

Embedded Power for
Business-Critical Continuity

AED/ALD17

150 Watts

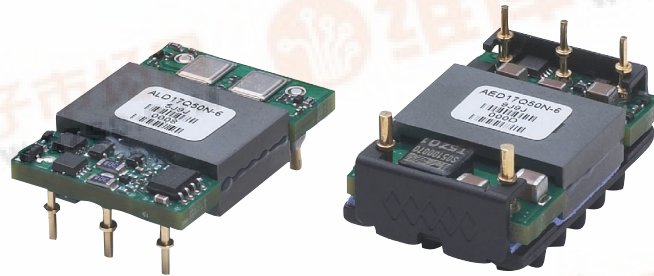
Total Power: 150 Watts
Input Voltage: 48V
of Outputs: Single

Special Features

- Intermediate Bus Converter for Front End (DPA) Distributed Power Architecture application
- High efficiency (96% Typical)
- Industry standard package 16th Brick 0.90" x 1.30"
- High capacitive load limit on start-up
- Output Enable Pin
- Undervoltage lockout
- Over Temperature Protection
- Meets Basic Insulation
- EU directive 2002/95/EC compliant for RoHS

Safety

UL, cUL 60950-1
TUV EN60950-1



Rev. 04.20.06
AED/ALD17
1 of 2

Electrical Specifications

Input

Input range	36V to 55V
Efficiency	96%@ 9.6V (typical)
Over Voltage Protection	60V typical

Output

Output current	17A max
Line regulation	-25% / +15% Vo, nom
Load regulation	5% Vo (typical)
Noise/ripple ¹	90mV (typical)
Over current limit	Auto-restart
Over temperature protection	115°C average PCB temperature (autorecovery)
Switching frequency	165kHz

Control

Enable	TTL compatible (positive or negative enable logic)
Isolation Voltage	
Input to Output	2000Vdc max

Environmental Specifications

Operating ambient temperature range	-40°C to +85°C ambient
Storage temperature	-55°C to +125°C
MTBF	>1 million hours

Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency ²	Model Number
36 - 55V	9.6V	17A	96% Typ	A(X)D17Q50(N)-(6)(L)

Options:

- (X) : "L" = Open Frame / Low Profile
- "E" = Heatplate Construction
- (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)

Pin Assignments

Single Output

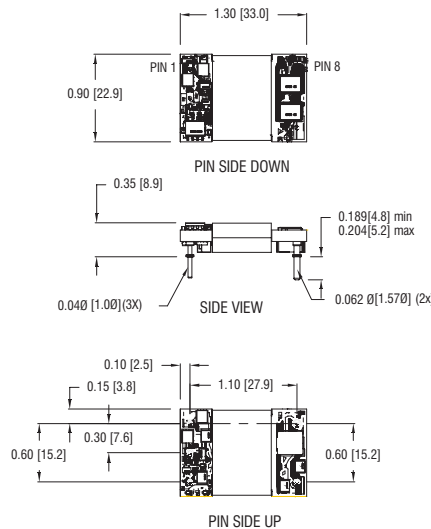
1. +Vin
2. Enable
3. -Vin
4. -Vout
5. Blank
6. Blank
7. Blank
8. +Vout

Notes:

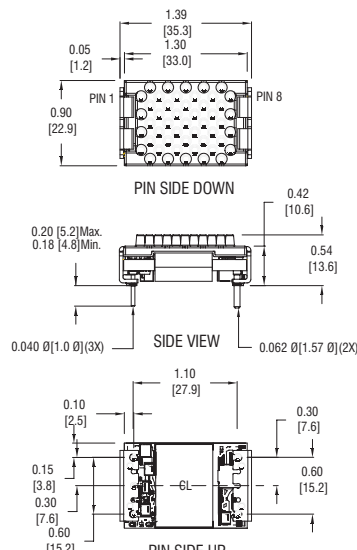
1. Measured at 20 MHz bandwidth with external 10 μ F tant. capacitor in parallel with 1 μ F ceramic capacitor placed across +Vout and -Vout; 33 μ F e-cap or equivalent placed across +Vin and -Vin.
2. Efficiency measurements are typical values taken at 48V input, nominal output, full load and $T_A = 25^\circ\text{C}$.
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]. Pin diameter, $\varnothing = 0.06$ " for Pin 4 (-Vout) and Pin 8 (+Vout), the rest of the pins are $\varnothing = 0.04$ ".
6. Technical Reference Notes should be consulted for detailed information when available.
7. Warranty 1yr.

Mechanical Drawing

ALD Series



AED Series



* This is a Preliminary Data Sheet. Astec Power 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.

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