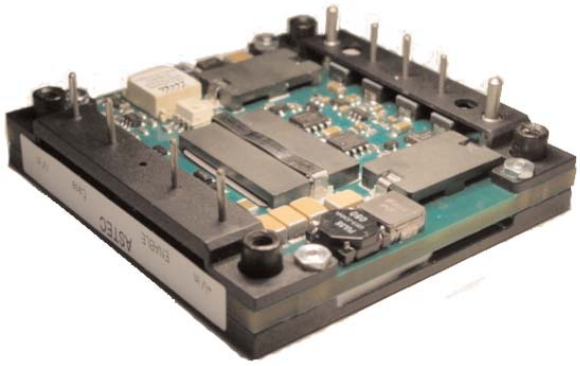
Astec Industry Standard

300W

AEH25

Ultra High Efficiency

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



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; ±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

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 Noise[1]	120mV tyical
Remote Sense	Up to 10%Vout
Output Voltage Adjust Range	±10% of nominal output
Transient Response	180mV typical output deviation 25% step change 300 µS recovery time
Overvoltage Protection	115% nominal output
Overcurrent Protection	116% Io nominal
Isolation Voltage	1500 Vdc

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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