

60 Watts

ALQ15

High Efficiency

PRELIMINARY



Total Power: 60 Watts
 Input Voltages: 48V
 No. of Outputs: Dual

Special Features

- Industry standard 1/4 Brick Footprint
- Open Frame Construction
- Low Ripple and Noise <math>< 30\text{mV}_{\text{PK-PK}}</math>
- Regulation to zero load
- High Capacitive Load start-up
- Fixed Frequency Switching for EMI predictability
- Basic Insulation
- OVP (Latching), OCP and OTP (Autorecovery)
- Input Under Voltage Lockout with Hysteresis
- Output Voltage Adjustability

Environmental

Operating Ambient Temperature -40°C to +85°C
 Storage temperature: -55°C to +125°C
 Over Temperature Protection: 110°C typical
 MTBF: > 1 Million Hrs

Safety

UL, cUL 60950 Recognized (Pending)
 TUV EN60950 Licensed (Pending)

Electrical Specs

Input

Input Range	36 to 75 VDC
Input Surge	100V /100ms
Efficiency	3.3V/2.5V @ 87% (typ at 60W) 3.3V/1.8V @ 86% 2.5V/1.5V @ 83%

Output

Regulation	< 1% V_o
Load Current	15A max per channel (60W max)

Noise/Ripple ¹	30mV _{PK-PK}
Transient Response (50% to 75% Step Load)	2% V_o deviation (typ) < 300 μ s settling time (typ)

Overvoltage Protection (Latching)	130% V_o (Typ)
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Current Limit (Typ)	130% $I_{O,max}$ (Typ)
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Switching Frequency	350kHz (typ)
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Control

Voltage Adjust	90 to 110% V_o
Enable	TTL compatible (pos & neg enable options)

Specifications subject to change without notice.

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ALQ15

Ordering Information

Input Voltage	Output Voltage V1/V2	Efficiency Full Load	Model Number
48V	3.3/2.5	15A/15A*	ALQ15FG48
48V	3.3/1.8	15A/15A*	ALQ15FY48
48V	2.5/1.5	15A/15A*	ALQ15GM48

* Total power both outputs combined not to exceed 60Watts

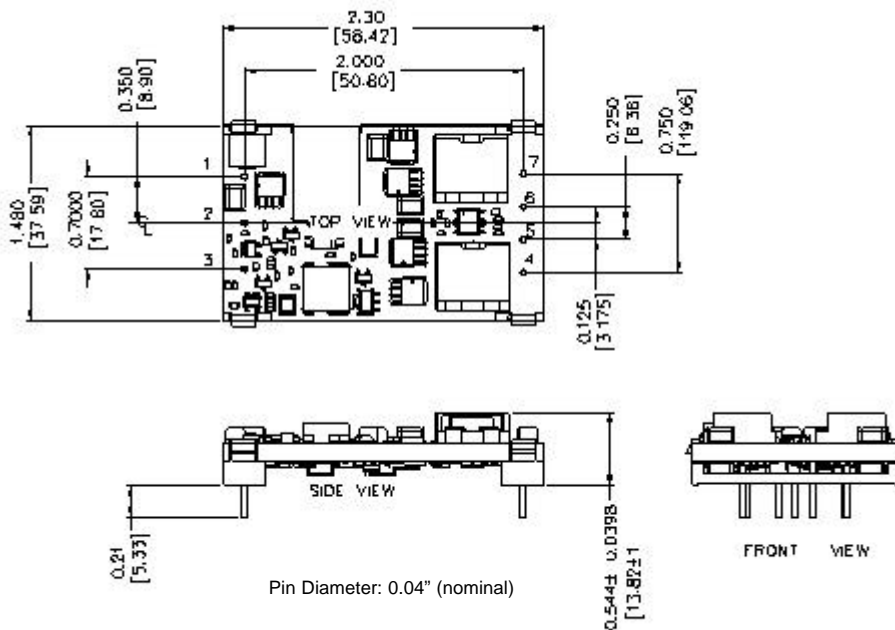
OPTIONS:

Enable Function "N" = negative logic enable
 without "N" = positive enable
 Pin Length without "-6" = 5mm (default std)
 "-6" = 3.7mm (nom)

Mechanical Dimensions and Pin Assignments

Pin Assignment

- +Vin
- Enable (on/off)
- Vin
- V2 output
- Rtn
- Trim
- V1 output



Pin Diameter: 0.04" (nominal)

Notes:

- 20 mHz bandwidth. External 10 uF tant. capacitor +1 uF cer. capacitor placed from +V out to -V out.
- Requires a 2.2 mf, 100V film capacitor connected between +V in and -V in to meet FCC class A and ETS300-386-1 requirements for conducted noise. Consult Factory for filtering information to meet FCC class B, VDE or EIC specifications.
- All specifications are typical at nominal line, full load, and 25°C unless otherwise noted.
- All specifications subject to change without notice. Mechanical drawings are for reference only
- Technical Reference Notes should be consulted for detailed information when available
- Warranty: 1yr

Astec Industry Standard