

# AEH08U48 53V @ 7.55 A

Total Power: 400 Watts  
Input Voltage: 48 V  
# of Outputs: Single



## Special Features

- High power converter
- High efficiency (94% Typical)
- Industry standard package  
Half Brick 2.30" x 2.40" x 0.50"
- High capacitive load limit on start-up
- Industry standard features:  
Input UVLO, Output Enable, Adjust, Differential Remote Sense; OCP, OVP, OTP
- Reinforced Insulation
- EU directive 2002/95/EC compliant for RoHS

## Electrical Specifications

Input	
Input range	38 V to 60 V
Efficiency	94% @ 53Vo (at nominal conditions)
Output	
Output current	7.55 A max
Line regulation	0.2% Vo, (max)
Load regulation	100 mV (max)
Noise/ripple <sup>1</sup>	150 mV (max)
Over current limit	Auto-restart
Over temperature protection	125 °C average PCB temperature (autorecovery)
Switching frequency	400 kHz
Control	
Enable	TTL compatible (positive or negative enable logic)
Isolation Voltage	
Input to Output	2250Vdc max

## Environmental Specifications

Operating ambient temperature range	-5 °C to +55 °C ambient
Storage temperature	-55 °C to +125 °C
MTBF	1.5 Mhrs @ 40 °C

## Safety

UL, cUL 60950-1  
TUV EN60950-1

## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency <sup>2</sup>	Model Number
38 - 60 V	53.0 V	7.55 A	94% Typ	AEH08U48(N)-(6)(A)(L)

Options:

- (N) : "N" = designates Negative Logic Enable (default is Positive Enable with no suffix "N" required)
- (6) : "-6" = 3.7mm nominal pin length (default is 5mm nominal pin length with no suffix "-6" required)
- (L) : "L" = RoHS Compliant (RoHS 6)  
without "L" = RoHS Compliant with Lead (Pb) in solder exemption (RoHS 5)
- (A) : "A" = M2.5 screw clearance mounting holes non-threaded  
(default is M3.0x0.5 threaded with no suffix "A" required)

## Pin Assignments

### Single Output

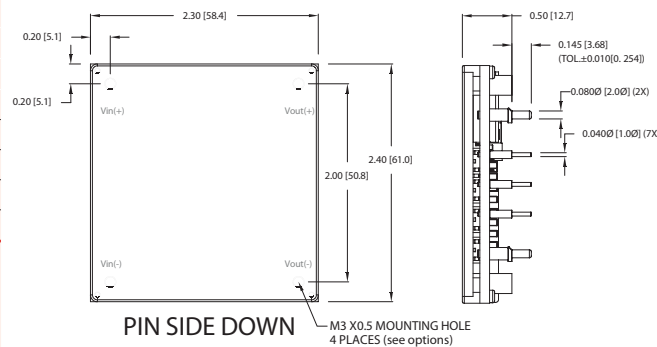
1. +Vin
2. Enable
3. Case Ground
4. -Vin
5. -Vout
6. -Sense
7. Trim
8. +Sense
9. +Vout

Notes:

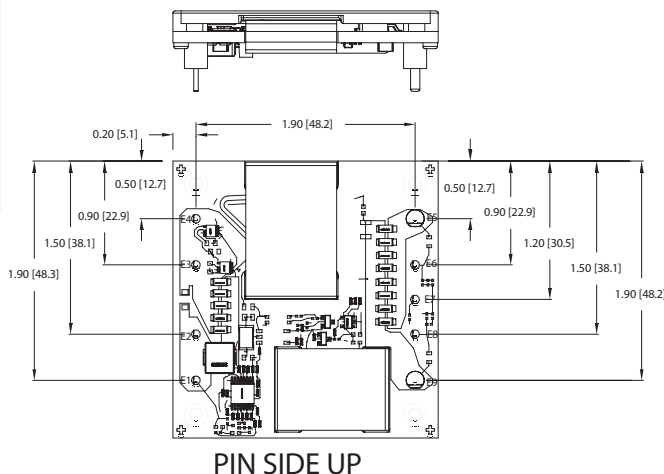
1. Measured at 20 MHz bandwidth with external 0.1  $\mu$ F ceramic capacitor in parallel with 2X 100  $\mu$ F E-cap / 63 V rated placed across +Vout and -Vout; 100  $\mu$ F e-cap or equivalent placed across +Vin and -Vin.
2. Efficiency measurements are typical values taken at 48 V input, nominal output, full load and  $T_A = 25^\circ\text{C}$ .
3. All specifications are typical at nominal line, full load and  $T_A = 25^\circ\text{C}$  unless otherwise noted.
4. All specifications subject to change without notice.
5. Mechanical drawings are for reference only. Dimensions are in inches [millimeters]. Pin placement tolerance  $\pm 0.005$  [0.127]. Mechanical Tolerance  $\pm 0.02$  [0.5].
6. Technical Reference Notes should be consulted for detailed information when available.
7. Warranty 2 years.

## Mechanical Drawing

### AEH08U48 Series



Mounting Hole Options	
-6AL	M2.5 clearance hole, non-threaded
Default	M3.0 x 0.5 threaded



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