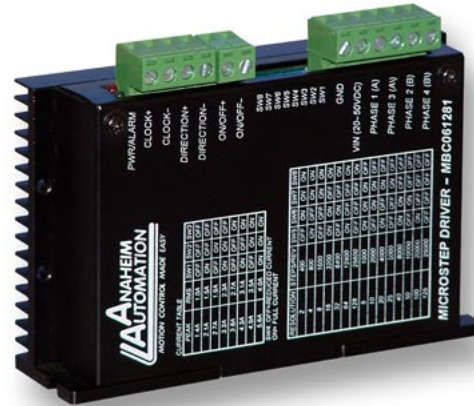


MBC061281 - Stepper Motor Driver

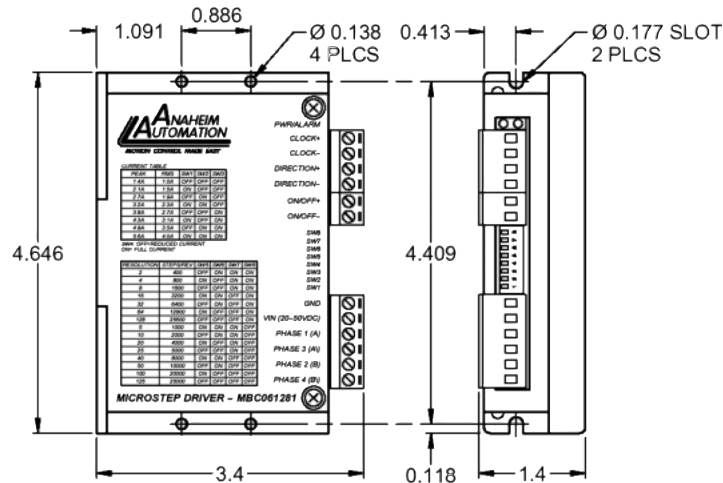


FEATURES

- Compact Stepper Motor Driver
- Output Current 5.6 Amps Peak
- 400 to 25,600 steps/rev
- Over and Under Voltage Protection
- Short Circuit Protection
- Selectable Stand Still Current Reduction
- No Minimum Inductance
- Optical Isolation
- Motor ON/OFF Input



DIMENSIONS



DESCRIPTION

If you're looking for big time stepper performance from a small driver, the MBC061281 is your answer. This powerful microstepping driver provides excellent torque in a compact and low profile enclosure. The MBC061281 is also very easy to use. It features rugged terminal blocks, a dip switch for current settings, and a visible silkscreen for easy installation and configuration.

Versatile as well as powerful, the MBC061281 has a wide amperage range. It is designed to handle small stepper motors rated as low as 1.4 Amps/phase, mid-sized steppers such as NEMA 23's and 34's, as well as larger motors with current ratings up to 5.6 Amps. It operates from a DC voltage of 20-50 Volts, making it a great fit for almost any

stepper application. The MBC061281 features optically isolated inputs that are 3.5 - 5.5VDC compatible. The clock input can be set to receive either sinking or sourcing clock signals at frequencies up to 400KHz. The driver also features direction control, motor on/off capabilities, and a built in short circuit, over voltage and under voltage.

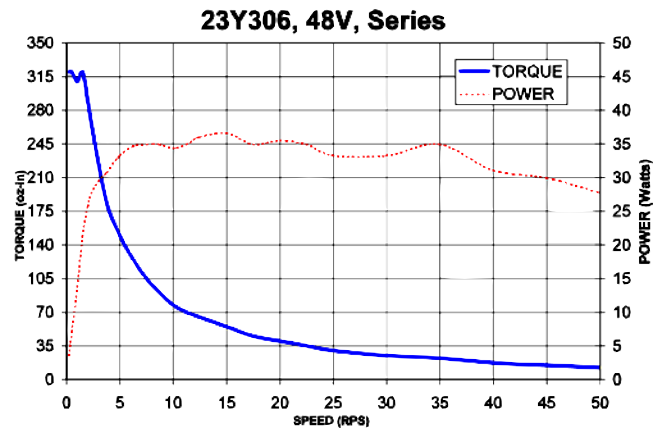
The MBC061281 is a bipolar type driver designed for use with 4, 6, or 8 lead stepper motors, making it compatible for series and parallel installations. The driver has a maximum 25,600 steps per revolution or 0.014° per step resolution, with respect to a 1.8° stepper motor. It also has a motor current reduction feature that will help keep stepper motors cool at standstill, and LEDs that indicate

power and fault condition shutdown.

Ideal Applications:

Automated machinery or processes that involve food, cosmetic, or medical packaging, labeling, or tamper-evident requirements, cut-to-length applications, electronic assembly, robotics, factory automation, special filming and projection effects, medical diagnostics, inspection and security devices, conveyor and material handling systems, metal fabrication (CNC machinery), pump flow control, XY and rotary tables, equipment upgrades or wherever precise positioning or speed control is required.

Torque Speed Curves



Specifications

Power Requirements: 20 - 50 VDC

Output Current Range: 1.4 - 5.6 Amps (Peak)

Microstepping Resolution: 25,600 Steps/Revolution (Div-by-128)

Input Signal Voltage: +5.0 VDC

Input Clock Frequency: 0 - 400 KHz

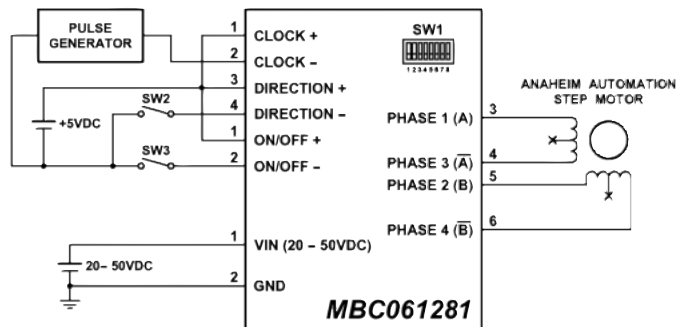
Minimum Input Current: 7.0mA
(Isolated Inputs)

Storage Temperature: -20° to + 50° C

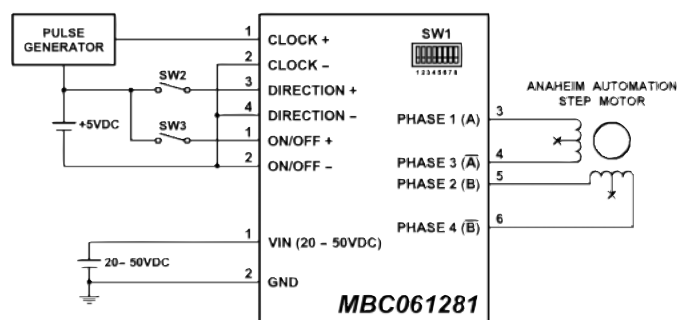
Absolute Maximum
Driver Temperature: 65° C

Driver Type: Bipolar, Compatible with 4, 6, and 8 Lead Motors. Series or Parallel connection.

Sinking Inputs:



Sourcing Inputs:



Additional Ordering Information

Model #	Description	Input Voltage	Power (Watt)
PSA40V4A	40 VDC Power Supply, Up to 4.0 Amp Capability	110 or 220 VAC	160
PSAM24V2.7A	24VDC Power Supply, Up to 2.7A Capability	95 - 250 VAC	65
PCL601	Single Axis Simple Programmable Controller, RS232/485 Compatible	24 VDC	-
PCL601USB	Single Axis Simple Programmable Controller, USB Compatible	24 VDC	-