

# MBC082561 - Stepper Motor Driver

FEATURES

- **Cost-Effective Stepper Motor**
- **Output Current 7.8 Amps Peak**
- **400 to 51,200 Steps/Rev**
- **Over and Under Voltage Protection**
- **Short Circuit Protection**
- **Selectable Stand Still Current Reduction**
- **No Minimum Inductance**
- **Optical Isolation**
- **Motor ON/OFF Input**



DESCRIPTION

If you're looking for big value from a stepper driver, the MBC082561 is your answer. This powerful microstepping driver provides excellent torque in a compact and low profile enclosure. The MBC082561 is also very easy to use. It features rugged terminal blocks, a DIP switch for currents settings, and visible silkscreen for easy installation and configuration. Versatile as well as powerful, the MBC082561 has a wide amperage range. It is designed to handle small stepper motors rated as low as 2.8 Amps/phase, mid-sized steppers such as NEMA 23's and 34's, as well as larger motors with current ratings up to 7.8 Amps. It operates from a DC voltage of 22-90 Volts, making it a great fit for almost

any stepper application. The MBC082561 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 500kHz. The driver also features direction control, motor on/off capabilities, and a built in short circuit, over voltage and under voltage protection.

The MBC082561 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 of 51,200 steps per revolution, 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.

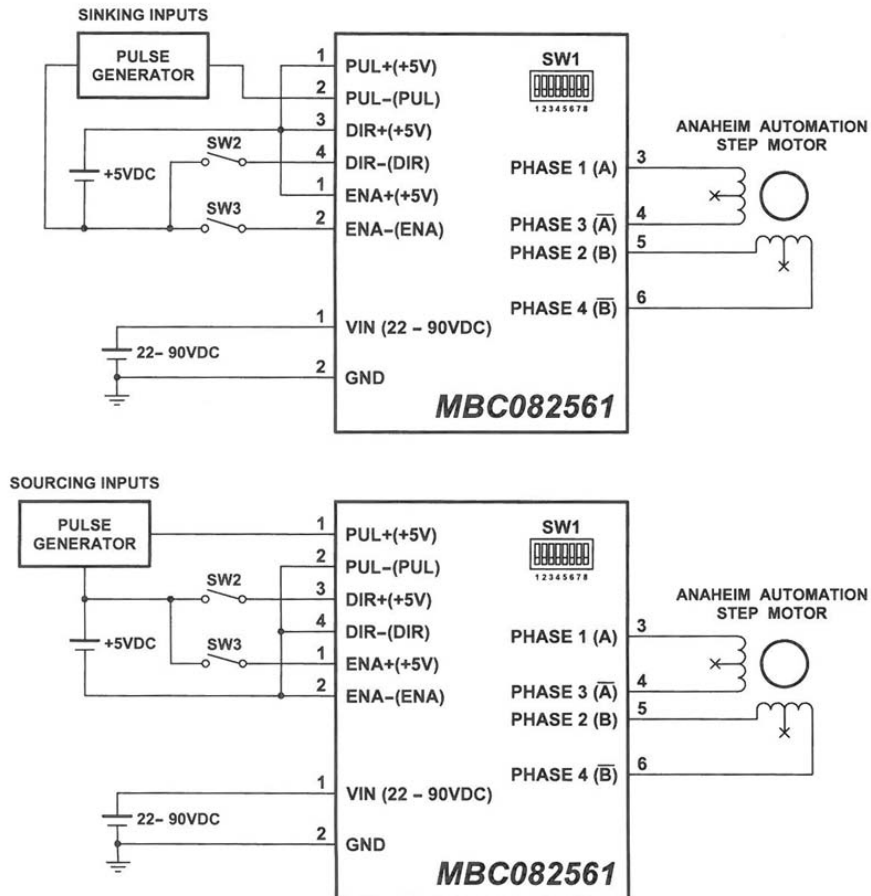
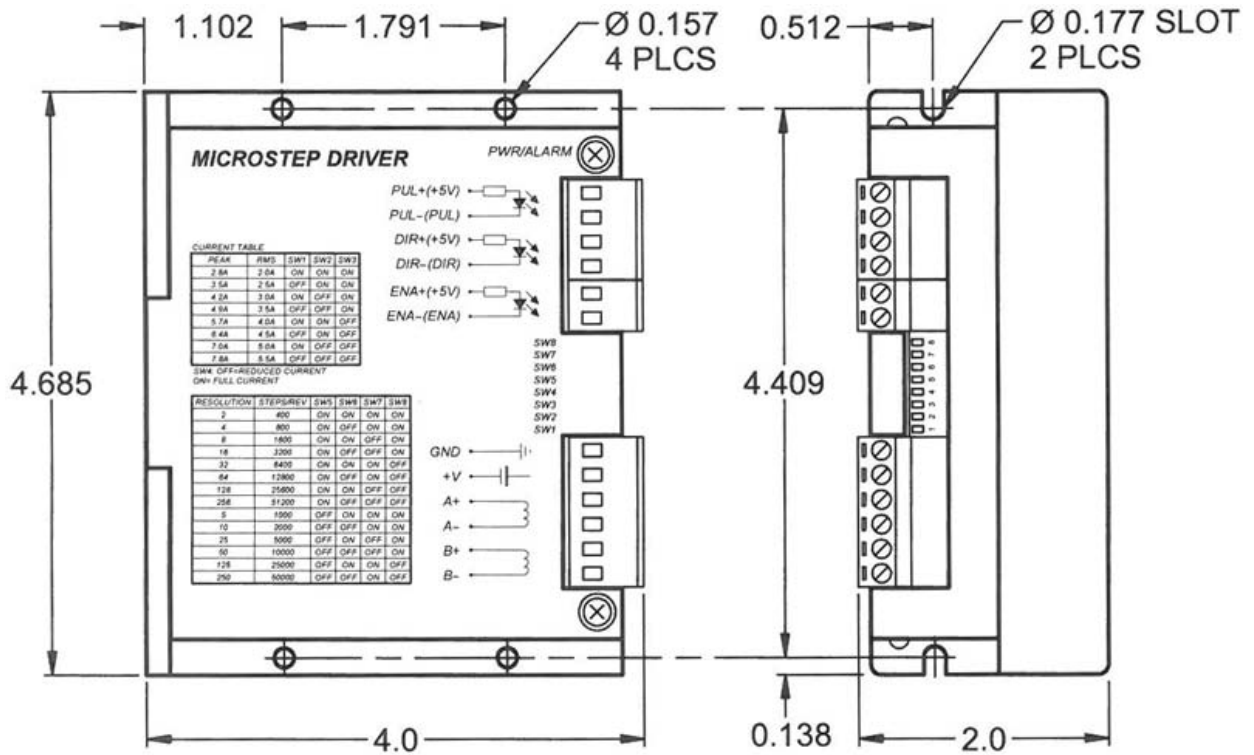
### Ideal Applications:

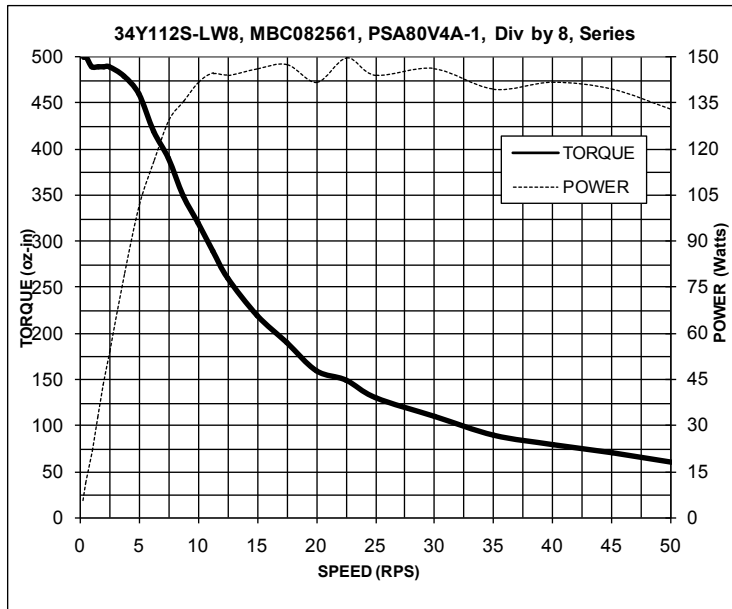
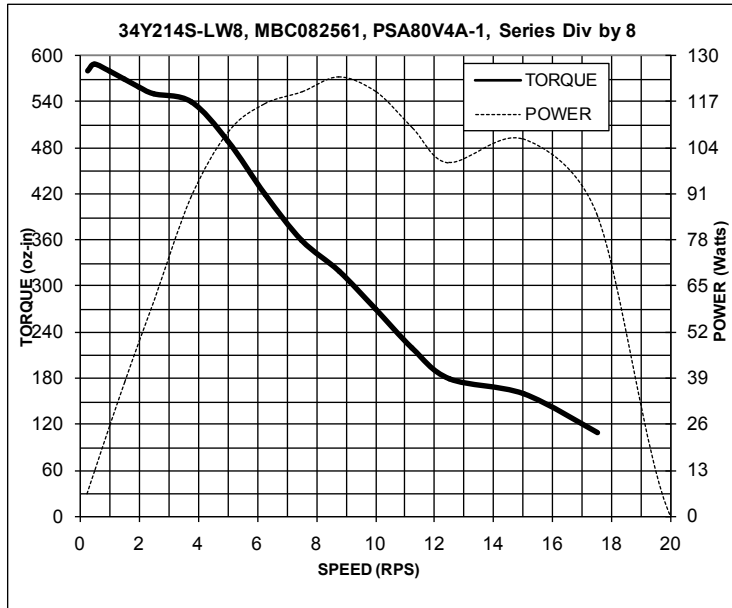
Automated machinery or processes that involve food, cosmetic, or medical packaging, labeling, or tamper-evident requirements, cut-to-length applications, electronic assembly, robotics, factory automation, special filming and projection effects, medical diagnostics, inspection and security devices, conveyor 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.

OPTIONAL POWER SUPPLY

Model #	Description	Input Voltage	Power (Watt)
PSA80V4A-1	80VDC Power Supply Up to 4.0 Amp Capability	110 or 220VAC	320
PSA40V4A	40VDC Power Supply Up to 4.0 Amp Capability	110 or 220VAC	160
PCL601	Single Axis Simple Programmable Controller, RS232/485 Compatible	24 VDC	-
PCL601USB	Single Axis Simple Programmable Controller, USB Compatible	24 VDC	-

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Power Requirements:	22 - 90VDC
Output Current Range:	2.8 - 7.8 Amps (Peak)
Microstepping Resolution:	51,200 Steps/Revolution (Div-by-256)
Input Signal Voltage:	+5.0VDC
Input Clock Frequency:	0 - 500KHz
Minimum Input Current: (Isolated Inputs)	7.0mA
Storage Temperature	-20 to +65°C
Absolute Maximum Driver Temperature:	65°C
Driver Type:	Bipolar, Compatible with 4, 6 and 8 lead Motors. Series or Parallel Connection