

Board Level Stepper Motor Drivers (BCD series)

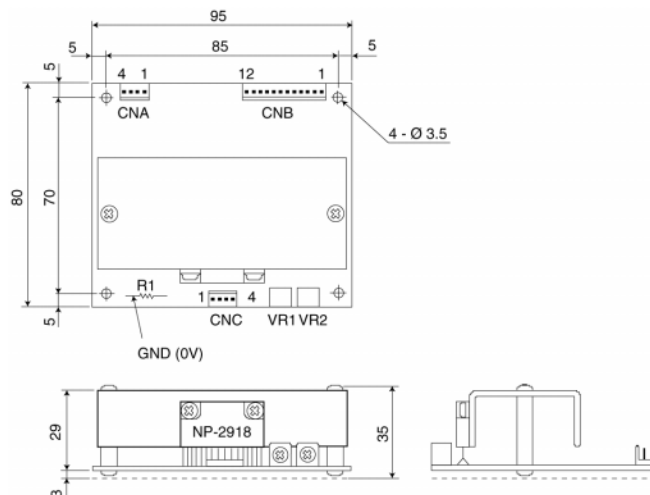
The BCD is a constant current type driver which incorporates our NP series chip for stepper motors. The drivers are small, easy to interface and use, yet powerful enough to support most applications. Operation with opto-isolated inputs and either bipolar or unipolar chopper versions are available.

DRIVERS

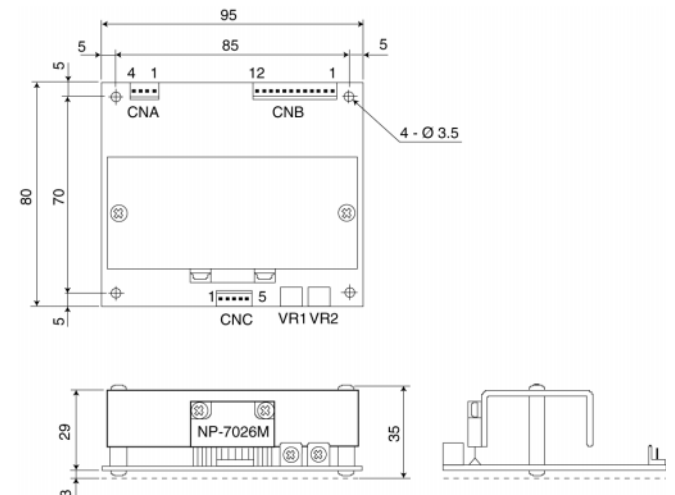
BCD SERIES

Driver Model	BCD-4012B	BCD-4020UT
<i>Electrical Specification</i>		
Input Power Supply	24VDC \pm 10% / 2A	24VDC \pm 10% / 2A
Control Mode	Bipolar Chopper	Unipolar Chopper
Excitation Mode	Full Step: (2-2 phase) / Half step (1-2 phase)	Full Step: (2-2 phase) / Half step (1-2 phase)
Output Current	1.2A / phase max. (0.2 ~ 1.2A)	2.0A / phase max. (0.2 ~ 2.0A)
<i>Control Signals</i>		
Input Signal Type	Photocoupler Input (Resistance 220ohm, Current 20mA max.)	Photocoupler Input (Resistance 220ohm, Current 20mA max.)
Pulse Input	CW/ CCW signal	CW/ CCW signal
Output Signal Type	Photocoupler open collector output (photo transistor: DC+24V 10mA max.)	Photocoupler open collector output (photo transistor: DC+24V 10mA max.)
<i>Environmental Conditions</i>		
Operating Temperature	0 ~ 40°C	0 ~ 40°C
Storage Temperature	- 10 ~ 70°C	- 10 ~ 70°C
<i>Other</i>		
Dimensions	95(W) x 80(D) x 35(H) mm	95(W) x 80(D) x 35(H) mm
Mass	130g	130g

BCD-4012B



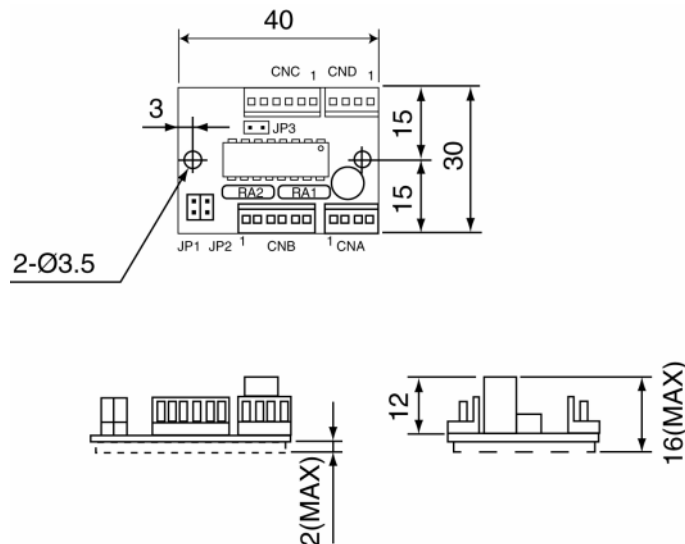
BCD-4020UT



Dimensions in MM. Inches = MM*0.04

Driver Model	BD4005U	
<i>Electrical Specifications</i>		
Input Power Supply		
Logic Voltage	Vcc: DC +5V±10%	0.1A (max)
Motor Drive Voltage	Vm: DC +30V±10% (max)	1.0A (max)
Control Mode	Unipolar constant voltage drive	
Excitation Mode	Full-step (2-2 phase) / Half-step (1-2 phase)	
Output Current	0.5A/Ø (max)	
Input Signal Type	CMOS (H: 3.5~5.3V / L: -0.3~0.8V)	
Pulse and Direction Input	Step command pulse (active H)	Input impedance = 10K ohm (pull-down)
	Pulse width: 1µ sec. min	Pulse rise/fall time: 0.5µ sec max.
<i>Environmental Conditions</i>		
Operating Temperature	0~40°C	
Storage Temperature	-10~70°C	
<i>Other</i>		
Dimensions	40 (W) x 30 (D) x 16 (H) mm	
Mass	15 g	

Outline Drawing



Dimensions in MM. Inches = MM*0.04