

# AED/ALD17

## 150 Watts

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

### 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



Rev. 04.02.08  
AED/ALD17  
1 of 2

## 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 <sup>1</sup>	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)
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### Isolation Voltage

Input to Output	2000Vdc max
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## Environmental Specifications

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

### Safety

UL, cUL 60950  
TUV EN60950



## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency <sup>2</sup>	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

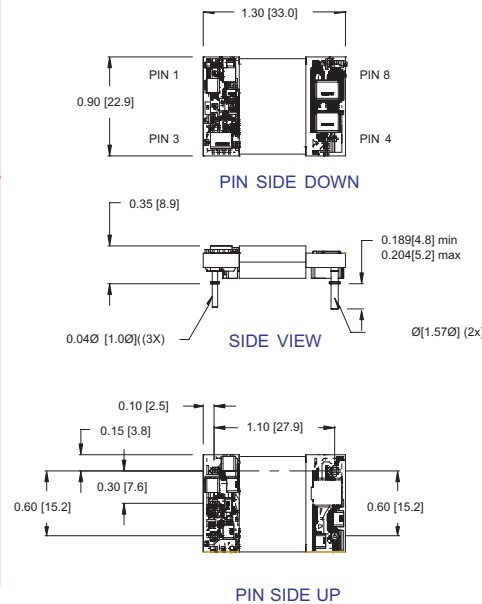
- +Vin
- Enable
- Vin
- Vout
- Blank
- Blank
- Blank
- +Vout

Notes:

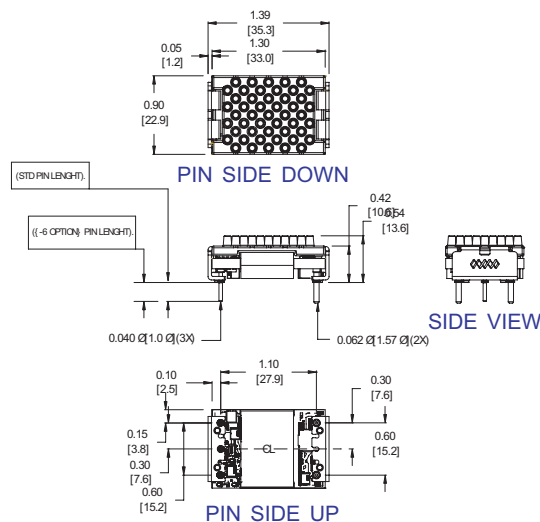
- 20 MHz bandwidth. External 10  $\mu$ F tant. capacitor in parallel with 1  $\mu$ F ceramic capacitor placed across the output and secondary return ground.
- Efficiency measurements are typical values taken at 48V input, nominal output, full load and  $T_A = 25^\circ\text{C}$ .
- All specifications are typical at nominal line, full load and  $T_A = 25^\circ\text{C}$  unless otherwise noted.
- All specifications subject to change without notice.
- Mechanical drawings are for reference only. Dimensions are in inches [millimeters]. Pin placement tolerance  $\pm 0.005$  [0.127]. Mechanical Tolerance  $\pm 0.02$  [0.5]. Pin diameter,  $\varnothing = 0.06$ " for Pin 4 (-Vout) and Pin 8 (+Vout), the rest of the pins are  $\varnothing = 0.04$ ".
- Technical Reference Notes should be consulted for detailed information when available.
- Warranty 1yr.

## Mechanical Drawing

## ALD Series



## AED Series



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