

ALQ25/AEQ25 Series

62.5 to 100 Watts

Total Power:

100 Watts (5 and 12Vo device)
82.5 Watts (for the 3.3Vo device)
62.5 Watts (for the 2.5Vo device)
Input Voltage: 36-75 VDC
of Output: Single

Special Features

- Delivers up to 25 A output current
- Industry standard quarter brick
- Basic Isolation
- Ultra High Efficiency
- Improved thermal performance: 12A (6.3A for the 8 V) at 55 °C at 1.5ms-1 (300LFM)
- High power density
- Low output noise
- Industry standard pinout
- 2:1 wide input voltage
- CNT function
- Remote sense
- Trim function: +10% / -20%
- Input under-voltage lockout
- Output over-current lockout
- Output over-voltage protection
- Over temperature protection
- RoHS Compliant

Safety

UL cUL
CSA
EN0950



Rev. 01.24.07
AEQ25Series
1 of 2



Electrical Specifications

Input

Input Range	36 to 75 VDC
Input Current (max.)	3.4 A
Input Reflected-ripple	20 mAp-p 5Hz to 20MHz: 12uH source impedance, TA=25 °C

Current Output

Output

Output voltage	2.5V, 3.3V, 5V and 12V nominal
Output Current	25A (8.3 A for the 12 Vo, 20A for the 5V)
Efficiency	>87% (See ordering information)
Line output regulation	8 mV (5 mV Typical) : 2.5 V device 10 mV (5 mV Typical) : 3.3 V and 5 V device 25 mV (12 mV Typical) : 12 V device
Load Output Regulation	15 mV max (10 mV Typ) : 2.5 V device 20 mV max (10 mV Typ) : 3.3 V and 5 V device 70 mV max (25 mV Typ) : 12 V device
Switching Frequency	300 KHz

Isolation

I/O isolation	1500 Vdc
Isolation Resistance	>10 Mohms

Environmental Specifications

Operating ambient temperature range	-40 °C to 70 °C
Storage temperature	-55 °C to 125 °C
Temperature Regulation	0.02 %Vo/°C
Calculated MTBF	2 Million hours (typ.); Io=Io-max; Tc=25 °C

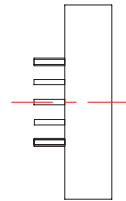
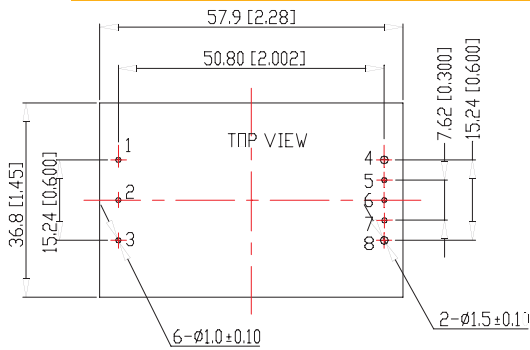


Ordering Information

Vin (V)	Vout (V)	Iout (A)	Effy	Model Number
36-75	2.5	25	88%	AEQ25G48(N)-L
36-75	2.5	25	88%	ALQ25G48(N)-L
36-75	3.3	25	89.5%	AEQ25F48(N)-L
36-75	3.3	25	89.5%	ALQ25F48(N)-L
36-75	5	20	90%	AEQ20A48(N)-L
36-75	5	20	90%	ALQ20A48(N)-L
36-75	12	8.33	90%	AEQ08B48(N)-L
36-75	12	8.33	90%	ALQ08B48(N)-L

Note: Option "N" is for the negative enabled option, omit if converter is positive enabled.

Mechanical Drawing



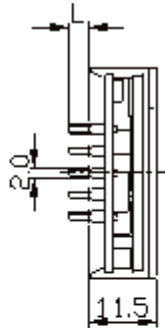
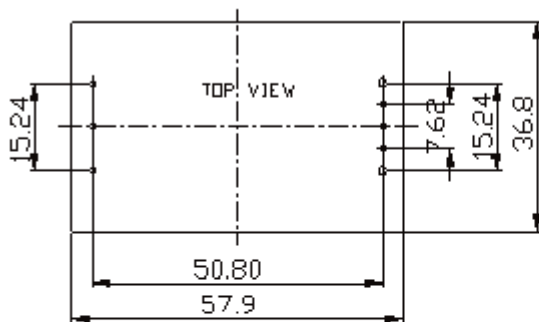
Open-Framed

Pin Length Option

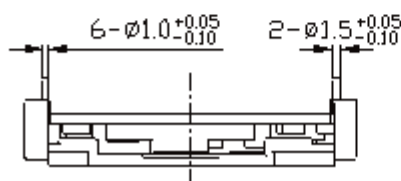
Device Code Suffix	L
-4	4.8mm +/- 0.5mm
-6	3.8mm +/- 0.5mm
-8	2.8mm +/- 0.25mm
NONE	5.8mm +/- 0.5mm



TOLERANCES: X.Xmm +/- 1.5mm



Baseplate



Pin 1	+Vin	Pin 4	+Vo
Pin 2	CNT	Pin 5	+Sense
Pin 3	-Vin	Pin 6	Trim
		Pin 7	-Sense
		Pin 8	-Vo

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 842 211
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
technicalsupport@astec.com

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