## mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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# 25 Amps ALD25



## **Special Features**

- High Efficiency
- -40°C to +85°C Ambient Air Operation
- 1.30" x 0.9" x 0.35" TH or SMT package
- · High capacitive load limit on start-up
- Industry standard feature sets: UVLO, OVP, OCP, OTP, On/Off Enable, Remote Sense, Output Trim
- Basic Insulation
- Regulation to zero load
- Fixed frequency switching
- EU Directive 2002/95/EC compliant for RoHS

## Environmental

Ambient air operating temperature range: -40°C to +85°C

Storage temperature: -40°C to +125°C

Overtemperature protection: 115°C PCB temperature (Typical)

MTBF: > 1 million hours

## Safety

UL,cUL 60950-1

TUV EN60950-1

Total Power: Input Voltages: No. of Outputs: 60W 48 Single

## **Electrical Specs**

36 to 75 VDC

100V /100ms

±0.1%V<sub>O</sub>

±0.1%V<sub>O</sub>

35mV Typ Up to 10% of Vo

88%@1.8V (Typical)

3%Vo (typ) deviation

50% to 75% Load change

## Input

Input Range Input Surge Efficiency

## Output

Line Regulation Load Regulation Noise/Ripple<sup>1</sup> Remote sense Transient Response

**Overvoltage Protection** 

Over Current protection

Over Temperature Protection Switching Frequency Isolation Voltage 80μs settling time (typ) 125% V<sub>O</sub> typ (autorecovery) 115% I<sub>O</sub> typ (autorecovery) 115°C average PCB temperature (autorecovery) Fixed Frequency

1500 Vdc

### Control

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



1

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ASIA



## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency <sup>2</sup>	Model Number
36V to 75V	5.0V	12A	91% Typ	ALD12A48(N) - (6)(S)(L)
36V to 75V 36V to 75V	3.3V 2.5V	18A 20A	90% Typ 89% Typ	ALD18F48(N) - (6)(S)(L) ALD20G48(N)- (6)(S)(L)
36V to 75V	1.8V	25A	88% Typ	ALD25Y48(N) - (6)(S)(L)
36V to 75V 36V to 75V	1.5V 1.2V	25A 25A	85% Тур 83% Тур	ALD25M48(N)- (6)(S)(L) ALD25K48(N) - (6)(S)(L)

#### NOTES:

Efficiency values taken at nominal input full load condition, 25°C ambient temperature.

#### **OPTIONS**

(N) : "N" = designates Negatve 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)

(S) : "-S" = Surface Mount Termination (default is thru hole termination with no sufix "-S required)

(L) : "L" = RoHS compliant (RoHS 6) / "Blank" - RoHS compliant with Lead (PB) in solder exemption (RoHS 5)

## **Pin Assignments**

#### Single Output

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

#### Notes:

- 1. Measured at 20MHz bandwidth with external 10  $\mu$ F tant. capacitor in parallel with 0.1  $\mu$ F ceramic capacitor placed across +Vout and -Vout; 33 $\mu$ F e-cap or equivalent placed across +Vin and -Vin.
- 2. Efficiency measurements taken at full load, nominal line and  $T_{\hbox{\scriptsize A}}$  = 25 °C.
- 3. All specifications are typical at nominal line, full load and T\_A = 25  $^\circ C$  unless otherwise noted.
- Mechanical drawings are for reference only. Dimensions are in inches [millimeters]. Mechanical tolerance: ± 0.002[0.5], recommended surface mount pads: Ø = 0.11[2.79] ± 0.005 [0.13]; through hole pin diameter (Pins 4 & 8) Ø = 0.062 [1.57], others Ø = 0.04 [1.0] (6X).
- 5. Technical reference Notes should be consulted for detailed information when available.
- 6. All specifications subject to change without notice.
- 7. Warranty 1 yr.

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. (REV08: MARCH 05, 2006)



EMERSON

ALD2

Astec Industry Standarc