

# PEO-S Series 50W Sixteenth Brick Single Output DC/DC Converter

## Features

- Industry standard footprint:  
1.30"x0.90"x0.43"(33.0 x 22.9 x 11.0mm<sup>3</sup>)
- Typical efficiency: 90%
- 2:1 wide input voltage range: 36-75V
- Single output:  
1.2V,1.5V,1.8V,2.5V,3.3V,5V
- Remote control ;Trim and sense function
- Input under-voltage shutdown
- Output over-current ,over-voltage, short-circuit protection
- Over-temperature protection
- No minimum load requirement

## Environmental

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

## Electrical Specifications

### Input

Input range:	36-75V
Input under-voltage shutdown:	32-34V

### Output

Voltage setpoint accuracy:	±1.0% max
Voltage adjust:	90% to 110%Vo
Line regulation:	5mV max
Load regulation:	15mV max
Over-current protection:	>110%Io, auto-recovery
Over-voltage protection:	>110%Vo, latch off
Short-circuit protection:	Continuous, auto-recovery
Ripple and noise:	<100mVpp max
Transient response:	200mV max recovery<250us max (25%~50%~25% Iomax) di/dt: 1A/10uS

### Control

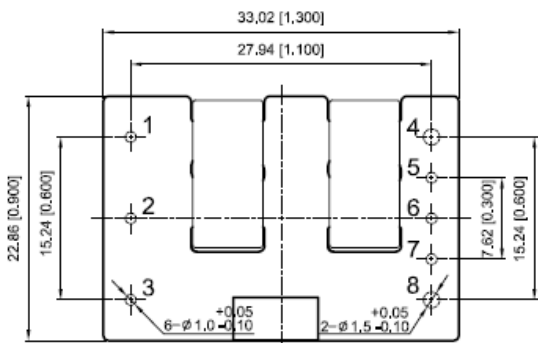
Control voltage:	
Positive logic	
High =on	3.5 to 10Vdc
Low=off	-0.7 to 1.5Vdc
Negative logic	
Low =on	-0.7 to 1.5Vdc
High=off	3.5 to 10Vdc
Control current::	2mA max



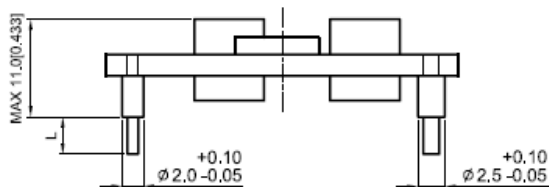
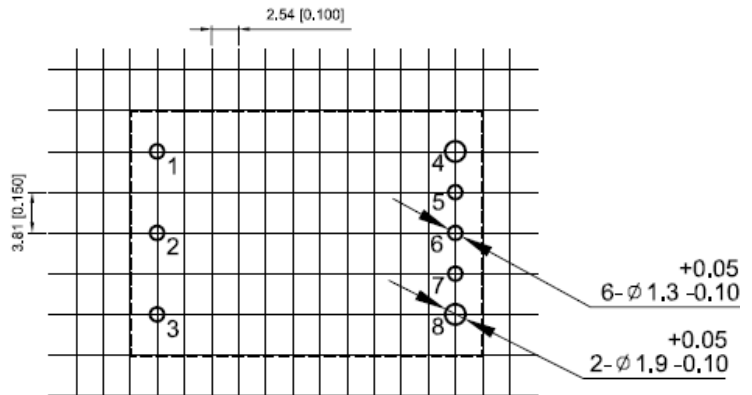
## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number
48V	1.0V	20A	85%	PEO50-48S1V0
48V	1.2V	20A	85%	PEO50-48S1V2
48V	1.5V	20A	87%	PEO50-48S1V5
48V	1.8V	20A	87%	PEO50-48S1V8
48V	2.5V	15A	89%	PEO50-48S2V5
48V	3.3V	15A	90%	PEO50-48S3V3
48V	5V	10A	91%	PEO50-48S05

## Dimensions



TOP VIEW



TOLERANCES: X.Xmm=+/-0.5mm  
X.XXmm=+/-0.25mm

Unit:mm[inch]

## Pin Assignments

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