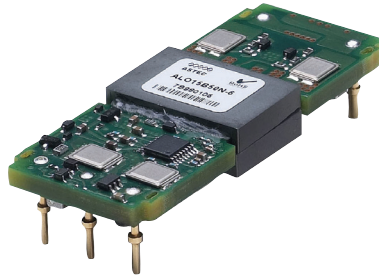


# ALO15B50

180 Watts

Total Power: 180 Watts  
Input Voltage: 48V  
# of Outputs: Single



## Special Features

- High efficiency (96% Typical)
- Industry standard package  
8th Brick 0.90" x 2.30" x 0.38"
- High capacitive load limit on  
start-up
- 12V Intermediate Bus  
Voltage for DPA application
- Output Enable Pin
- Undervoltage lockout
- Over Temperature Protection
- Meets Basic Insulation
- EU directive 2002/95/EC  
compliant for RoHS

## Electrical Specifications

Input	
Input range	36V to 55V
Efficiency	96%@ 12V (typical)
Over Voltage Protection	60V typical
Output	
Output current	0A to 15 max (180W output power)
Line regulation	-25% / +15% Vo, nom
Load regulation	5% Vo (typical)
Noise/ripple <sup>1</sup>	90mV (typical)
Over current limit	115% IO,MAX typical (autorecovery)
Over temperature protection	125°C average PCB temperature (autorecovery)
Switching frequency	220kHz
Control	
Enable	Positive and Negative logic options
Isolation Voltage	
Input to Output	1500Vdc max

## 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 60950-1  
TUV EN60950-1



## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency <sup>2</sup>	Model Number
36 - 55V	12V	15A	96% Typ	ALO15B50(N)-(6)(L)

### Options:

Enable Function	"N" = negative logic enable without "N" = positive logic enable (default)
Pin Length Option	"-6" = 3.7mm (nominal) Standard pin length is 5mm nominal
RoHS Version	"L" = RoHS Compliant (RoHS 6) without "L" = RoHS Compliant with lead (Pb) in solder exemption (RoHS 5)

## Pin Assignments

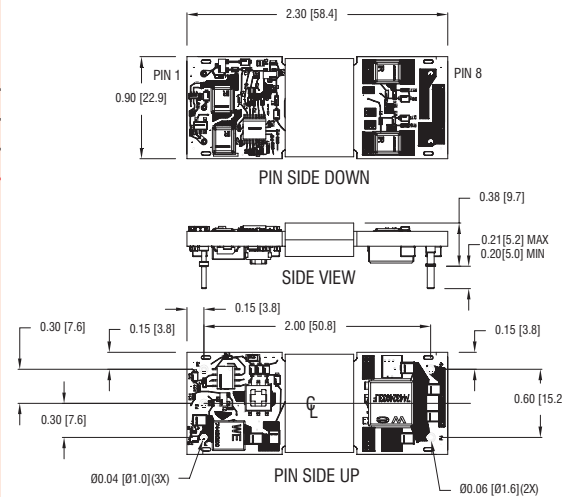
### Single Output

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  $\mu$ F tant. capacitor in parallel with 1  $\mu$ F ceramic capacitor placed across +vout and -Vout.
2. Efficiency measurements are typical values taken at 48V input, 12V 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  $\pm 0.005$  [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  $\varnothing = 0.04$ ".
6. Technical Reference Notes should be consulted for detailed information when available.
7. Warranty 1yr.

## Mechanical Drawing



## Astec Power

5810 Van Allen Way  
Carlsbad, CA 92008  
USA  
Telephone: +1 760 930 4600  
Facsimile: +1 760 930 0698  
Technical Support: +1 888 41 ASTEC  
or +1 407 241 2752

Waterfront Business Park  
Merry Hill, Dudley  
West Midlands, DY5 1LX  
United Kingdom  
Telephone: +44 (0) 1384 842 111  
Facsimile: +44 (0) 1384 843 355

Units 2111-2116, Level 21  
Tower 1, Metroplaza  
223, Hing Fong Road  
Kwai Fong, New Territories  
Hong Kong  
Telephone: +852 2437 9662  
Facsimile: +852 2402 4426

For global contact, visit:

[www.astecpower.com](http://www.astecpower.com)  
[technicalsupport@astec.com](mailto:technicalsupport@astec.com)

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

Printed in USA

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

- AC Power
- Connectivity
- DC Power
- Embedded Power**
- Inbound Power
- Integrated Cabinet Solutions
- Outside Plant
- Precision Cooling
- Site Monitoring and Services

**EmersonNetworkPower.com**