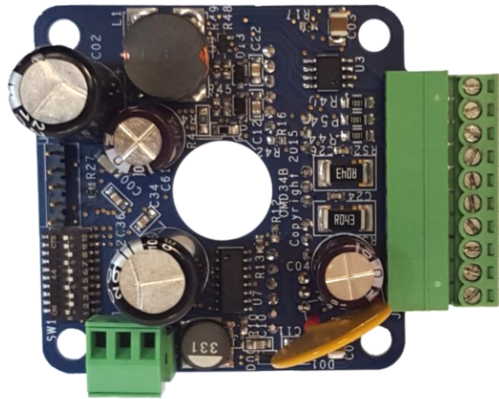


OMD34b

The OMD34b is an advanced microstep motor driver with selectable microstep resolution in a small compact size. Its small design is compatible to mount on a NEMA 23 stepper motor, and includes a hole in the center so the shaft of a linear actuator motor can pass through when mounted on the motor. Motor phase current is set via dip-switch providing a very predictable current control and easy set up, particularly for a production environment. The connectors are screw terminal plugs for easy and secure wiring.



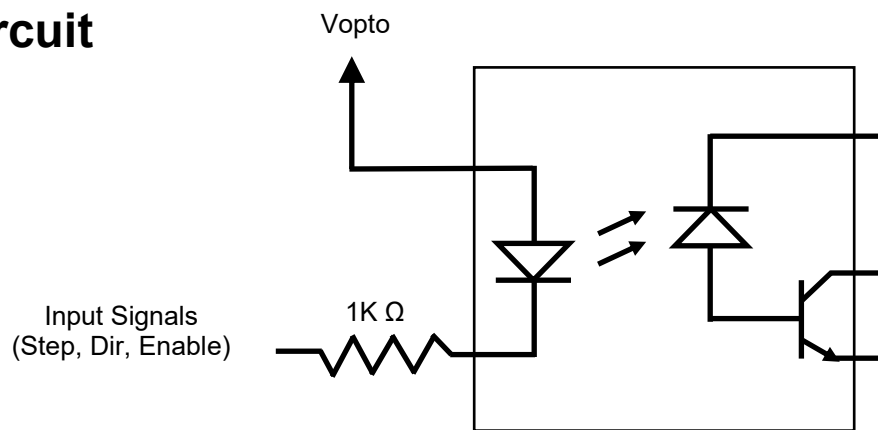
FEATURES

- Integrated design
- Velocity = 0 to 1M steps per second
- Step resolutions include: full, 1/2, 1/4, 1/8, 1/16, 1/64, 1/128, 1/256.
- Single supply voltage +18VDC to +80VDC
- Up to 7.0 Amp phase current for high torque motors
- Center pass-through hole for linear actuator stepper motors
- Up to 3.5 Amps without a heat-sink
- Motor current set with dip-switch for predictable current
- Matches the NEMA 23 dimension for direct motor mounting
- Use existing motors or select the optimum motor for the application for cost control and best performance
- Screw-terminal connector plugs for convenient wiring
- LED indicator for status
- Automatic current decay mode detection
- Optional travel limit input for additional protection
- Exceptional value

Electrical Specifications

Parameter	Min	Typ	Max	Unit	Notes
Supply Voltage	18		80	VDC	
Run Output Current/Phase	0		7.0	A	DIP-Switch selectable
Hold Output Current/Phase	0		7.0	A	DIP-Switch selectable
Vopto	5		20	V	
Input Voltage (STEP/DIR/ENABLE)	0	5	Vopto	V	
STEP frequency	0		1	MHz	The maximum frequency is gated by the optocoupler's circuitry.

Input Circuit



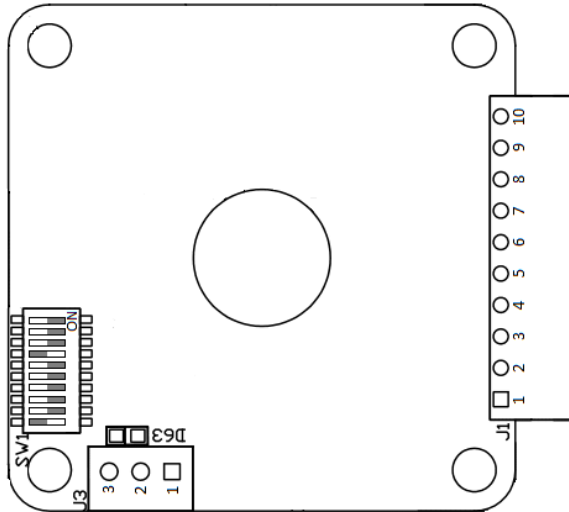
Environmental Specifications

- Operating Temperature..... 0.0 to +40° C
- Storage Temperature..... - 40° to +125° C
- Weight..... 96.4g (including mating connectors & heat sink)
- Humidity..... 20 to 95% Φ, non-condensing
- Outline..... 2.22" x 2.82" x 1.17" (including mating connectors)



Connector Pin-out

OMD34b



PIN	J1
1	GND
2	VSupply
3	P1A
4	P1B
5	P2A
6	P2B
7	STEP
8	DIR
9	ENABLE
10	VOPTO+

PIN	J3
1	Neg. Limit
2	Pos. Limit
3	GND

S1: Step Resolution Set

SW9	SW8	SW7	Res.	Step/Rev.
On	On	On	Full	200
On	On	Off	1/2	400
On	Off	On	1/4	800
On	Off	Off	1/8	1,600
Off	On	On	1/16	3,200
Off	On	Off	1/64	12,800
Off	Off	On	1/128	25,600
Off	Off	Off	1/256	51,200

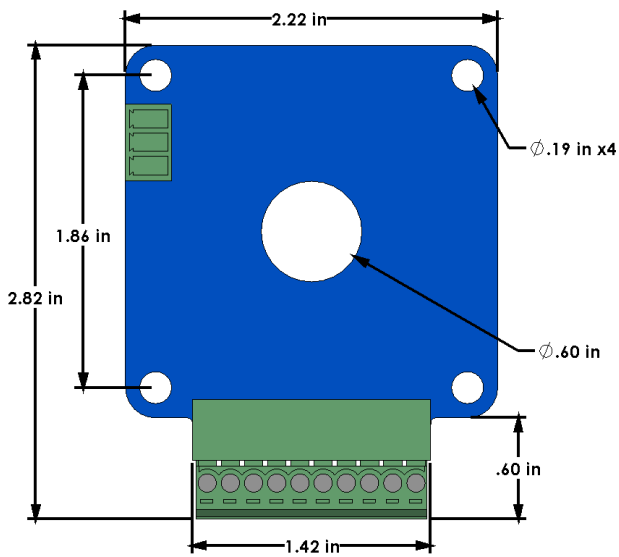
(1.8° motor resolution)

S1: Current Set

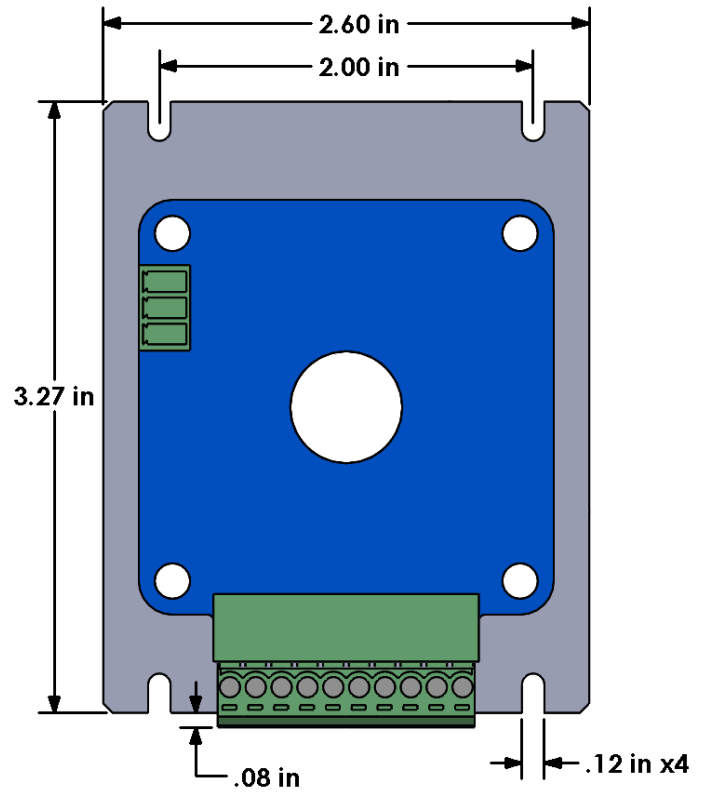
Run Current			Value (A)	Hold Current			Value (A)
SW6	SW5	SW4		SW3	SW2	SW1	
On	On	On	0	On	On	On	0
On	On	Off	1	On	On	Off	1
On	Off	On	2	On	Off	On	2
On	Off	Off	3	On	Off	Off	3
Off	On	On	4	Off	On	On	4
Off	On	Off	5	Off	On	Off	5
Off	Off	On	6	Off	Off	On	6
Off	Off	Off	7	Off	Off	Off	7



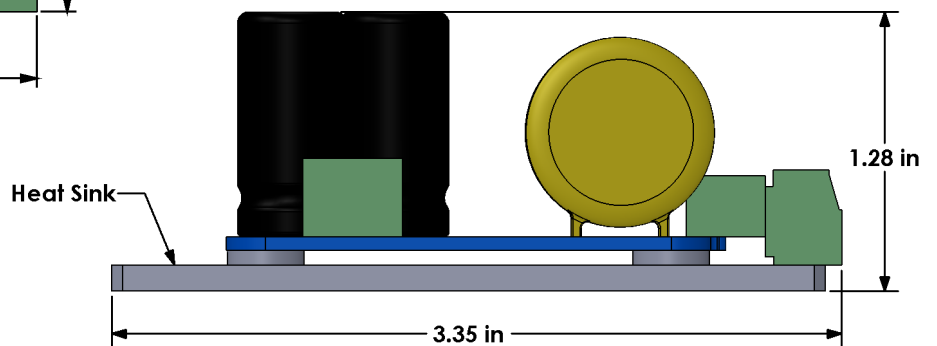
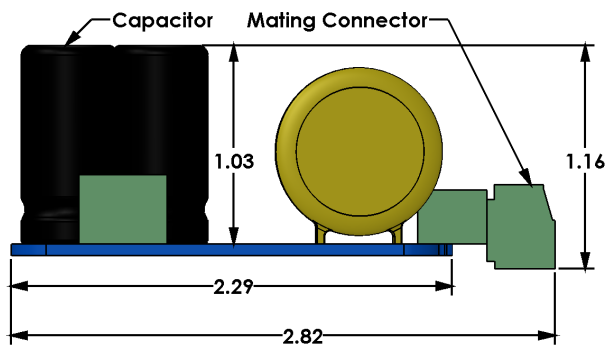
Dimensions



Without Heat-Sink



With Heat-Sink



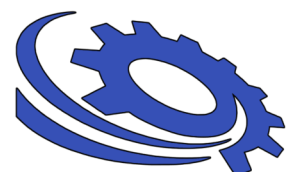
ISO 9001
QMI-SAI Global

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ORDERING INFORMATION

Model	Description
OMD34b	MicroStep Driver, Size 23, 7A



www.OMSmotion.com

3701-0461034PBF rev.A