

# 30 Watts AK60C

Total Power: 30 Watts  
Input Voltages: 48V  
No. of Outputs: Single



## Special Features

- Industry standard pin-out & performance 100°C baseplate temperature (no derating)
- Positive and negative enable function
- Low output ripple and noise
- Multiple pin length options
- Remote sense compensation
- Regulation to zero load
- Fixed frequency switching (300 kHz)

## Environmental

Operating case temperature range:  
-40°C to +105°C  
Storage temperature: -55°C to +125°C  
MTBF: >1 million hours

## Safety

UL UL1950  
CSA CSA22.2-950  
TUV EN60950

## Electrical Specs

### Input

|             |              |
|-------------|--------------|
| Input range | 36-75 VDC    |
| Input Surge | 100V / 100ms |
| Efficiency  | 84%@5V       |

### Output

|                             |  |
|-----------------------------|--|
| Load regulation             | 0.2% max<br>(add 10mV for Vo 3.3V or less)                             |
| Line regulation             | 0.2% max (5V or greater)<br>(10mV for 3.3V or less)                    |
| Ripple and noise            | 100mV max  |
| Output voltage adjust range | +10-20% of nominal output  |
| Transient Response          | 5% max deviation with<br>50% to 75% full load<br>500 μS (max) recovery |

|   |                     |
|---|---------------------|
| Overvoltage protection<br>Inception of<br>current Limit | 140% maximum output |
|---|---------------------|

### Control

|                          |  |
|--------------------------|--|
| Voltage Adjust<br>Enable | 80 to 110%<br>TTL compatible<br>(positive & negative enable options) |
|--------------------------|--|

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AK60C

## Ordering Information

| Input Voltage | Output Voltage | Model Number      |
|---------------|----------------|-------------------|
| 48V           | 3.3V @ 6.5A    | AK60C-048L-033F08 |
| 48V           | 5.0V @ 6.0A    | AK60C-048L-050F06 |

NOTES:

Enable Function

"N" = negative logic enable (without "N" = positive enable)

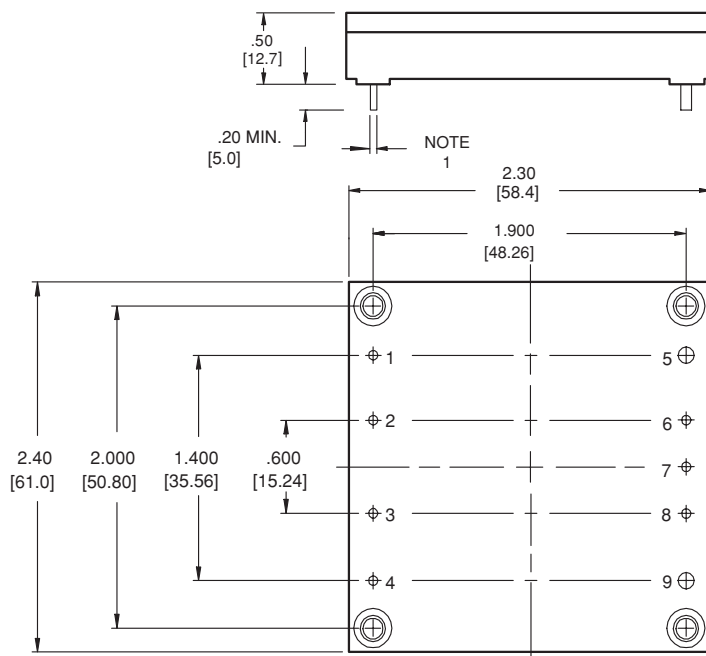
## Pin Assignments

### 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 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)

BOTTOM VIEW

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