

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 10.16mm³)
- 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
- 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><\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><70\text{mVpp}</math> max.
Transient response: 200mV max
Recovery<math><200\mu\text{s}</math> max
(25%~50%~25% $I_{o\text{max}}$)
di/dt: 1A/10uS

Control

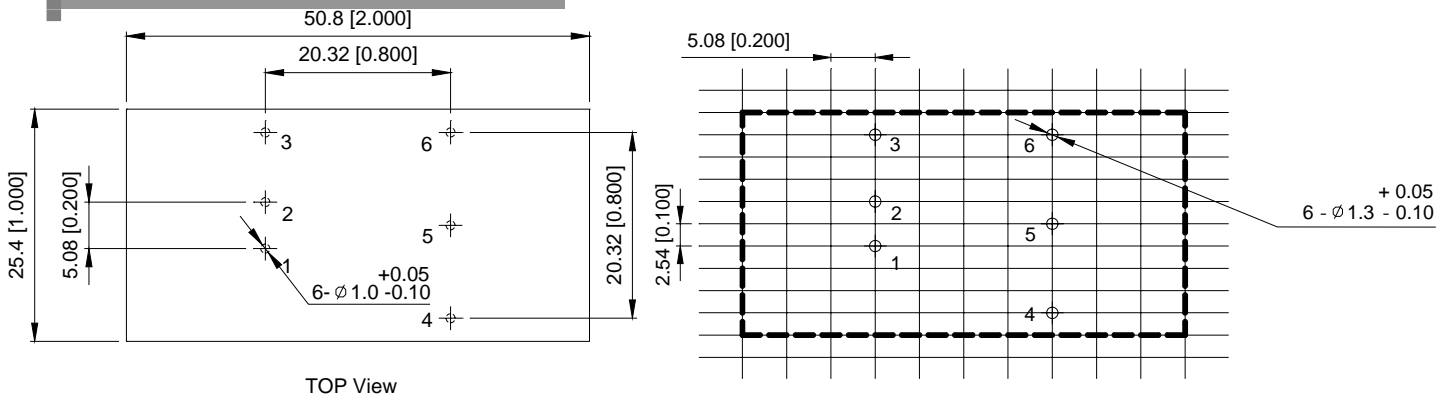
Control voltage:
Positive logic
High =on 3.5 to 15Vdc
Low=off -0.7 to 1.5Vdc
Negative logic
Low =on -0.7 to 1.5Vdc
High=off 3.5 to 15Vdc
Control current:
2mA max (for positive logic)
4mA max (for negative logic)



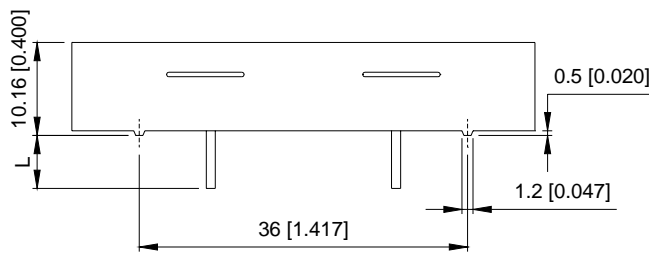
Ordering Information

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