

# PEH300-48S Series

## 300 Watt Bus Converter

### Features

- Industry standard quarter brick footprint: 2.28" x 1.45" x 0.37" (57.9 x 36.8x 9.3mm<sup>3</sup>)
- Typical efficiency: 96.5%
- Wide input voltage: 42-55V
- Single output: 12V typical
- Remote control
- Input under-voltage shutdown
- Input over-voltage shutdown
- Output over-current protection
- Output short-circuit protection
- Over-temperature protection
- No minimum load requirement
- Isolated output

### 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:	42-55Vdc
Input under-voltage shutdown:	36-40Vdc
Input over-voltage shutdown:	57-59Vdc

#### Output

Voltage setpoint :	10-13.8Vdc
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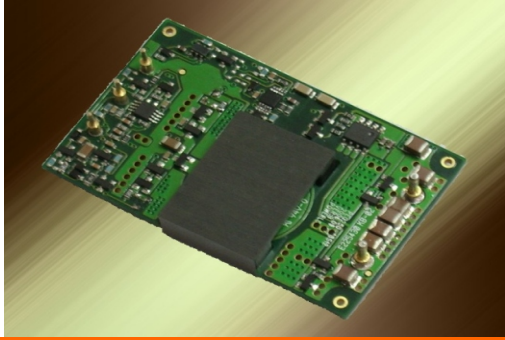
Line regulation:	/
Load regulation:	500mV max.

Short-circuit protection:	continuous, auto-recovery
Over-current protection:	>110%I <sub>o</sub> , auto-recovery

Ripple and noise:	<120mVpp max.
Transient response:	recovery <150uS max. 150mV max. (25% step load change from 50% I <sub>o</sub> ) di/dt: 1A/10uS

#### Control

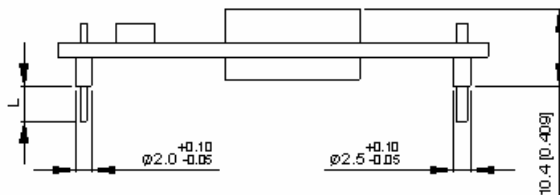
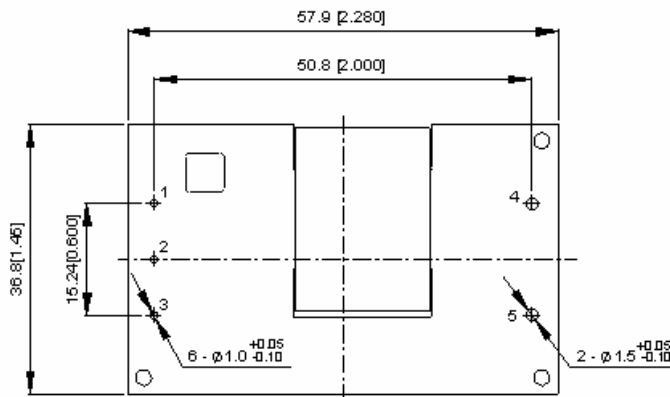
Control voltage:	
Positive logic	
High =on	3.5 to 10Vdc
Low=off	-0.7 to 1.5Vdc
Negative logic	
Low =on	-0.7 to 1.5Vdc
High=off	3.5 to 10Vdc
Control current:	2mA max.



## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number
48V	12V	25A	96.5%	PEQ300-48S12-4

## Dimensions



TOLERANCES: X.Xmm=±0.5mm  
X.XXmm=±0.25mm

## Pin Assignments

1	+Vin
2	CNT
3	-Vin
4	+Vo
5	-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.