

40 Amps

ALQ40

High Efficiency Quarter Brick

Total Power: 144W
Input Voltages: 48V
No. of Outputs: Single

Preliminary



Special Features

- High efficiency (91% Typical)
- -40°C to +70°C Ambient Air Operation
- Industry standard package
1.48" x 2.30" x 0.38"
- High capacitive load limit on start-up
- Remote sense compensation
- Basic insulation
- Regulation to zero load
- Fixed frequency switching (200KHz)

Environmental

Ambient air operating temperature range:
-40°C to +70°C

Storage temperature: -40°C to +125°C

Overtemperature protection: 115°C typical

MTBF: > 1 million hours

Safety

UL,cUL 60950

TUV EN60950

Electrical Specs

Input

Input Range 36 to 75 VDC
Input Surge 100V /100ms
Efficiency 91%@3.3V Typ

Output

Load Regulation 10mV typical down to no load
(3V3 output and below)

Line Regulation 10mV typical
(3V3 output and below)

Voltage Tolerance ±1%

Noise/Ripple 100mV max typ
150mV max for 5V

Remote sense Up to 10% of Vo

Transient Response 5% max deviation with 25% to 75% full
(output 5V and above)
200mV (output below 5V)
500µs (max) recovery

Overvoltage Protection 140% nominal output

Current Limit 140% nominal output

Switching Frequency 200KHz (typ)

Control

Voltage Adjust 90 to 110% for 5V output
80 to 110% for 3.3V and below

Enable TTL compatible
(positive & negative enable options)

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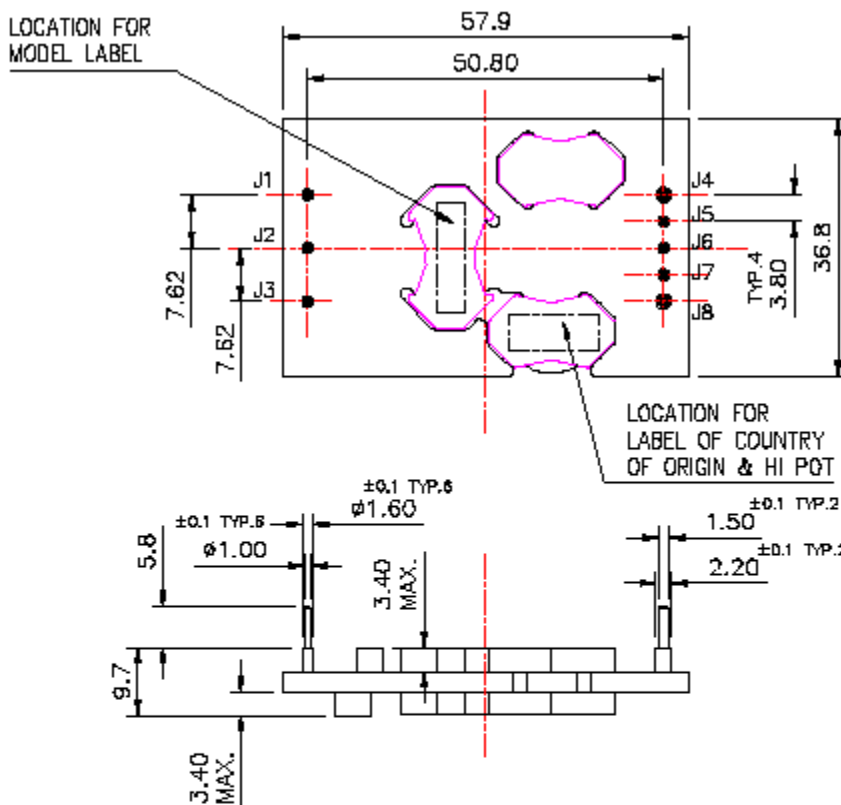


Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number
36V to 75V	5.0V	25A	91% Typ	ALQ25A48
36V to 75V	3.3V	35A	90% Typ	ALQ35F48
36V to 75V	2.5V	40A	89% Typ	ALQ40G48
36V to 75V	1.8V	40A	87% Typ	ALQ40Y48
36V to 75V	1.5V	40A	85% Typ	ALQ40M48
36V to 75V	1.2V	40A	84% Typ	ALQ40K48

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

Pin Assignments



- J1: -Vin
- J2: ENABLE
- J3: +Vin
- J4: -Vo
- J5: -SENSE
- J6: TRIM
- J7: +SENSE
- J8: +Vo

Notes:

Nominal values apply with sense pins connected to +Vout and Ground Return with other control pins unconnected.

Specifications subject to change without

REV 3: Dec 2003

www.astecpower.com



ALQ40K48

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