

IB462He

ULTRA-MINIATURE BIPOLAR STEPPING MOTOR DRIVER

FEATURES

- Very Low Cost
- Ultra Miniature (1.2 x 2.4 x 0.28 inches)
(30 x 61 x 7.1 mm)
- Advanced Hybrid Design
- Full or Half Step
- Input Voltage (+12 to +48 VDC)
- Output Current (0.1A to 2A Per Phase)
- 20 kHz Chopping Rate
- Alternative to Chipsets

DESCRIPTION

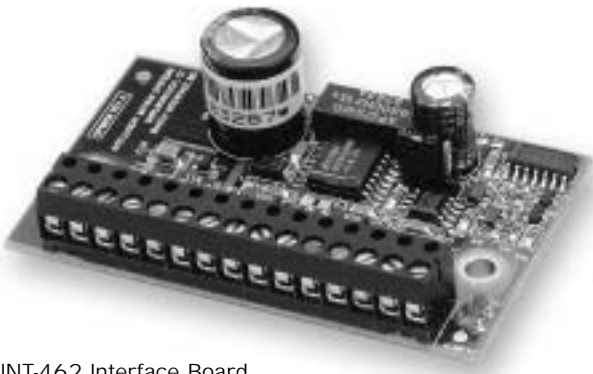
Based upon our popular IB462 Half/Full Step Driver, the IB462He is a low cost, high performance alternative to larger drives. The small size of the IB462He makes it ideal for system designs where space is at a premium without sacrificing performance as a result.

The IB462He operates between +12 and +48 VDC. This high voltage allows for greater speeds at higher torque. Combine this with 2A per phase of output current and 160 watts of power and you have a low cost alternative to chipsets, all contained in a package that minimizes expensive real estate!

The IB462He is our smallest and lowest priced drive. It will reduce time to market, increase reliability, and it comes with a 2 year warranty. The IB462He represents affordable, state-of-the-art technology for the competitive edge needed in today's market.

OPTIONS

The INT-462 is an optional plug-on interface board which can be used with the IB462He to facilitate testing, or in



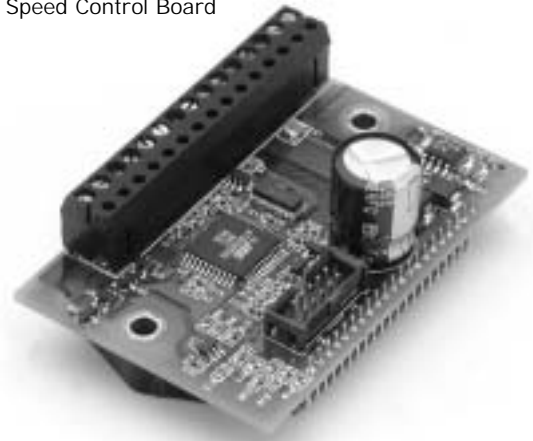
INT-462 Interface Board



Patent Pending

situations where panel mounting the IB462He is preferred. The INT-462 is much more than a simple pluggable interface. It adds a dynamic array of features to the IB462He that are found only on larger more expensive drives. Features such as a +5 VDC switching power supply, +5 to +48 VDC opto-isolated inputs which are internally limited to 8mA, automatic current reduction, over current and short circuit protection, input capacitor, and fault and power LEDs. Wiring is done through a 15 pin removable screw terminal.

OSC-462H Speed Control Board



The OSC-462H analog speed control board is an option for adding low cost, intelligent velocity control to the IB462He driver. The OSC-462H is powered by a single +12 to +48 VDC power supply, which will also provide power for the IB462He. The control board features a digital oscillator for accurate velocity control with an output frequency of up to 60 kilohertz. The IB462He driver plugs easily into a 21 pin receptacle attached to the OSC-462H. This device allows for a simple, cost effective solution in applications requiring variable velocity control. (Product details on page 8.)

Also available is the H-462H heat sink, which only adds 2.21 cubic inches (36.1 cubic cm) to the overall footprint of the IB462He.

ELECTRICAL SPECIFICATIONS

Input Voltage (Motor)	+12 to +48 VDC
Input Voltage (Logic)	+5 VDC
Output Current (Per Phase)	0.1 to 2.0 Amps
Step Clock Frequency (Max.)	40 kHz

ORDERING INFORMATION

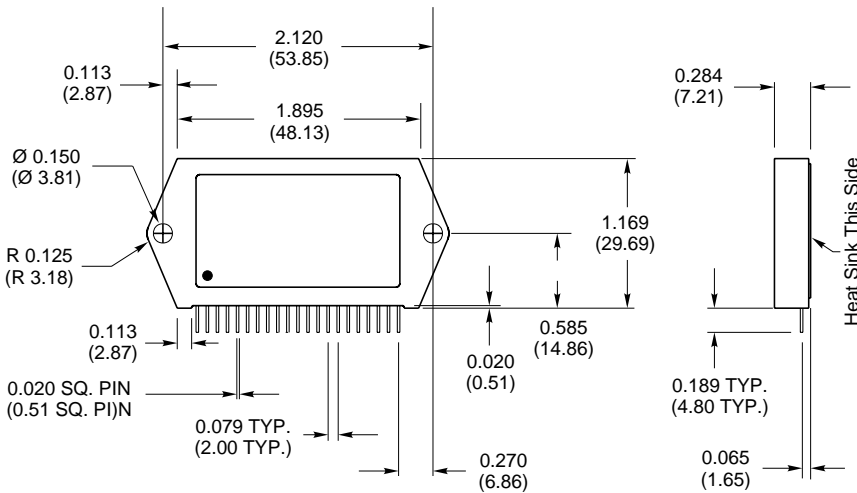
Name	Part Number
Stepping Motor Driver (Includes Thermal Pad)	IB462He
Isolating Thermal Pad	TI-462H
Heat Sink	H-462H
Interface Board	INT-462
21 Pin Right Angle Connector	HY462-CN021
Analog Speed Control Board	OSC-462H
Mounting L-Bracket	MB-21
Analog Speed Control Board Parameter Setup Cable	OSC-CC100-000
Small End Screwdriver	SD1

PIN ASSIGNMENTS

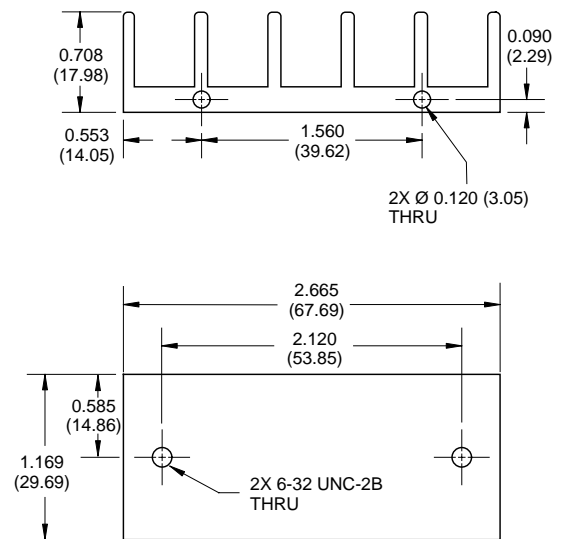
PIN#	FUNCTION
1	Current Adjust
2	Reset
3	Half/Full Step
4	Step Clock
5	+5V Supply In
6	Direction
7	Enable
8	Sense B
9, 10	Phase B
11, 12	Phase B
13, 14	+12 to +48 VDC (+V)
15, 16	Power Ground
17, 18	Phase A
19, 20	Phase A
21	Sense A

MECHANICAL DRAWINGS

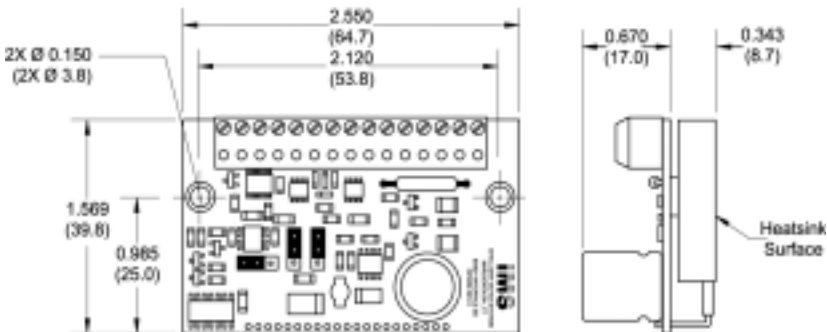
IB462He DRIVER



H-462H HEAT SINK



INT-462 INTERFACE BOARD



Dimensions in Inches (mm)