

# PEH50-48S Series

## 50 Watt Half Brick

### Features

- Industry standard footprint:  
2.4" x 2.28" x 0.36" (61.0 x 57.9 x 9.2mm<sup>3</sup>)
- Typical efficiency: 90%
- Wide input voltage: 36-75V
- Single output: 3.3V, 5V
- Remote control
- Trim and sense function
- Input under-voltage shutdown
- Output over-current protection
- Output over-voltage protection
- Output short-circuit protection
- Over-temperature protection
- No minimum load requirement
- Basic isolation

### Environmental

- Operating ambient temperature range:  
-40 to 55
- Operating board temperature range:  
-40 to 100
- Storage temperature:  
-55 to 125
- Over-temperature protection:  
>120 typical
- Temp.coefficient:  
<±0.02%/
- MTBF:  
>2 million hrs

### Electrical Specifications

#### Input

Input range: 36-75Vdc  
Input under-voltage shutdown: 32-35Vdc

#### Output

Voltage setpoint accuracy: ±1.0%V<sub>o</sub> max.  
Voltage adjust: 90% to 110% V<sub>o</sub>

Line regulation: 0.2%V<sub>o</sub> max.

Load regulation: 0.2%V<sub>o</sub> max.

Short-circuit protection: continuous, auto-recovery(or latch off)

Over-current protection: >110%I<sub>o</sub>, auto-recovery(or latch off)

Over-voltage protection: >110%V<sub>o</sub>, latch off (or auto-recovery)

Ripple and noise: <150mVpp max.

Transient response: recovery <250uS max.

200mV max.

(25% step load change from 50% I<sub>o</sub>)

di/dt: 1A/10uS

#### Control

Control voltage:

Positive logic

High =on 3.5 to 10Vdc

Low=off -0.7 to 1.5Vdc

Negative logic

Low =on -0.7 to 1.5Vdc

High=off 3.5 to 10Vdc

Control current:

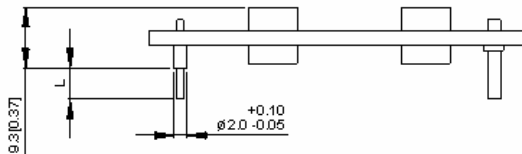
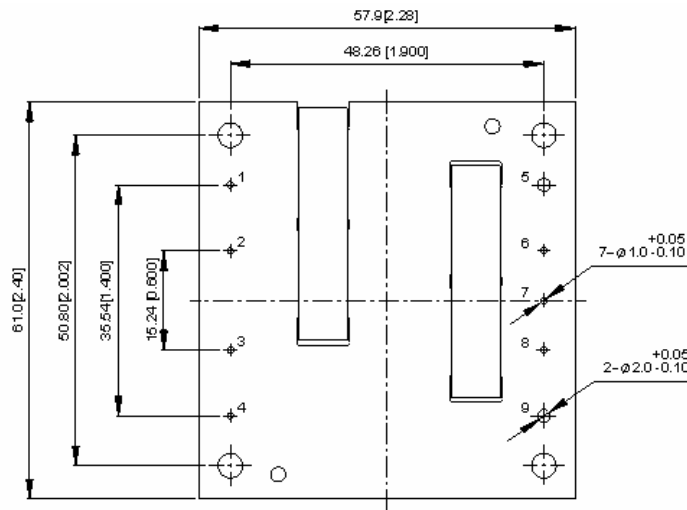
2mA max.



## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number
48V	3.3V	10A	89%	PEH50-48S3V3-4
48V	5V	10A	90%	PEH50-48S05-4

## Dimensions



TOLERANCES: X.Xmm=±0.5mm  
 X.XXmm=±0.25mm  
 Unit:mm[inch]

## Pin Assignments

1. +Vin
2. CNT
3. Case
4. -Vin
5. +Vo
6. +Sense
7. Trim
8. -Sense
9. -Vo

## Pin Length

4.8mm	-4
3.8mm	-6
2.8mm	-8
5.8mm	None

Notes: The detail and recommended hole pattern layout is available in the Application Manual.