

# PDG Series

## 30W/40W Single Output DC/DC Converter

### Features

- Industry standard footprint:  
2"x2"x0.38"(50.80 x 50.80 x 9.66mm<sup>3</sup>)
- Typical efficiency: 87%
- 2:1 wide input voltage range: 36-75V
- Single output: 3.3V, 5V
- Trim function; Remote control
- 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:  
>110°C typical
- Temperature coefficient:  
<±0.02%/°C
- MTBF:  
>2 million hrs

### Electrical Specifications

#### Input

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

#### Output

Voltage setpoint accuracy: ±1.0%Vo max  
Voltage adjust: 90% to 110%Vo  
Line regulation: 0.2%Vo max  
Load regulation: 0.5%Vo max  
Over-current protection: >120%Io, auto-recovery  
Over-voltage protection: >120%Vo, auto-recovery  
Short-circuit protection: Continuous, auto-recovery  
Ripple and noise: <75mVpp  
Transient response: 120mV max(for 3.3Vout)  
150mV max(for 5Vout)  
recovery<200us max  
(25%~50%~25% Iomax)  
di/dt: 1A/10uS

#### Control

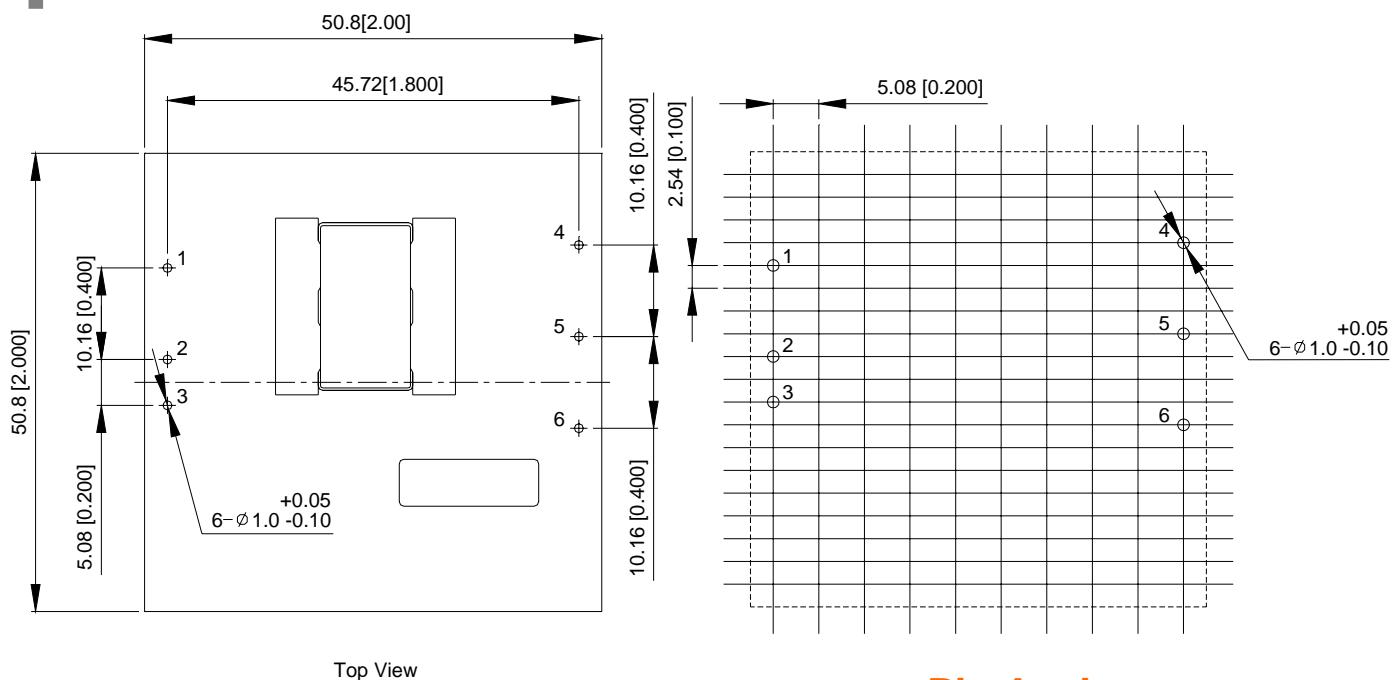
Control voltage:  
Positive logic  
High =on 3.5 to 10Vdc  
Low=off -0.7 to 1.5Vdc  
Negative logic  
Low =on -0.7 to 1.5Vdc  
High=off 3.5 to 10Vdc  
Control current: 2mA max



## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number
48V	3.3V	7A	85%	PDG30-48S3V3-4
48V	5V	6A	87%	PDG30-48S05-4
48V	3.3V	10A	85%	PDG40-48S3V3-4
48V	5V	8A	89%	PDG40-48S05-4

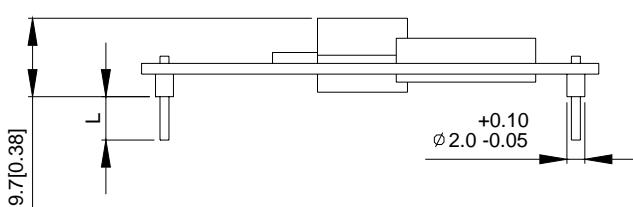
## Dimensions



Top View

## Pin Assignments

CNT	PIN	LENGTH	TOLERANCE
1	CNT		
2	-Vin	4.8mm	-4
3	+Vin	3.8mm	-6
4	Trim	2.8mm	-8
5	-Vo	5.8mm	None
6	+Vo		



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

Unit:mm[inch]