

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
 Efficiency² 91% @ 3.3V (typical)

Output

Line / Load Regulation < 0.1% V_O (typical)
 Load Current Up to 20A
 Noise/Ripple¹ 50mV_{PK-PK} (typical)
 Transient Response 3% typical deviation
 (50% to 75% Step Load)
 < 200μs settling time
 Over Voltage Protection 125% V_O Typ (autorecovery)
 Over Current Protection 125% I_{O,max} Typ (autorecovery)
 Over Temperature Protection 115°C average PCB temperature
 (autorecovery)
 Switching Frequency 400KHz
 Isolation Voltage 1500Vdc

Control

Output Voltage Trim ±10% V_{O,NOM}
 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 ²	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

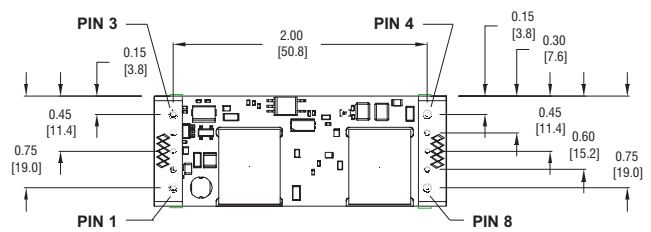
Single Output

1. +Vin
2. Enable (On/Off)
3. -Vin
4. -V_{OUT}
5. -Sense
6. Trim
7. +Sense
8. +V_{OUT}

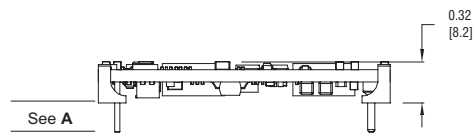
Notes:

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_A = 25°C.
3. All specifications are typical at nominal line, full load and T_A = 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.

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

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)

ALO20F36

Astec Industry Standard