

75 Amps AEQ75Y48

High Efficiency Quarter Brick



Total Power: 135W
Input Voltages: 48V
No. of Outputs: Single

Electrical Specs

Input

| | |
|-------------|--------------|
| Input Range | 36 to 75 VDC |
| Input Surge | 100V /100ms |
| Efficiency | 89% typical |

Output

| | |
|------------------------|---|
| Output Current | 75A max |
| Line/Load Regulation | <0.15%Vo typical |
| Noise/Ripple | 25mV typical |
| Remote sense | Up to 10% of Vo |
| Transient Response | 4% deviation typical 50% to 75% Load change 0.1A/μs Slew Rate 100μs recovery |
| Overvoltage Protection | 120% Vo (autorecovery) |
| Current Limit | 110% Io (autorecovery) |
| Switching Frequency | 500kHz |

Control

| | |
|----------------|--|
| Voltage Adjust | 90 to 110% Vo |
| Enable | TTL compatible (Positive or Negative Logic options) |

Special Features

- High Efficiency
- Baseplate construction
- Industry standard package 1.45" x 2.30"
- Redundant output power pins
- Startup and stable operation at high capacitive load
- Remote sense compensation
- Regulation to zero load
- Fixed frequency switching
- Basic insulation
- EU Directive 2002/95/EC Compliant for RoHS

Environmental

Operating temperature range:
-40°C to +105°C Baseplate
Storage temperature: -40°C to +125°C
Overtemperature protection: 115°C PCB
temperature (Typical)
MTBF: > 1 million hours

Safety

UL, cUL 60950
TUV EN60950

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AEQ75Y48

Ordering Information

| Input Voltage | Output Voltage | Output Current | Efficiency | Model Number |
|---------------|----------------|----------------|------------|-------------------------|
| 36V to 75V | 1.8V | 75A | 89% Typ | AEQ75Y48(N) - (6)(3)(L) |

OPTIONS

- suffix "N" = Negative Logic Enable (without suffix "N" designates Positive Logic Enable)
- suffix "6" = 3.7mm nominal pin length (5mm pin length default)
- suffix "-3" = single pair of output pins (Pins 4 and 10 unstuffed)
- without suffix "-3" = double pair of output pins (Pins 4, 5, 9, 10 are present)
- suffix "L" = RoHS compliant (RoHS 6) / "Blanks" = RoHS compliant with Lead (Pb) in solder exemption (RoHS 5)

Pin Assignments

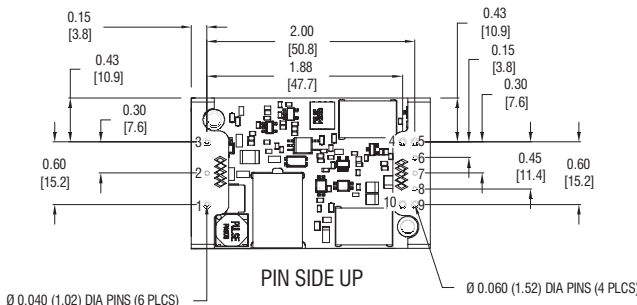
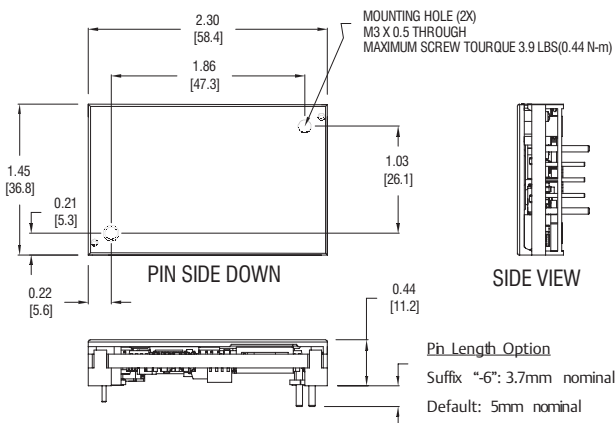
Single Output

- +Vin
- Enable
- Vin
- Common (OPTIONAL)
- Common
- Sense
- Trim
- + Sense
- + Vout
- + Vout (OPTIONAL)

Notes:

- Nominal values apply with sense pins connected to +Vout and Ground Return with other control pins unconnected.
- Consult the Technical Reference Notes for more detailed information.
- Dimensions provided in the mechanical outline are nominal values.
- Specifications subject to change without notice.
- 2 Year warranty

* 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. (REV02: DECEMBER 20, 2006)



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