



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!



## Contact us

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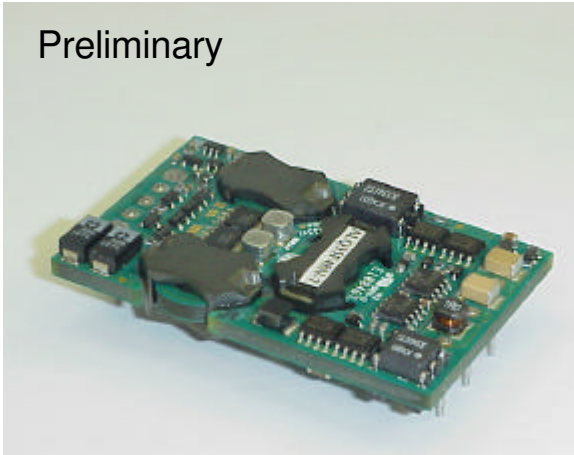
# 40 Amps

## 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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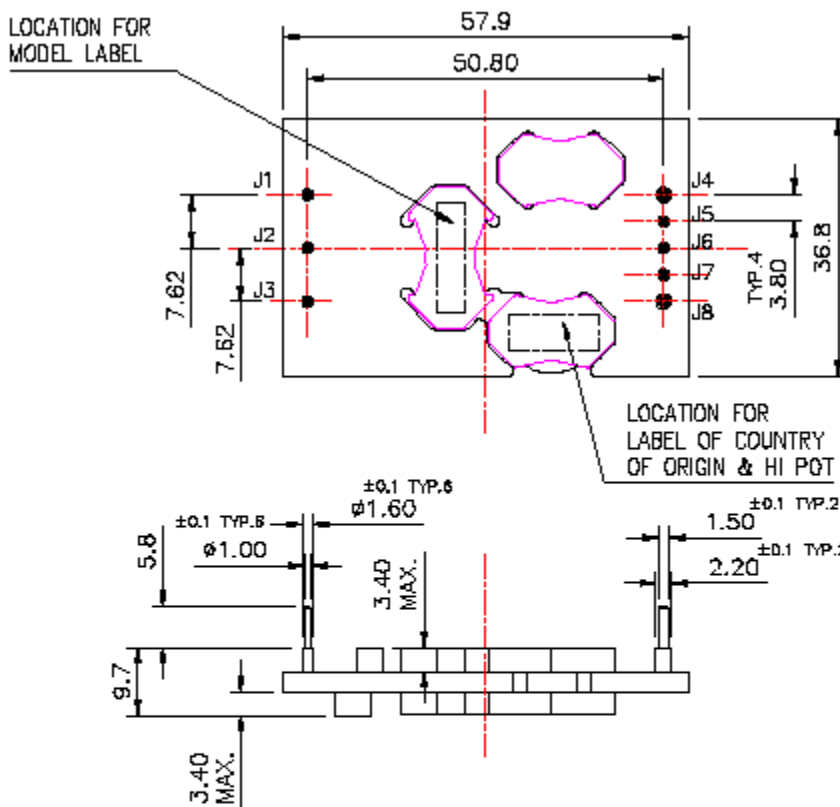


**Ordering Information**

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