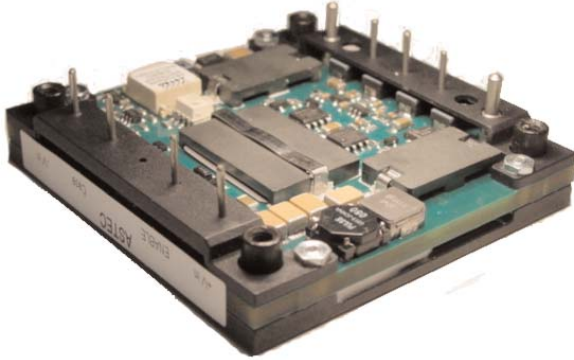


300W

AEH25

Ultra High Efficiency



Total Power: 300 Watts (12V @ 25A)
 Input Voltages: 48 V
 No. of Outputs: Single

www.DataSheet4U.com

Electrical Specs

Input

Input range 36-75 VDC
 Input Surge 100V / 100ms
 Efficiency 93% @ 12V (Typical)

Control

Enable TTL compatible
 (positive or negative enable logic control options)

Output

Regulation (Line, Load, Temp) <2%
 Ripple and Noise¹ 120mV typical
 Remote Sense Up to 10%Vout
 Output Voltage Adjust Range $\pm 10\%$ of nominal output
 Transient Response 180mV typical output deviation
 25% step change
 300 μ S recovery time
 Overvoltage Protection 115% nominal output
 Overcurrent Protection 116% I_o nominal
 Isolation Voltage 1500 Vdc

Special Features

- High efficiency, 12V@ 93% (Typical)
- Industry Standard Half Brick baseplate design
- Low output ripple and noise
- High capacitive load limit on start-up
- Remote sense compensation
- Regulation to zero load
- Fixed frequency switching
- Industry Std features: Input UVLO, OCP, OVP, OTP; Short ckt protection; $\pm 10\%$ Output Adjust
- Positive or Negative enable logic control option
- Meets Basic Insulation

Environmental

Operating temperature
 -40°C to +100°C Baseplate
 Storage temperature: -55°C to +125°C
 Overtemperature protection: 110°C typical
 MTBF: >1 million hours

Safety

UL, cUL 60950 Recognized
 TUV EN60950 Licensed

Ordering Information

Input Voltage	Output Voltage / Current	Efficiency	Model Number
36V to 75V	12V @ 25A	93%	AEH25B48(N)-(5)(6)(T)

OPTION: suffix "N" = Negative Enable
 non suffix "N" = Positive Enable (default)
 suffix "-6" = 3.7mm pin length
 suffix "-5" = 4.5mm pin length
 default pin length = 5mm nominal pin length
 suffix "T" = "Tuned" version for slow start up time

Typical efficiency measurement taken at nominal line, full load, 25°C ambient.

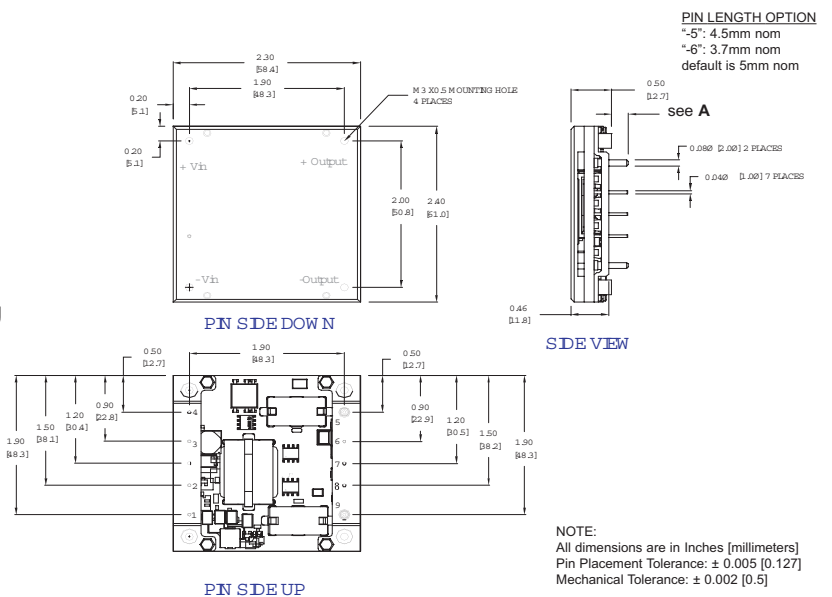
Pin Assignments

Single Output

1. +Vin
2. Enable (On/Off)
3. Case (AEH)
4. -Vin
5. - Output
6. - Sense
7. Trim
8. + Sense
9. + Output

Notes:

1. 20 MHz BW with external 10uF/25V tantalum in parallel with 0.1uF/50V X7R ceramic capacitor placed across the output.
2. Requires a 2.2 uf, 100V film capacitor connected between +V in and -V in to meet FCC class A and ETS300-386-1 requirements for conducted noise. Consult Factory for filtering information to meet FCC class B, VDE or EIC specifications.
3. All specifications are typical at nominal line, full load, and 25°C unless otherwise noted.
4. All specifications subject to change without notice. Mechanical drawings are for reference only
5. Technical Reference Notes should be consulted for detailed information when available
6. Warranty: 1yr



* Astec reserves the right to make changes to the information contained herein without notice and assumes no liability as a result of its use or application. (REV06: JANUARY 26, 2006)