

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 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 |

Safety

UL, cUL 60950-1
TUV EN60950-1

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

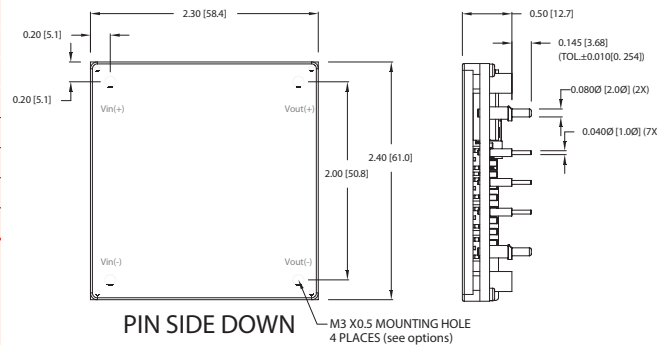
1. +Vin
2. Enable
3. Case Ground
4. -Vin
5. -Vout
6. -Sense
7. Trim
8. +Sense
9. +Vout

Notes:

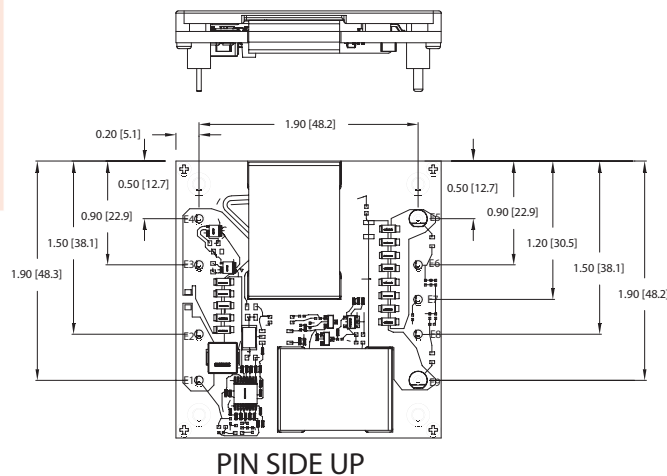
1. Measured at 20 MHz bandwidth with external 0.1 μ F ceramic capacitor in parallel with 2X 100 μ F E-cap / 63 V rated placed across +Vout and -Vout; 100 μ F e-cap or equivalent placed across +Vin and -Vin.
2. Efficiency measurements are typical values taken at 48 V input, nominal output, full load and $T_A = 25^\circ\text{C}$.
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 ± 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



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



Americas

5810 Van Allen Way
Carlsbad, CA 92008
USA
Telephone: +1 760 930 4600
Facsimile: +1 760 930 0698

Europe (UK)

Waterfront Business Park
Merry Hill, Dudley
West Midlands, DY5 1LX
United Kingdom
Telephone: +44 (0) 1384 842 211
Facsimile: +44 (0) 1384 843 355

Asia (HK)

14/F, Lu Plaza
2 Wing Yip Street
Kwun Tong, Kowloon
Hong Kong
Telephone: +852 2176 3333
Facsimile: +852 2176 3888

For global contact, visit:

www.Emerson.com/EmbeddedPower
techsupport.embeddedpower@emerson.com

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