Motor Drive Circuit SHSD24-01A

HOME

Products

Small Motors

DC Coreless Motors

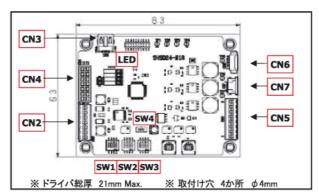
Brushless Motor

Motor Drive Circuit SHSD24-01A

Drivers are used to operate and control Brushless Motor.







SHSD24-01A drive controller applies to all Orbray brushless motors. It works both with/without hall sensor and automatically adjust supply voltage when there is a gap between command and actual rotation speed. It is equipped with current limit function for protection and status can be checked by LED/LCD and analog voltage output.

OPERATION MODE

EXT/IO	Rotation speed and direction can be controlled by external input/output signal.
VR	Rotation speed and direction can be controlled by built-in potentionmeter or switch.
PC	Rotation speed and direction can be controlled through RS232C from PC (software needed).

Driver SDSD24-01A

Connector

NAME	FUNCTION		
CN2	Power /I/O Connector		
CN3	RC232Cconnector		
CN4	LCD connector		

NAME	MATCHING MOTOR		
CN5(8pin)	With hall sensor (BMN07-BMS16)		

NAME	MATCHING MOTOR		
CN6(4pin)	Sensorless (leadwire)		
CN7(4pin)	sensorless FPC (BMN04, BMN07)		

[CN2]: Power /I/O

Connector

Pin#	NAME	I/O	FUNCTION
1	FG	0	Rotation speed monitor
2	STATUS	0	Status display
3	ENABLE	I	Enable input
4	CW/CCW	I	Switch rotation direction
5	SPEED	1	Rotation speed setting
6	+Vcc	-	Voltage input 7.5V~26.4V
7	GND	-	GND

Driver SDSD24-01A SWITCH

NAME	FUNCTION			
SW1	SELECT MOTOR			
SW2	SELECT OPERATION MODE / CONTROL			
SW3	PI GAIN, SWITCH DIRECTION			
SW4	SWITCH OUTPUT VOLTAGE			

Driver SDSD24-01A **ELECTRIC SPECIFICATIONS**

ITEM	SPEC VALUE	UNIT
VOLTAGE (Vcc)	7.5~26.4v	V
CURRENT CONSUMPTION	30	mA
OUTPUT VOLTAGE	3.0~26.4	V
MAX OUTPUT CURRENT	2	А
MAX CONTINUOUS CURRENT	1	А
MAX ROTATION SPEED	150,000	rpm

INPUT / OUTPUT SIGNAL SPEC (EXT/IOモード)

NAME	Pin#	STATUS	SPEC VALUE	
	CN2-1	0-5V SIGNAL OUTPUT DUTY 83% /		
FG		ROTATION		
		SPEED[rpm]=F	G frequency [Hz] × 60	

NAME	Pin#	STATUS	SPEC VALUE
		OPERATION	5) (
		ERROR	5 V
		OPERATION	D + 50% DI 1.0-
STATUS	CN2-2	ERROR	Duty50% Pluse 1.0s
		Standby	OV
		OPERATING	D + 50% DI + + 0.2-
		CONDITION	Duty50% Pluse 0.2s
	CN2-3	ENABLE	< 1.00V or GND
ENABLE		OPERATION	< 1.00V or GND
ENABLE		DISABLE	> 4.00V or OPEN
		OPERATION	> 4.00V 01 OF LIN
		DIRECTION	< 1.00V or GND
CW/CCW	CN2-4	CCW	< 1.00V 01 GND
CW/CCW	CN2-4	DIRECTION	> 4.00V or OPEN
		CW	> 4.00 V OI OI LIN
SPEED	CN2-5	SPEED Orpm	ANALOG VOLTAGE 0V
SPEED		MAX SPEED	ANALOG VOLTAGE 5V

LED turns on in case of setting error.

Specifications are subject to change without notice.