

# MLU10641 - Stepper Motor Driver

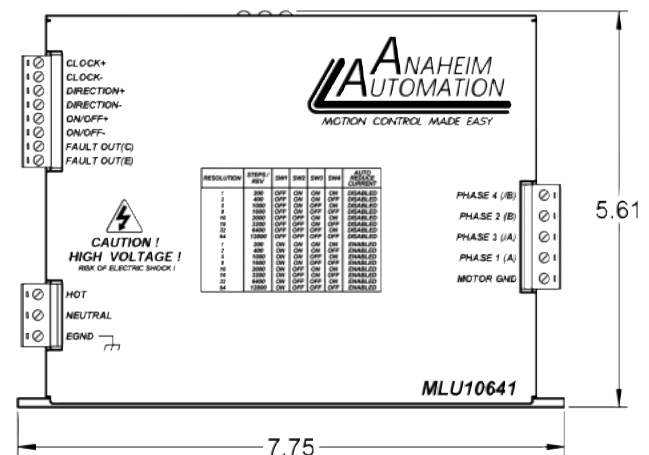
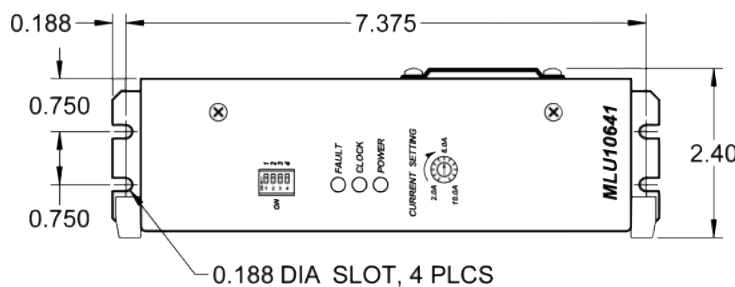


## FEATURES

- High Torque Output
- Output Current 10.0 Amps Peak
- 200 to 12,800 steps/rev (1, 2, 5, 8, 10, 16, 32 and 64 Selectable Step Operations)
- Short Circuit Protection
- Over-Temperature and Over-Voltage Shutdown
- No Minimum Inductance
- Optical Isolation
- Motor ON/OFF input



## DIMENSIONS



## DESCRIPTION

If you're looking for big time stepper performance, the MLU10641 is your answer. This powerful microstepping driver provides excellent torque. The MLU10641 is also very easy to use. It features rugged terminal blocks, a rotary pot for current settings, and a visible silkscreen for easy installation and configuration.

Versatile as well as powerful, the MLU10641 has a wide amperage range. It is designed to handle small stepper motors rated as low as 2.0 Amps/phase, mid-sized steppers such as 34's, as well as larger motors with current ratings up to 10.0 Amps. It operates from an AC voltage of 95-132 Volts, making it a great fit for almost any stepper application. The MLU10641 features optically isolated inputs that are 3.5 - 24VDC

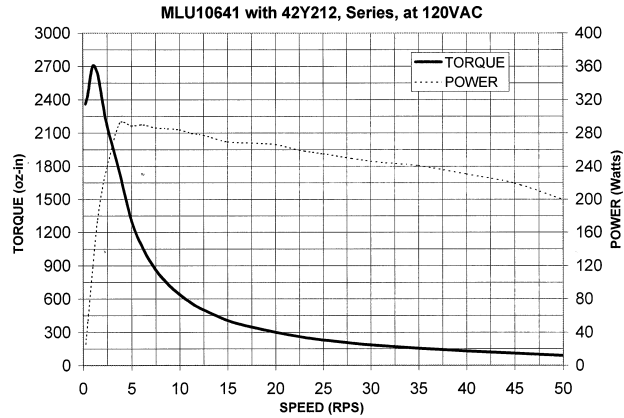
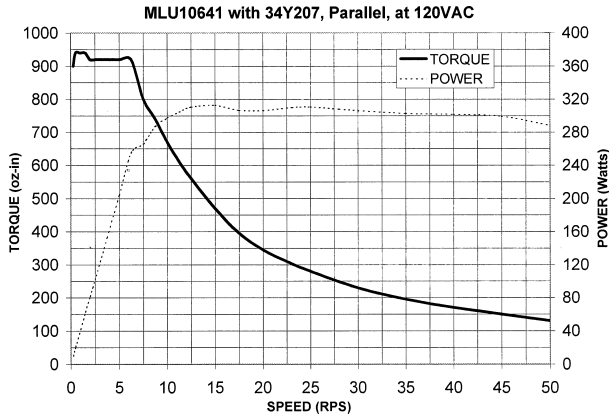
compatible. The clock input can be set to receive either sinking or sourcing clock signals at frequencies up to 400KHz. The driver also features direction control, motor on/off capabilities, isolated fault out output, and a built in short circuit and miswire shutdown protection.

The MLU10641 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 12,800 steps per revolution or 0.028° 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, fault conditions and pulses being received.

### 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: 95 - 132VAC

Output Current Range: 2.0 - 10.0 Amps (Peak)

Microstepping Resolution: 12,800 Steps/Revolution (Div-by-64)Max

Input Signal Voltage: 3.5 - 24 VDC

Input Clock Frequency: 0 - 400 KHz

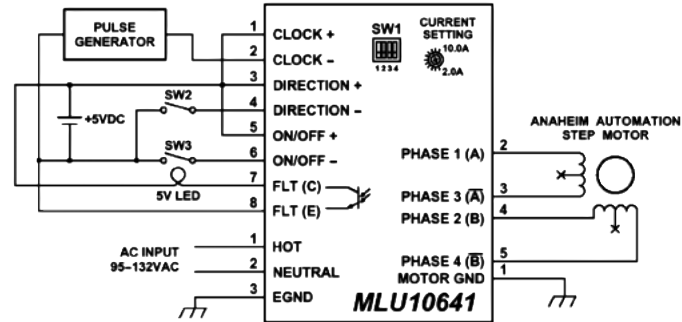
Minimum Input Current:  
(Isolated Inputs) 7.0mA

Storage Temperature: 0° to + 50° C

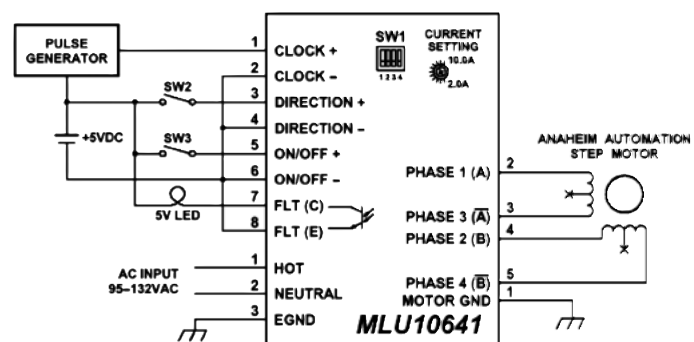
Absolute Maximum  
Driver Temperature: 70° C

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)
PCL601	Single Axis Simple Programmable Controller, RS232/485 Compatible	24 VDC	-
PCL601USB	Single Axis Simple Programmable Controller, USB Compatible	24 VDC	-