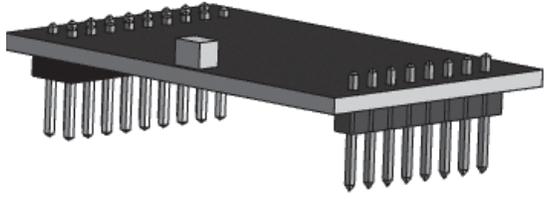


MDC020-050101 - 50V, 10A Brushless Controller

FEATURES

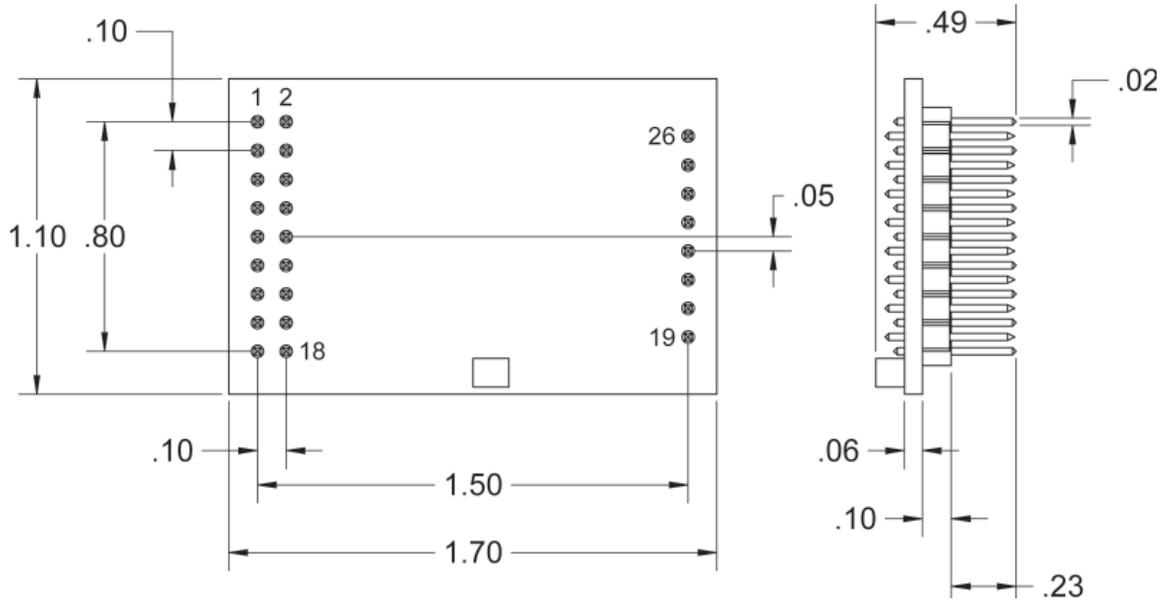
- Open Loop Operation
- 6 - 50VDC Voltage Range
- 0.75V to 5V External Voltage Speed Control
- 2-Quadrant Operation
- Hall Sensor Feedback
- Short Circuit Protection
- Maximum Current Limit at 10.0 Amps (peak)
- Enable and Direction Input
- TTL-CMOS Compatible Inputs
- Compact Size
- Easy Connectivity/Integration into Motherboard



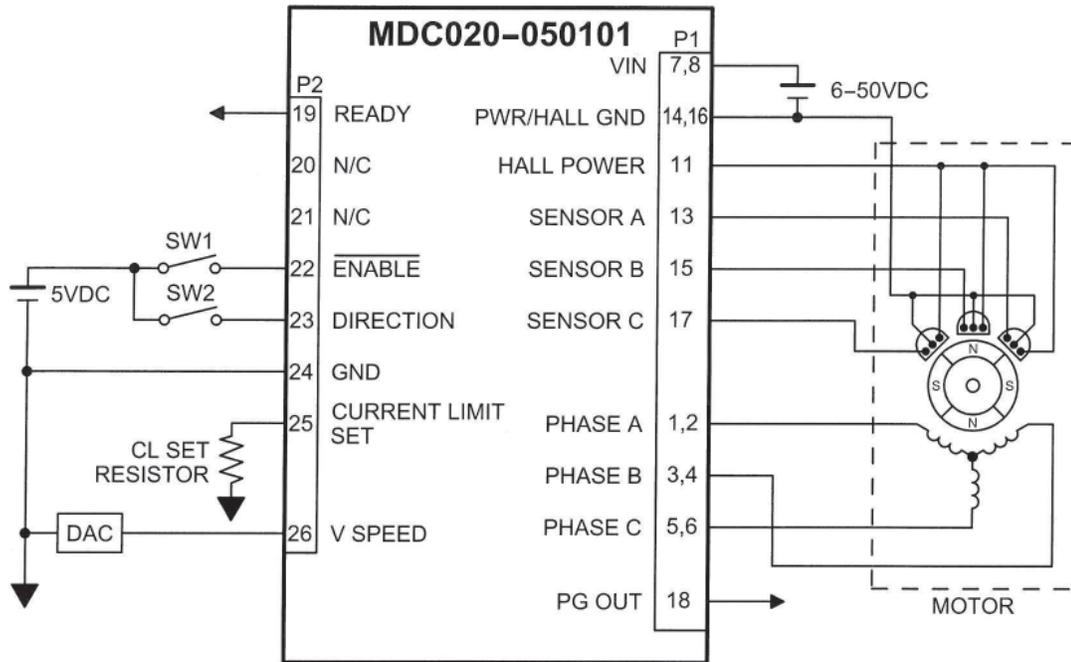
DESCRIPTION

The MDC020-050101 driver is designed to drive DC Brushless motors at currents of up to 10A (peak) and 50V. The driver operates in the basic open loop configuration with 120° DC Brushless motors. The driver is protected against over current, hall sensor error and under voltage. When an error occurs, a fault output is turned low logic '0' to notify the user. An external voltage (0.75-5VDC) is used to control the speed of the motor. The direction of the motor can be preset by the direction control input. The freewheel input overrides all other inputs into the driver. With two connector arrays arranged in a 2.54 mm pattern, it allows easy integration and connectivity to the MDC020-EVALBOARD or the OEM-side mother board.

DIMENSIONS



L011803



Part #	Description
MDC020-050101	Featured BLDC driver 10A, 50V
PSEPM-0200-1-24V-8.4A	DC Power Supply 24VDC at 8.4mps
PSEPM-0200-1-48V-4.2A	DC Power Supply 48VDC at 4.2Amps
MDC020-EVALBOARD	Evaluation Board for Board Level OEM BLDC and DC Speed Controllers MDC020-024031, MDC020-050101, MBDC020-24031, and MBDC020-050101

- Power Requirements:** 6 - 50VDC
- Output Current Range:** 0.5 - 10.0 Amps (Peak)
0.25 - 5 Amps (Continuous)
- Ready: (P2, Pin 19)** Logic "1" - Ready
Logic "0" - Fault
- Enable: (P2, Pin 22)** Logic "1" - Motor phases on (enabled)
Logic "0" (open) - Motor phases off (disabled)
- Direction: (P2, Pin 23)** Logic "1" - Motor moves clockwise
Logic "0" (open) - Motor imves counter clockwise
- Current Limit Set: (P2, Pin 25)** Logic "1" (open) - 10A current limit
Resitor to GND - Sets current limit (Refer to User's guide for values)
- V Speed: (P2, Pin 26)** 0.75V - 5V
- Operation Temperature:** 0°C to 70°C