

# PEQ-S Series 50W/100W/125W Quarter Brick Single Output DC/DC Converter

## Features

- Industry standard footprint:  
2.28"x1.45"x0.37"(57.9 x 36.8 x 9.3mm<sup>3</sup>)
- Typical efficiency: 90%
- 2:1 wide input voltage range:  
36-75V,18-75V(for 12Vout)
- Single output:  
1.2V,1.5V,1.8V,2.5V,3.3V,5V,12V
- Remote control ;Trim and sense function(not commended for 12Vout)
- 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;18-75V(for 12Vout)
Input under-voltage shutdown:	32-34V;16-18V(for 12Vout)

### Output

Voltage setpoint accuracy:	±1.0%(±2.0%for 12V)Vo max
Voltage adjust:	90% to 110%Vo
Line regulation:	5mV max
Load regulation:	15mV(0.5%Vo for 12V)max
Over-current protection:	>110%Io, auto-recovery (or latch off)
Over-voltage protection:	>110%Vo, latch off (or auto-recovery)
Short-circuit protection:	Continuous, auto-recovery (or latch off)
Ripple and noise:	<100mVpp max (<150mVpp for 12Vout)
Transient response:	200mV max 300mV max(for12Vout) recovery<250us max (25%~50%~25% Iomax)

di/dt: 1A/10uS

### Control

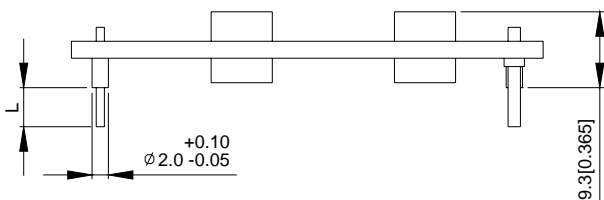
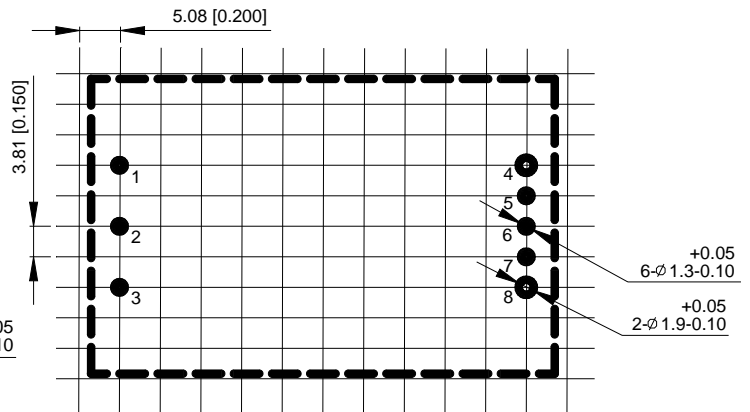
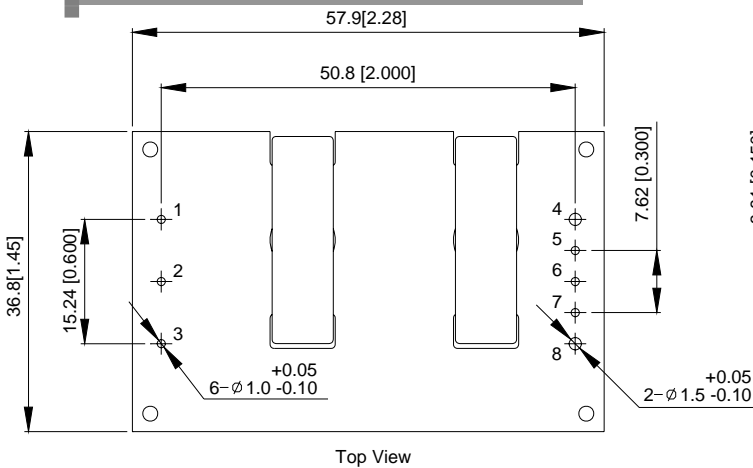
Control voltage:	
Positive logic	
High =on	3.5 to 10Vdc
Low=off	-0.7 to 1.5Vdc
Negative logic	
Low =on	-0.7 to 1.5Vdc
High=off	3.5 to 10Vdc
Control current::	2mA max



## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number
48V	1.2V	30A	85%	PEQ50-48S1V2-6
48V	1.5V	30A	87%	PEQ50-48S1V5-6
48V	1.8V	30A	88%	PEQ50-48S1V8-6
48V	3.3V	10A	90%	PEQ50-48S3V3-6
48V	5V	10A	92%	PEQ50-48S05-6
48V	2.5V	25A	89%	PEQ100-48S2V5-6
48V	3.3V	25A	90%	PEQ100-48S3V3-6
48V	5V	20A	92%	PEQ100-48S05-6
48V	12V	8.3A	89%	PEQ100-48S12-6
48V	5V	25A	90%	PEQ125-48S05-6

## Dimensions



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

Unit:mm[inch]

## Pin Assignments

1	+Vin		
2	CNT		
3	-Vin	Pin Length:	
4	+Vo	4.8mm	-4
5	+Sense	3.8mm	-6
6	Trim	2.8mm	-8
7	-Sense	5.8mm	None
8	-Vo		

Note: No pin5, pin6, pin7 for PEQ100 48S12, output between pin4(Vout+) and pin8(Vout-)