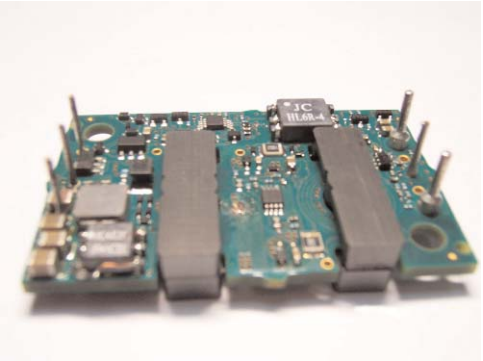
Preliminary Datasheet - Astec Industry Standard

20 Amps

Total Power:	240W
Input Voltages:	48
No. of Outputs:	1

ALQ/AEQ20B48



Special Features

- Quarter brick industry standard outline
- Baseplate or openframe low profile construction
- Industry Standard features : Input UVLO with hysteresis, Enable, OVP, OCP, OTP, output Voltage Trim, Differential Remote Sense
- Fixed switching frequency for EMI predictability
- Prebias startup capable
- RoHS compliant
- Meets basic insulation

Environmental

Ambient air operating temperature range: -40°C to +85°C

Storage temperature: -40°C to +125°C

MTBF: > 1 million hours

Safety

UL, cUL 60950 (Pending)

TUV EN60950 (Pending)

Electrical Specs

Input

Input Range	36 to 75 VDC
Input Surge	100V /100ms
Efficiency	93% (Typical)

Output

Line Regulation	± 0.1% (Typical)
Load Regulation	± 0.1% (Typical)
Noise/Ripple[1]	60mV (Typical)
Transient Response	5% deviation (50% to 75% step load) < 250µs settling time
Over Current protection	130% Io (autorecovery)
Over Voltage protection	120% Vo (autorecovery)
Over Temperature Protection	115ºC average PCB temperature (autorecovery)
Switching Frequency	150kHz
Isolation Voltage	2250 Vdc

Control

Enable On/Off	Positive or Negative Logic Options TTL Compatible

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Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency[2]	Model Number
36V to 75V	12V	20A	93% Typ	ALQ20B48(N)-(6)
36V to 75V	12V	20A	93% Typ	AEQ20B48(N)-(6)

OPTIONS
(N) : = designates Negatve Logic Enable (default is Positive Enable with no suffix “N” required)
(6) : = denotes 3.7mm Pin length (default is 5mm)
ALQ: = openframe construction
AEQ: = baseplate construction

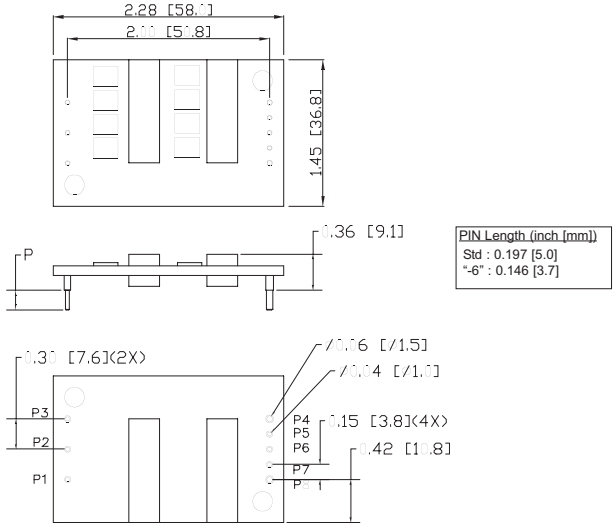
Pin Assignments

1. + Vin
2. Enable On/Off
3. - VIN
4. - VO
5. - Sense
6. Trim
7. + Sense
8. +VO

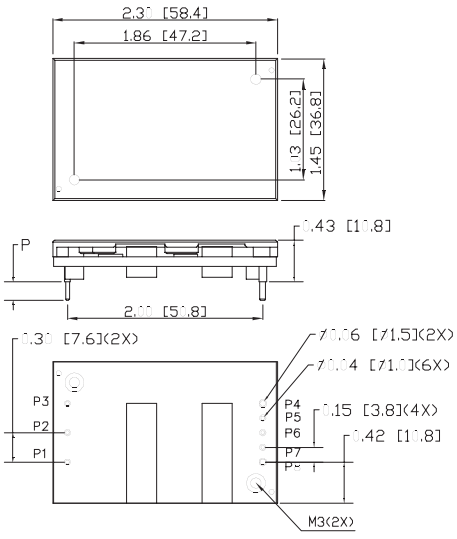
Notes:
1. Measured at 20MHz bandwidth with external 10 uF tant. capacitor in parallel with 1 uF ceramic capacitor across +VO and -VO, TA = 25 °C.
2. Efficiency measurements taken at nominal line, VIN = 48V, IO = 100% load, TA = 25 °C.
3. All specifications are considered typical values unless otherwise noted and are subject to change without notice.
4. 1 year warranty.
5. Consult factory for further product technical details.

MECHANICAL OUTLINE

OPENFRAME



BASEPLATE



Preliminary Data Sheet. Astec reserves the right to make changes to the information contained herein without notice and assumes no liability as a result of its use or application.
(REV A1: JANUARY 9, 2006)