FABER INDUSTRIAL TECHNOLOGIES
(PHONE) 877- 40 FABER ✧ 877- 403 - 2237
www.faberinc.com

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 patented IB462He makes it ideal for systems where space is at a premium without sacrificing performance.

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!

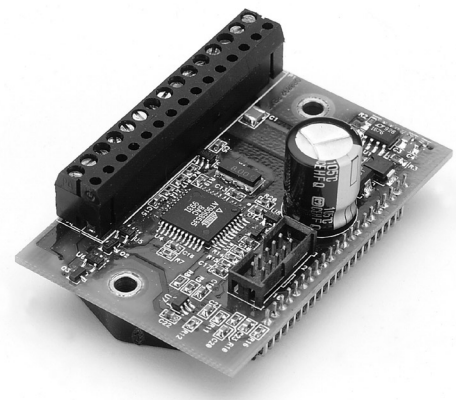
The IB462He is our smallest and lowest priced drive. It will reduce time to market, increase reliability, and it comes with a 2 year warranty. The IB462He represents affordable, state-of-the-art technology for the competitive edge needed in today's market.

OPTIONS

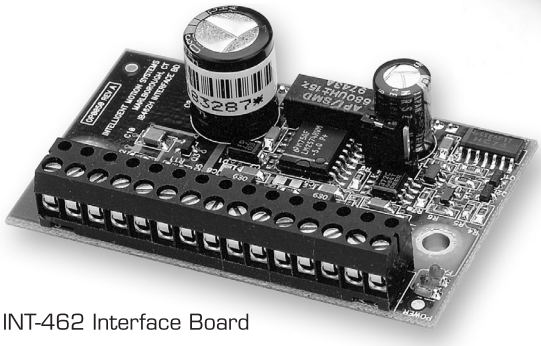
The INT-462 is an optional plug-on interface board which can be used with the IB462He to facilitate testing, or in situations where panel mounting the IB462He is preferred. The INT-462 is much more than a simple pluggable interface. It adds a dynamic array of features to the IB462He, typically found only on larger and 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.

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.



OSC-462H Speed Control Board



INT-462 Interface Board

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

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	+V (+12 to +48 VDC)
15, 16	Power Ground
17, 18	Phase A
19, 20	Phase A
21	Sense A

TEMPERATURE

Operating Temperature at Mounting Surface* ..... 0 to +70° C

*External heat sink may be required to maintain mounting surface below 70°C. Isolating thermal pad is required when using additional heat sink.

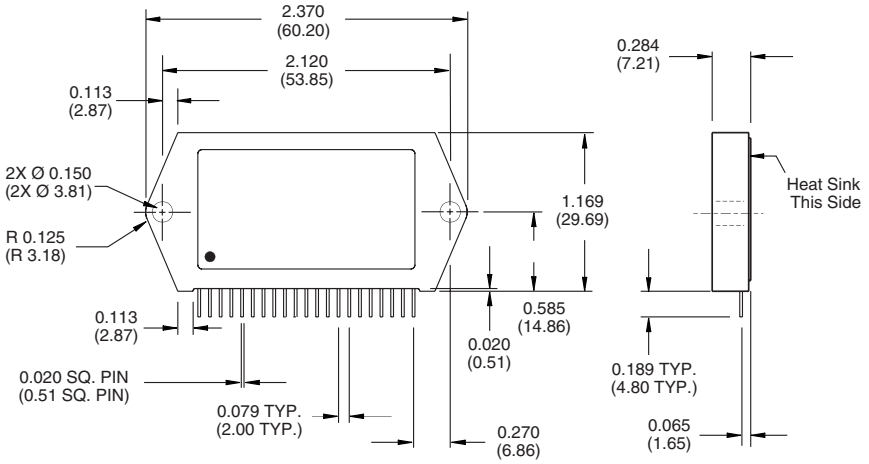
ORDER INFORMATION

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

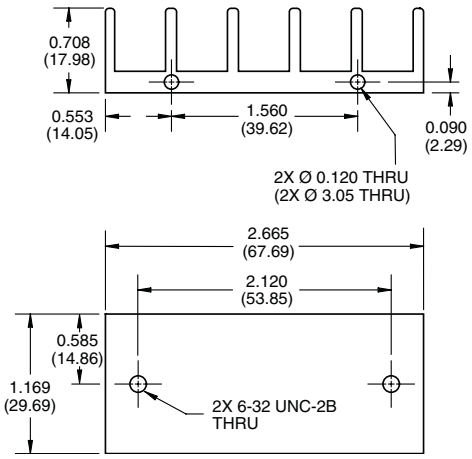
MECHANICAL SPECIFICATIONS

Dimensions in Inches (mm)

IB462He DRIVER



H-462H HEAT SINK



INT-462 INTERFACE BOARD