

# 66Watts

## ALO20F36

Wide Range Input



### Special Features

- 2.3" x 0.9" Industry Standard 8th brick outline
- Wide Operating Input Voltage Range
- Regulation to zero load
- High Efficiency
- Fixed Frequency Switching for EMI predictability
- Industry Standard features: Input UVLO with hysteresis, Enable, OVP, OCP, OTP, Output VoltageTrim, Differential Remote Sense
- Meets Basic Insulation
- EU Directive 2002/95/EC compliant for RoHS

### Environmental

Operating Ambient Temperature  
 Openframe: -40°C to +85°C Ambient  
 Storage temperature: -55°C to +125°C  
 MTBF: > 1 Million Hrs

### Safety

UL, cUL 60950 Recognized  
 TUV EN60950 Licensed

Total Power: 66 Watts  
 Input Voltages: 19 - 60V  
 No. of Outputs: Single

### Electrical Specs

#### Input

Input Range 19 to 60 VDC  
 Input Surge 100V /100ms  
 Efficiency<sup>2</sup> 91% @ 3.3V (typical)

#### Output

Line / Load Regulation < 0.1% V<sub>O</sub> (typical)  
 Load Current Up to 20A  
 Noise/Ripple<sup>1</sup> 50mV<sub>PK-PK</sub> (typical)  
 Transient Response 3% typical deviation  
 (50% to 75% Step Load)  
 < 200μs settling time  
 Over Voltage Protection 125% V<sub>O</sub> Typ (autorecovery)  
 Over Current Protection 125% I<sub>O,max</sub> Typ (autorecovery)  
 Over Temperature Protection 115°C average PCB temperature  
 (autorecovery)  
 Switching Frequency 400KHz  
 Isolation Voltage 1500Vdc

#### Control

Output Voltage Trim ±10% V<sub>O,NOM</sub>  
 Enable TTL compatible  
 (Positive or Negative Logic)

AMERICAS

5810 Van Allen Way  
 Carlsbad, CA 92008  
 Telephone: 760-930-4600  
 Facsimile: 760-930-0698

EUROPE

Astec House, Waterfront Business Park  
 Merry Hill, Dudley  
 West Midlands, DY5 1LX, UK  
 Telephone: 44 (1384) 842-211  
 Facsimile: 44 (1384) 843-355

ASIA

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



## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency <sup>2</sup>	Model Number
19V to 60V	3.3V	20A	91%	ALO20F36(N) - (6)(L)

OPTIONS:

- (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) / "Blank" = RoHS compliant with Lead (Pb) in solder exemption

## Pin Assignment

### Single Output

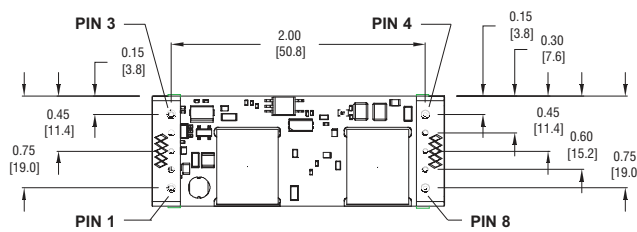
1. +Vin
2. Enable (On/Off)
3. -Vin
4. -V<sub>OUT</sub>
5. -Sense
6. Trim
7. +Sense
8. +V<sub>OUT</sub>

Notes:

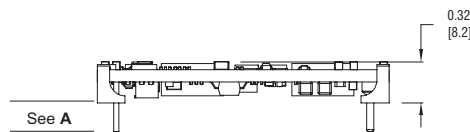
1. 20 MHz bandwidth. External 10 uF tant. capacitor in parallel with 0.1 uF ceramic capacitor placed across the output and secondary return ground.
2. Efficiency measurements are typical values taken at full load, 24V or 48V input and T<sub>A</sub> = 25°C.
3. All specifications are typical at nominal line, full load and T<sub>A</sub> = 25°C unless otherwise noted.
4. All specifications subject to change without notice.
5. Mechanical drawings are for reference only. Dimensions are in inches [mm]. Pin placement tolerance ± 0.005 [0.127]. Mechanical Tolerance ± 0.02 [0.5]. Through hole pin diameter (Pins 4 & 8) Ø = 0.062 [1.57], others Ø = 0.04 [1.0] (6X).
6. Technical Reference Notes should be consulted for detailed information when available.
7. Warranty 1yr.

This is a Preliminary Data Sheet. Astec reserves the right to make changes to the information contained herein without notice and assumes no liability as a result of its use and application. (REV 03: MARCH 8, 2007)

### ALO - OPENFRAME



PIN SIDE UP



PIN LENGTH	A
Std Pin Length:	0.189 [4.8] MIN
	0.205 [5.2] MAX
"-6" Option:	0.137 [3.5] MIN
	0.152 [3.9] MAX

ALO20F36

Astec Industry Standard