

# 150 Watts BK60C-40

High Efficiency



## 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

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:

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

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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))

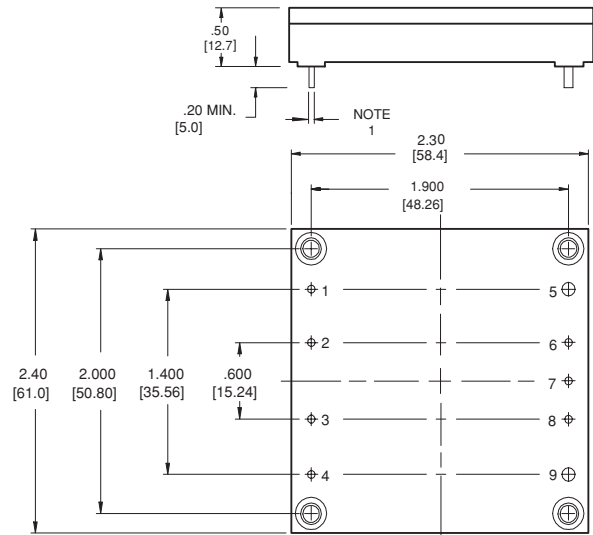
## Pin Assignments

### 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

BOTTOM VIEW

Astec Industry Standard