

PDG Series

30W/40W Single Output DC/DC Converter

Features

- Industry standard footprint:
2"x2"x0.38"(50.80 x 50.80 x 9.66mm³)
- Typical efficiency: 87%
- 2:1 wide input voltage range: 36-75V
- Single output: 3.3V, 5V, 12V
- 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

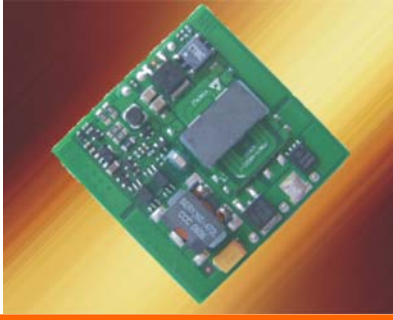
Input range:	36-75V
Input under-voltage shutdown:	32-35V

Output

Voltage setpoint accuracy:	±1.0%Vo max
Voltage adjust:	90% to 110%Vo
Line regulation:	0.5%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 <120mVpp(for12Vout)
Transient response:	120mV max(for3.3Vout) 150mV max(for5Vout) 300mV max(for12Vout) recovery<200us max (25%~50%~25% Iomax) di/dt: 1A/10uS

Control

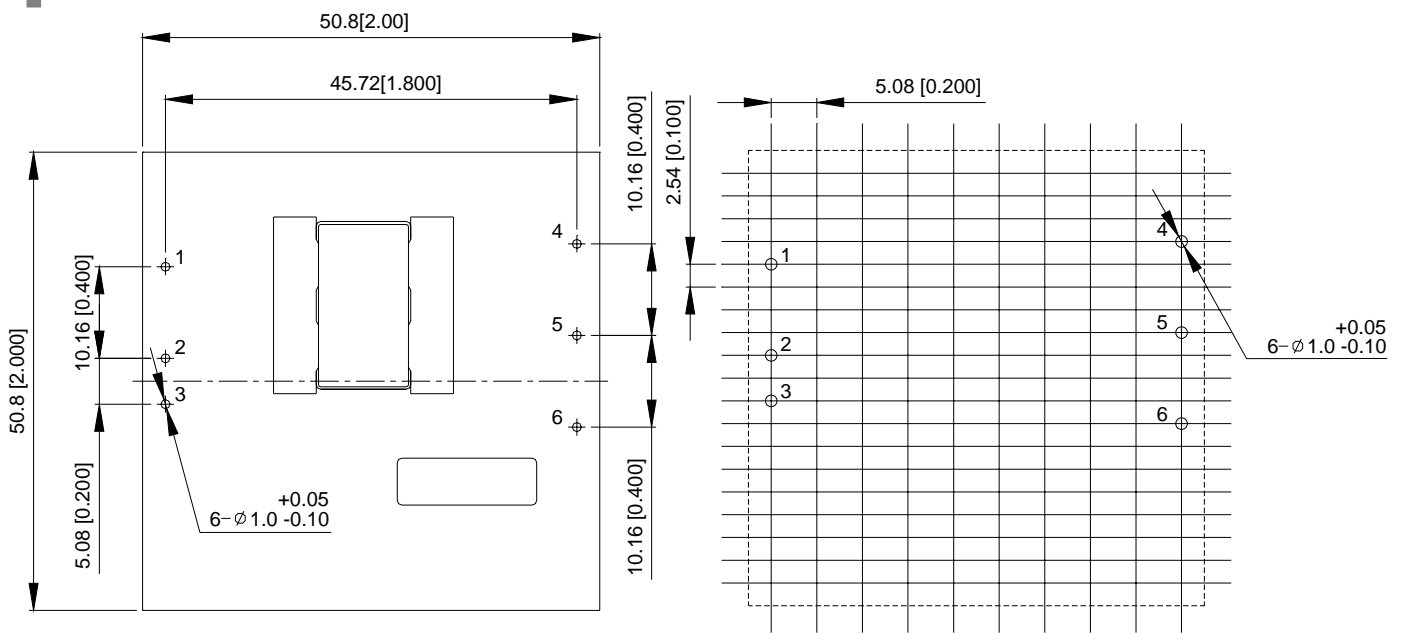
Control voltage:	
Positive logic	
High =on	3.5 to 10Vdc
Low=off	-0.7 to 1.5Vdc
Negative logic	
Low =on	-0.7 to 1.5Vdc
High=off	3.5 to 10Vdc
Control current::	2mA max



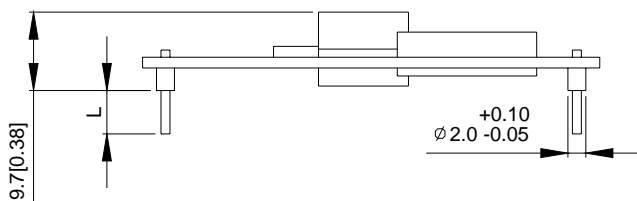
Ordering Information

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
48V	12V	2.5A	88%	PDG 30-48S12-4

Dimensions



Top View



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

Unit:mm[inch]

Pin Assignments

- | | |
|---|------|
| 1 | CNT |
| 2 | -Vin |
| 3 | +Vin |
| 4 | Trim |
| 5 | -Vo |
| 6 | +Vo |