

Astec Industry Standard

25 Amps,20 Amps,8.33 Amps

ALQ25 Series
High Efficiency Quarter Brick



Total Power:100W(5V,12V);62.5W(2.5V);82.5W(3.3V)
Input Voltage :48V
No.of Outputs:Single output

Special Features

- High efficiency(Typ) :90% (5V,12V); 88%(2.5V); 89.5%(3V)
- -40°C to +70°C Ambient Air Operation
- Industry standard package
 2.28" x 1.45" x 0.5"(baseplated)
 2.28" x1.45"x 0.4"(open frame)
- High capacitive load limit on start-up
- Basic insulation
- Regulation to zero load

Environmental

Ambient air operating temperature range:
 -40°C to +70°C
 Overtemperature protection: 115°C typ
 MTBF: > 2 million hours

Safety

UL,CSA,EN

Electrical Specs

Input	
Input Range	36 to 75 VDC
Input Surge	100V /100ms
Efficiency (Typ)	90% (5V,12V); 88%(2.5V);89.5%(3V)
Output	
Voltage Tolerance (line, load, temp)	<1.9%
Ripple&Noise	120mV Max.
Transient Response	Load change 25% of Io max from 50%Io max ,<200mv,<400µs (di/dt =1A/µs,output cap = 1000µF aluminium electrolyte)
Overvoltage Protection (Hiccup)	6V to 7.5V (5V) 3V to 3.8V(2.5V) 3.9V to 5V(3.3V) 14.4V to 18V(12V)
Current Limit(Hiccup)	>22A (5V) >9.2A(12V) >27A(2.5V,3.3V)
Overtemperature Protection	Auto-recovery
Switching Frequency	300k
Control	
Trim range(%)	80 to 110
Enable	Positive & negative enable options

Thermal Derating
 The module can deliver up to full power at 55°C ambient, Vin: 48V,with 200LFM forced air(output to input).





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
Fwai Fong, New Territories
Hong Kong
Telephone: 852-2437-9662
Facsimile: 852-2402-4426



ALQ25 Series

Ordering Information

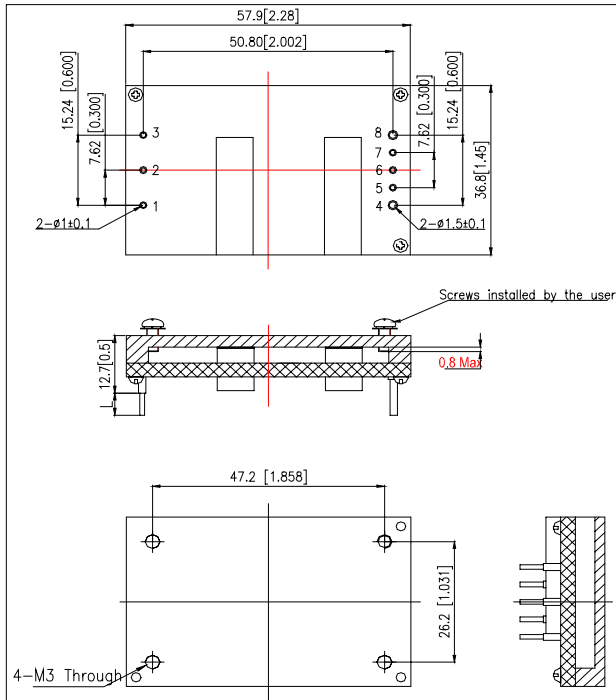
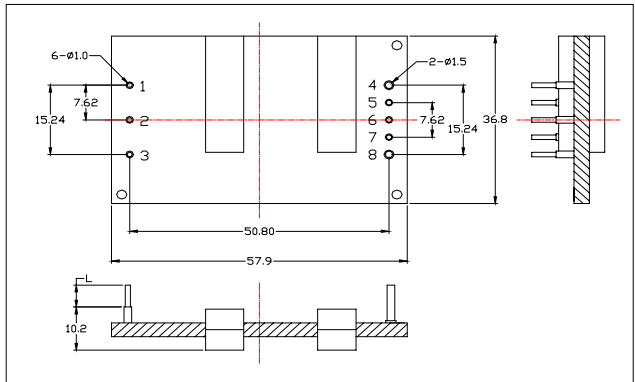
Input Voltage	Output Voltage	Output Current	Efficiency	Model Number
48V	5V	20A	90% Typ	ALQ20A48N,AEQ20A48N
48V	2.5V	25A	88% Typ	ALQ25G48N,AEQ25G48N
48V	3.3V	25A	89.5% Typ	ALQ25F48N,AEQ25F48N
48V	12V	8.33A	90% Typ	ALQ08B48N,AEQ08B48N

NOTES: "N" = Negative logic enable (without "N" = Positive logic enable)

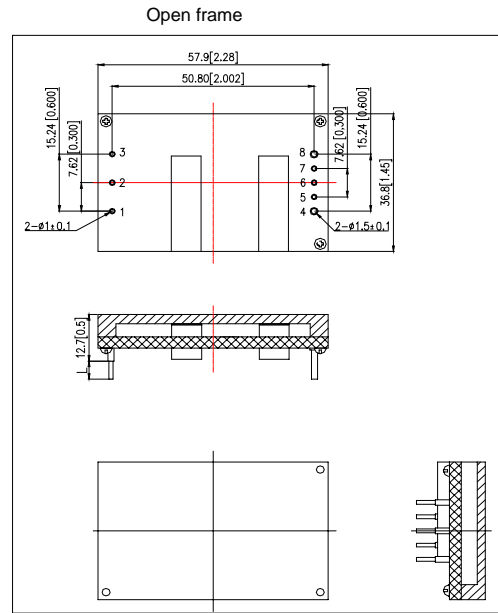
Pin Assignments

Single Output

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



Baseplated (for 2.5V, 3.3V and 5V)



Baseplated (for 12V)

Device code suffix	Length
-4	4.8mm ± 0.5mm
-6	3.8mm ± 0.5mm
-8	2.8mm ± 0.25mm
None	5.8mm ± 0.5mm
Tolerance: X.Xmm ± 0.5mm; X.XXmm ± 0.25mm	

Notes:

1. All specifications subject to change without notice. Mechanical drawings are for reference only.
2. Technical Reference Notes should be consulted for detailed information when available.

REV 1: August 2005