

Astec Industry Standard

150 Watts BK60C-40

High Efficiency



Total Power: 150 Watts
Input Voltages: 48V
No. of Outputs: Single

Electrical Specs

Input

Input range 36-75 VDC
 Input Surge 100V / 100ms
 Efficiency 89% @ 3.3V (typ)

Output

Load regulation 10mV typical down to no load (output below 5V)
 Line regulation 10mV typical (output below 5V)
 Ripple and noise 200mV p-p max
 Remote sense Up to 0.5V
 Output voltage adjust range $\pm 20\%$ of nominal output
 Transient Response 10% max deviation with 25% to 75% full load (output 5V and above) 200mV
 Overvoltage Protection 130% nominal output (output 5V and above) 160% nominal output (2.2V output) 140% nominal output (3.3V output)
 Current Limit 115% maximum output

Control

Voltage Adjust 90 to 110%
 Enable TTL compatible (positive & negative enable options)

Notes:

- Nominal values apply with sense pins connected and other control pins unconnected.
- Specifications subject to change without notice.

Special Features

- High efficiency, 5V@89%
- 40°C to 100°C baseplate operating temperature (no derating)
- Positive and Negative enable function
- Low output ripple and noise
- High capacitive load limit on start-up
- Remote sense compensation
- Regulation to zero load
- Fixed frequency switching (300 kHz)

Environmental

Operating temperature (baseplate): -40°C to +100°C
 Storage temperature: -55°C to +105°C
 Overtemperature protection: 110°C typical
 MTBF: >1 million hours

Safety

UL UL 1950
 CAN22.2-950
 TUV EN60950



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BK60C-40

Ordering Information

Input Voltage	Output Voltage	Efficiency	Model Number
48V	1.8V @ 40A	81% min	BK60C-048L-018F40H
48V	2.5V @ 40A	84% min	BK60C-048L-025F40H
48V	3.3V @ 40A	86% min	BK60C-048L-033F40H

NOTES:
 Efficiency is measured at full load and Tc=70 Deg C
 "N" added to suffix = Negative Enable (Omit suffix for positive enable (default))

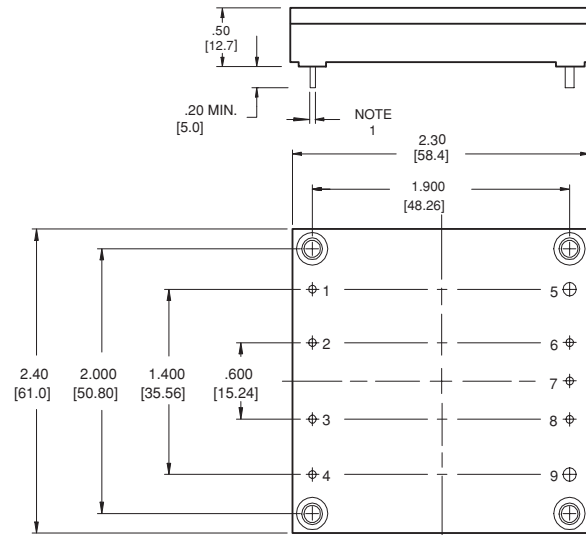
Pin Assignments

Single Output

1. -Vin
2. Case
3. Enable (on/off)
4. +Vin
5. -5V Rtn
6. - Sense
7. Trim
8. + Sense
9. +Out

Notes:

1. 20 mHz bandwidth. An external 2.2 mf ceramic capacitor is recommended to be placed from +V out to -V out.
2. 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.
3. All specifications are typical at nominal line, full load, and 25°C unless otherwise noted.
4. All specifications subject to change without notice. Mechanical drawings are for reference only.
5. Please refer to the Technical Reference Notes for more information.
6. Warranty: 1 yr



Mounting Inserts
 M3 X .5 (4 places)

Case Material: Metal base, plastic cover
 Weight: 2.75 Oz / 78 Grams

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