

# BK60C

150 Watts  
High Efficiency

*BK60C Industry Standard Series*

Total Power	150 Watts
Input Voltages	48V
# of Outputs	Single



## 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 (500 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** UL1950, UL 1459

**CSA** CSA22.2-234  
CSA22.2-950

**VDE** VDE 0805  
EN60950

**CE** CE Mark

**ETSI** 300 132-2 para 4

**BELLCORE** NEBs

## ELECTRICAL SPECIFICATIONS

### Input

Input range ..... 36-75 VDC  
Input Surge ..... 100V / 100ms  
Efficiency ..... 90%@5V

### Control

Voltage Adjust ..... 80 to 120%  
Enable ..... TTL compatible  
(positive & negative enable options)

### Output

Load regulation ..... 0.2% typical down to no load  
(output 5V and above)  
10mV typical down to no load  
(output below 5V)

Line regulation ..... 0.2% typical  
(output 5V and above)  
10mV typical  
(output below 5V)

Ripple and noise ..... 2% typical (100mV p-p max)

Remote sense ..... Up to 0.5V

Output voltage  
adjust range ..... +10-20% of nominal output

Transient Response ..... 10% max deviation with  
25% to 75% full load  
(output 5V and above)  
200mV (output below 5V)  
500 μS (max) recovery

Oversvoltage 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

### NOTES:

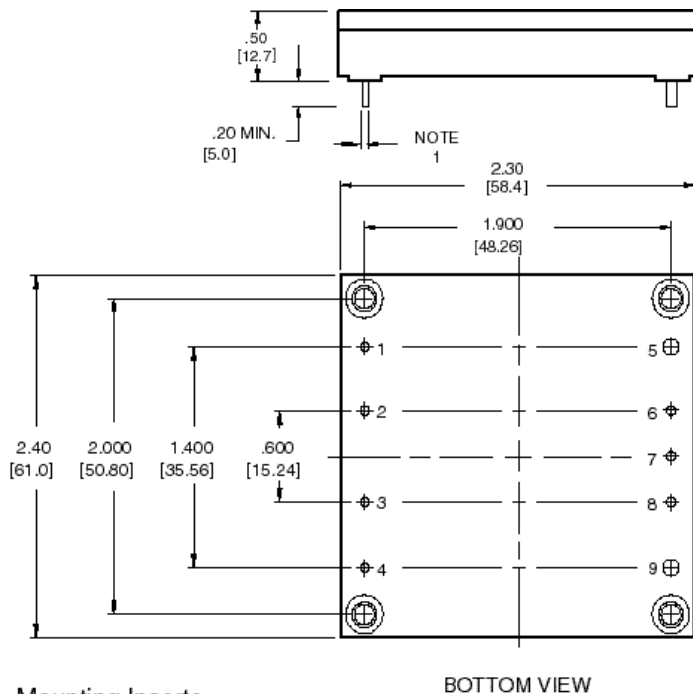
Nominal values apply with sense pins connected  
and other control pins unconnected.

Specifications subject to change without notice.

## ORDERING INFORMATION

Input Voltage	Output Voltage	Efficiency	Model Number
48V	1.8V @ 30A	76%	BK60C-048L-018F30H
48V	2.5V @ 30A	80%	BK60C-048L-025F30H
48V	3.3V @ 30A	85%	BK60C-048L-033F30H
48V	5.0V @ 30A	89%	BK60C-048L-050F30H

## DIMENSIONS



Mounting Inserts  
M3 X .5 (4 places)

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

## PIN ASSIGNMENTS

### Single Output

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

## NOTES

1. 20 mHz bandwidth. An external 2.2  $\mu$ f ceramic capacitor is recommended to be placed from +V out to -V out.
2. Requires a 2.2  $\mu$ f, 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.