

AED/ALD17

150 Watts

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



Electrical Specifications

Input

Input range	36V to 55V
Efficiency	96%@ 9.6V (typical)
Over Voltage Protection	60V typical
Input UVLO	36 to 37.5V

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

Special Features

- 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
TUV EN60950



Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency ²	Model Number
38 - 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

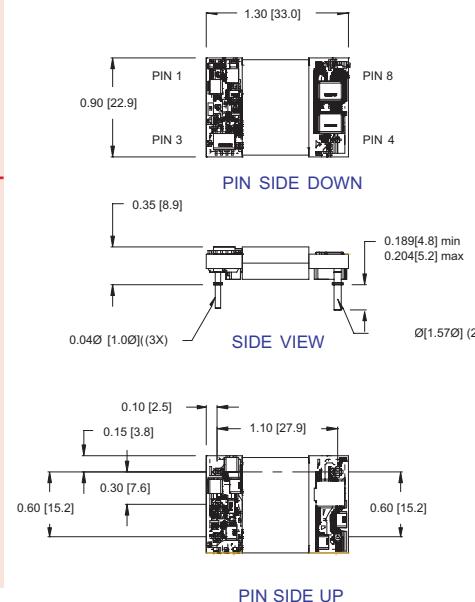
1. +Vin
2. Enable
3. -Vin
4. -Vout
5. Blank
6. Blank
7. Blank
8. +Vout

Notes:

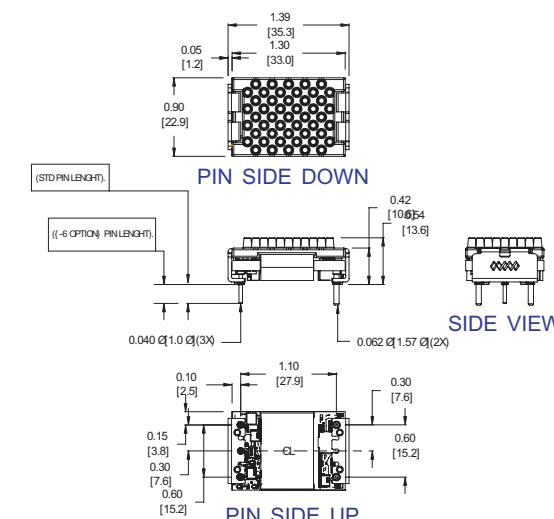
1. 20 MHz bandwidth, External 10 μ F tant. capacitor in parallel with 1 μ F ceramic capacitor placed across the output and secondary return ground.
2. Efficiency measurements are typical values taken at 48V input, nominal output, full load and $T_A = 25^\circ\text{C}$.
3. All specifications are typical 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.

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.powerconversion.com
[techsupport.embeddedpower
@emerson.com](mailto:techsupport.embeddedpower@emerson.com)

While every precaution has been taken to ensure accuracy and completeness in this literature, Emerson Network Power assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

Emerson Network Power.
The global leader in enabling
business-critical continuity.

- AC Power
- Connectivity
- DC Power
- Embedded Computing
- **Embedded Power**
- Monitoring
- Outside Plant
- Power Switching & Controls
- Precision Cooling
- Racks & Integrated Cabinets
- Services
- Surge Protection

EmersonNetworkPower. com

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co.
©2008 Emerson Electric Co.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Emerson Network Power](#):

[ALD17Q50N-L](#) [ALD17Q50-6L](#) [ALD17Q50-L](#)