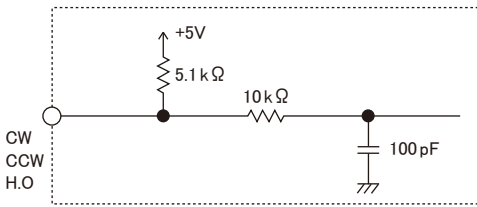


V SERIES MOTOR SPECIFICATION

Model	02K-V523(Single axis), 02K-V523W(Both axes)
Holding Torque (N-m)	0.018
Rated Current (A/phase)	0.25
Winding Resistance (Ω)	9.0
Rotor Inertia (gcm ²)	4.2
Motor Lengh; L (mm)	30.5
Mass (g)	70
Size (mm)	24□

※Conversino Table for Torque
(g-cm) = 980 × (N-m), (kg-cm) = 9.8 × (N-m)

INPUT CIRCUIT



SETTING MICROSTEP RESOLUTION



MC-0503	SW No.	0	1	2	3	4	5	6	7	8	9
	Division (m)	1	2	4	5	8	10	20	40	80	16
Ex.] m=1; Full step, m=2; Half step						A	B	C	D	E	F
						25	50	100	125	200	250

MC-0503-3	SW No.	0	1	2	3	4	5	6	7	8	9
	Division (m)	1※	2※	3	6	12	18	24	32	36	48
						A	B	C	D	E	F
						60	72	120	160	180	240

Micro Step Angle = $\frac{\text{Base Step Angle}}{\text{Division}}$
72 divided steps → 0.01 degree
※Does not drive at the low vibration in this case.