



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!



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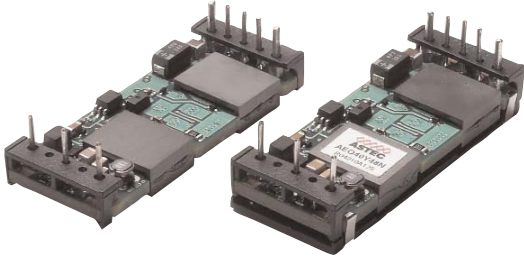
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



120Watts

AEO/ALO40

High Efficiency



Total Power: 120 Watts
 Input Voltages: 48V
 No. of Outputs: Single

Electrical Specs

Input

Input Range	36 to 75 VDC
Input Surge	100V /100ms
Input UVLO	33 - 36 V (UVLO ON) 31 - 34 V (UVLO OFF)
Efficiency ²	93% @ 5 V (typical)

Output

Line / Load Regulation	< 0.1% V _O (typical)
Load Current	Up to 40A for V _O ≤ 1.8V
Noise/Ripple ¹	30mV _{PK-PK} (typical)
Transient Response	2% typical deviation (50% to 75% Step Load) < 100μs settling time (typ)
Over Voltage Protection	130% V _O Typ (autorecovery)
Over Current Protection	130% I _{O,max} Typ (autorecovery)
Over Temperature Protection	115°C average PCB temperature (autorecovery)
Switching Frequency	Fixed Frequency
Isolation Voltage	1500Vdc

Control

Output Voltage Trim	±10% V _{O,NOM}
Enable	TTL compatible (Positive or Negative Logic)

Special Features

- 2.3" x 0.9" Industry Standard 8th brick outline
- Baseplate or Openframe construction
- Low Ripple and Noise
- Regulation to zero load
- High Capacitive Load start-up
- 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
 Baseplate: -40°C to +100°C Case

Storage temperature: -55°C to +125°C

MTBF: > 1 Million Hrs

Safety

UL, cUL 60950-1 Recognized

TUV EN60950-1 Licensed

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Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency ²	Model Number
36V to 75V	12.0V	10A	93.0%	A(X)O10B48 (N) - (6)(S)(L)
36V to 75V	5.0V	20A	92.0%	A(X)O20A48 (N) - (6)(S)(L)
36V to 75V	3.3V	30A	91.0%	A(X)O30F48 (N) - (6)(S)(L)
36V to 75V	2.5V	35A	89.5%	A(X)O35G48 (N) - (6)(S)(L)
36V to 75V	1.8V	40A	88.0%	A(X)O40Y48 (N) - (6)(S)(L)
36V to 75V	1.5V	40A	86.0%	A(X)O40M48 (N) - (6)(S)(L)
36V to 75V	1.2V	40A	85.0%	A(X)O40K48 (N) - (6)(S)(L)

OPTIONS:

(X) : "L" = Open Frame / Low Profile
 "E" = Baseplate Construction

(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)

(S) : "-S" = Surface Mount Termination (default is Through Hole Termination with no suffix "-S" required)⁷

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

Pin Assignment

Single Output

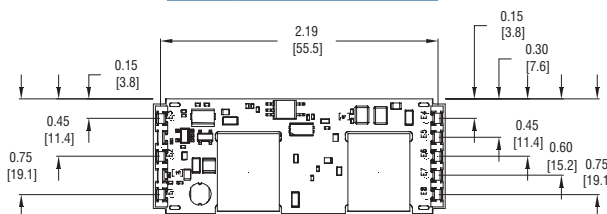
1. +Vin
2. Enable (On/Off)
3. -Vin
4. -V_{OUT}
5. -Sense
6. Trim
7. +Sense
8. +V_{OUT}

Notes:

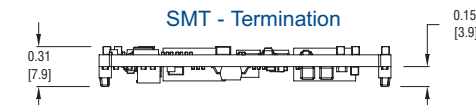
1. Measured at 20 MHz bandwidth with external 10 μF tant. capacitor in parallel with 0.1 μF ceramic capacitor connected across +V_{out} and -V_{out}; 220 μF e-cap or equivalent connected across +Vin and -Vin.
2. Efficiency measurements are typical values taken at full load, nominal line and T_A = 25°C.
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], recommended surface mount pads (min: 0.080 x 0.112 [2.03 x 2.84] / max: 0.092 x 0.124 [2.34 x 3.15]); 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. AEOxxxxx-Sx series (surface mount termination with baseplate) are not reflow compatible.
8. Warranty 2 yrs.

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 02: MARCH 7, 2007)

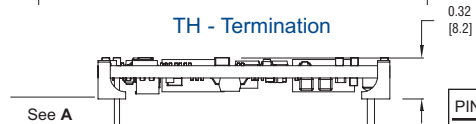
ALO - OPENFRAME



SMT - Termination

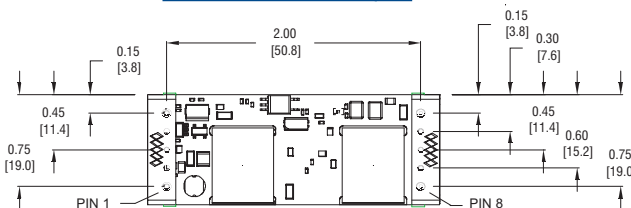


TH - Termination

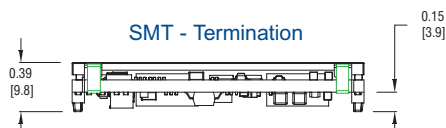


PIN LENGTH	A
Std Pin Length:	0.189 [4.8] MIN 0.205 [5.2] MAX
"-6" Option:	0.137 [3.5] MIN 0.152 [3.9] MAX

AEO - BASEPLATE



SMT - Termination



TH - Termination

