

40 Amps

ALQ40

High Efficiency Quarter Brick

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



Preliminary

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)

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

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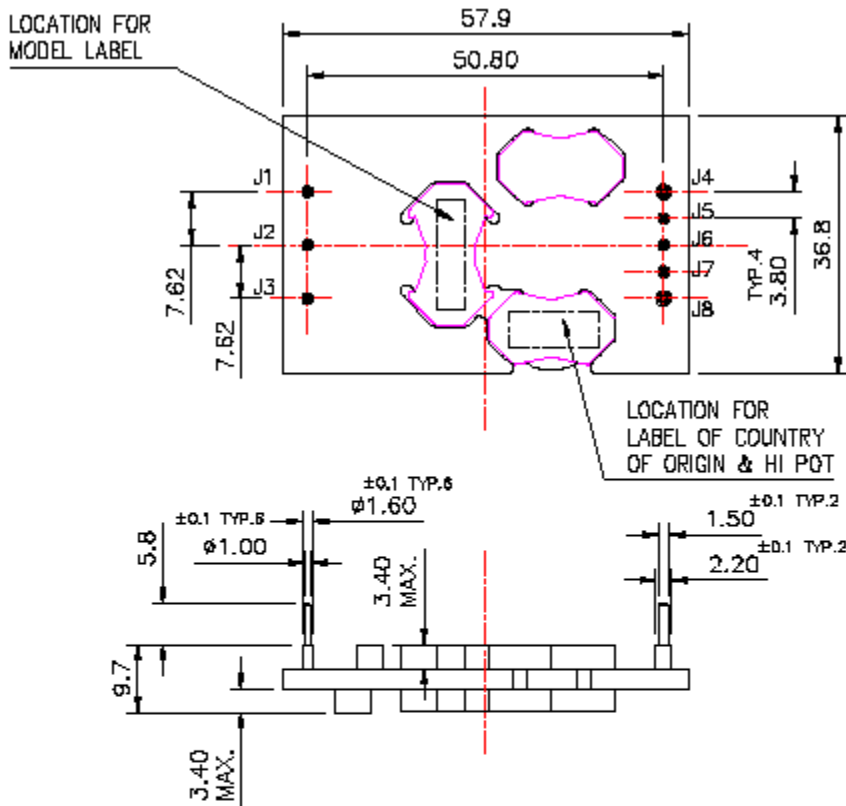


Ordering Information

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