

# PDD10-S Series

## 10 Watt Single Output DC/DC Converter

### Features

- Approved to IEC/EN60950, UL60950 safety standards
- Industry standard footprint: 2"x1"x0.4"(50.80 x 25.40 x 10.16mm<sup>3</sup>)
- Typical efficiency: 81%
- 2:1 wide input voltage range: 9-18V,18-36V,36-75V
- Single output: 3.3V, 5V, 12V, 15V
- Trim function;Remote control (for Vin 48V)
- No minimum load requirement
- Output over-current and short-circuit protection (for Vin 48V,Vout 3.3V, 5V)
- Isolation voltage: 1500Vdc,1min (Input-Output; Input-Case; Output-Case)

### 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
- Temperature coefficient: <math>\lt; \pm 0.02\%/^{\circ}\text{C}</math>
- MTBF: >2 million hrs

### Electrical Specifications

#### Input

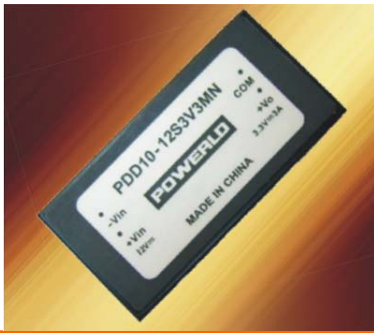
Input range: 9-18V,18-36V,36-75V

#### Output

Voltage setpoint accuracy:  $\pm 1.0\%V_o$  max  
Voltage adjust: 90% to 110% $V_o$   
Line regulation: 0.2% $V_o$  max  
Load regulation: 0.5% $V_o$  max  
Over-current protection: >120% $I_o$ , auto-recovery  
Short-circuit protection: Continuous,auto-recovery  
Ripple and noise: <math>\lt; 70\text{mVpp}</math> max.  
Transient response: 200mV max  
Recovery<math>\lt; 200\mu\text{s}</math> max  
(25%~50%~25%  $I_{o\text{max}}$ )  
di/dt: 1A/10uS

#### Control

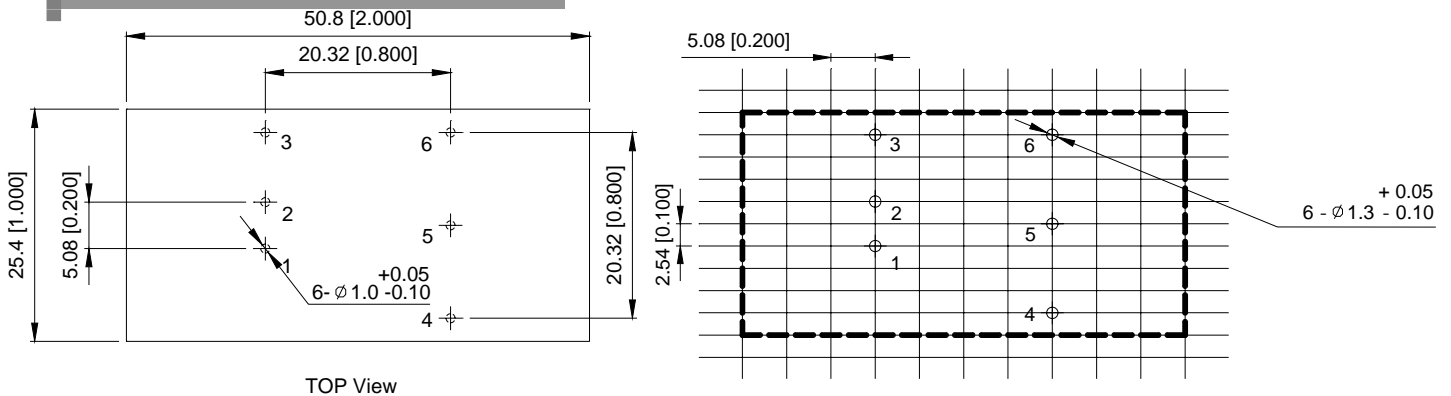
Control voltage:  
Positive logic  
High =on 3.5 to 15Vdc  
Low=off -0.7 to 1.5Vdc  
Negative logic  
Low =on -0.7 to 1.5Vdc  
High=off 3.5 to 15Vdc  
Control current:  
2mA max (for positive logic)  
4mA max (for negative logic)



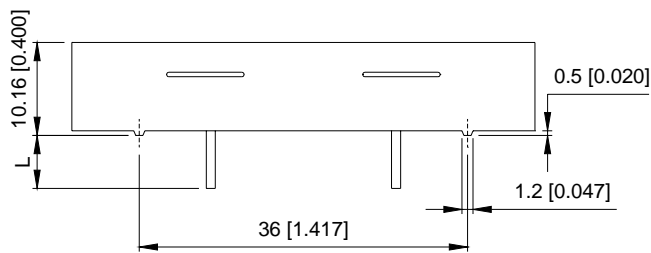
## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number
12V	3.3V	3A	76%	PDD10-12S3V3
12V	5V	2A	81%	PDD10-12S05
12V	12V	0.83A	81%	PDD10-12S12
12V	15V	0.67A	81%	PDD10-12S15
24V	3.3V	3A	76%	PDD10-24S3V3
24V	5V	2A	81%	PDD10-24S05
24V	12V	0.83A	82%	PDD10-24S12
24V	15V	0.67A	82%	PDD10-24S15
48V	3.3V	3A	77%	PDD10-48S3V3
48V	5V	2A	81%	PDD10-48S05
48V	12V	0.83A	82%	PDD10-48S12
48V	15V	0.67A	83%	PDD10-48S15

## Dimensions



TOP View



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

Unit:mm[inch]

## Pin Assignments

- 1 +Vin
- 2 -Vin
- 3 NC(or CNT)
- 4 +Vo
- 5 Trim
- 6 -Vo

Pin Length: 5.8mm