

## ALO15B50

180 Watts

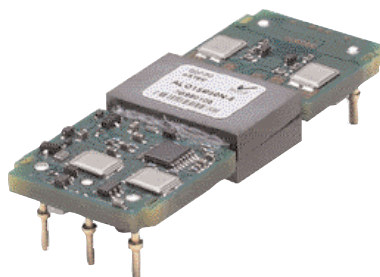
**Total Power:** 180 Watts  
**Input Voltage:** 48V  
**# of Outputs:** Single

### 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
- 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



Rev. 04.02.08  
ALO15B50  
1 of 2

## Electrical Specifications

Input	
Input range	36V to 55V
Efficiency	96%@ 12V (typical)
Over Voltage Protection	60V typical
Input UVLO	35 to 36V
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	200kHz
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



## 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

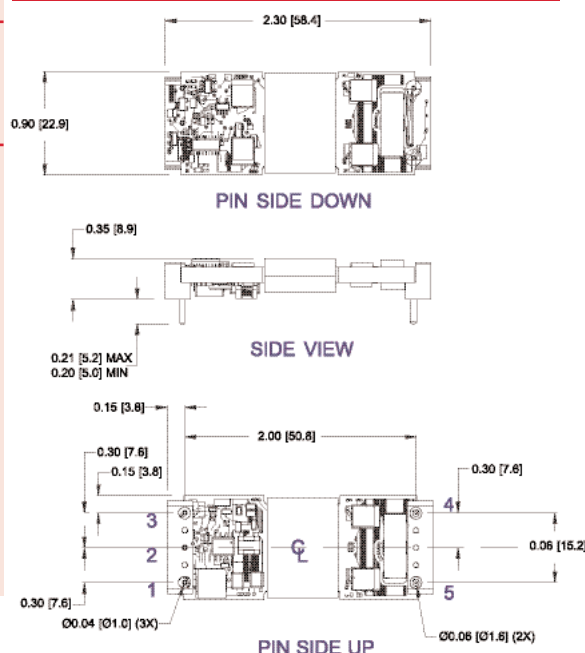
### Single Output

1. +Vin
2. Enable
3. -Vin
4. -Vout
5. +Vout

### Notes:

1. 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.
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 5 (+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



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