# AEH08U48
# 53V @ 7.55 A

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



RoHS 2002/95/EC

## 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

## Safety

UL, cUL 60950-1
TUV EN60950-1

## 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[1] | 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 |

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## Ordering Information

| Input Voltage | Output Voltage | Output Current | Efficiency[2] | 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

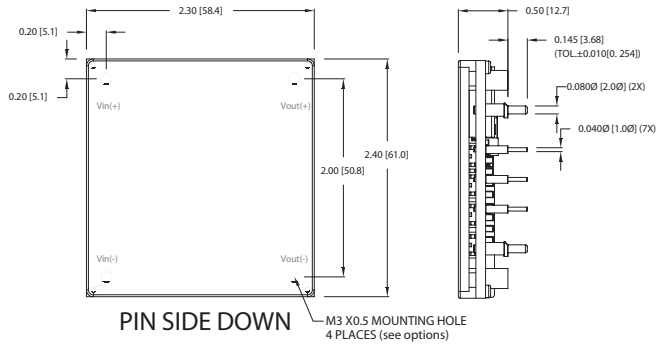
| Single Output |
|---|
| 1. +Vin |
| 2. Enable |
| 3. Case Ground |
| 4. -Vin |
| 5. -Vout |
| 6. -Sense |
| 7. Trim |
| 8. +Sense |
| 9. +Vout |

Notes:

1. Measured at 20 MHz bandwidth with external 0.1 µF ceramic capacitor in parallel with 2X 100 µF E-cap / 63 V rated placed across +Vout and -Vout; 100 µF 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 °C.
3. All specifications are typical at nominal line, full load and $T_A$ = 25 °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 ± 0.005 [0.127]. Mechanical Tolerance ± 0.02 [0.5].
6. Technical Reference Notes should be consulted for detailed information when available.
7. Warranty 2 years.

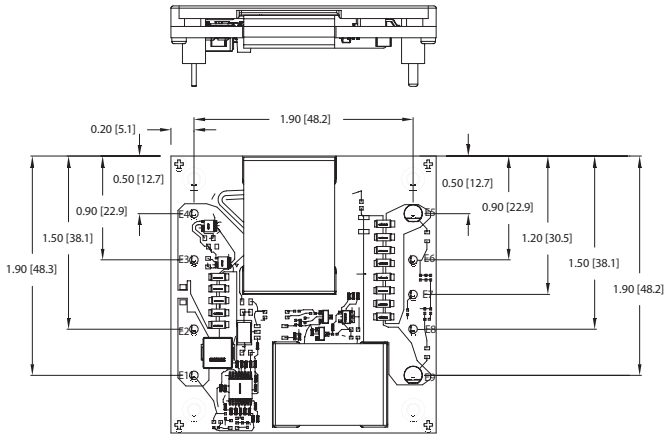
## Mechanical Drawing

### AEH08U48 Series




PIN SIDE DOWN

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




PIN SIDE UP

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