

# PDM30-D Series

## 30 Watt Dual Outputs DC/DC Converter

### Features

- Industry standard footprint:  
2"x1.6"x0.38"(50.80 x 40.6 x 9.66mm<sup>3</sup>)
- Typical efficiency: 86%
- 2:1 wide input voltage range:  
18-36V,36-75V
- Dual outputs:  $\pm 5V$ ,  $\pm 12V$ ,  $\pm 15V$
- Trim function; Remote control
- Input under-voltage shutdown
- Output over-current ,output 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:  
< $\pm 0.02\%/^{\circ}C$
- MTBF:  
>2 million hrs

### Electrical Specifications

#### Input

Input range:	18-36V,36-75V
Input under-voltage shutdown:	15-16.5V,32-35V

#### Output

Voltage setpoint accuracy:	$\pm 1.0\%V_o$ max
Voltage adjust:	90% to 110% $V_o$
Line regulation:	0.3% $V_o$ max
Load regulation:	0.5% $V_o$ max
Over-current protection:	>120% $I_o$ , auto-recovery
Over-voltage protection:	>120% $V_o$ , latch off
Short-circuit protection:	continuous,auto-recovery
Ripple and noise:	<75mVpp (for $\pm 5V_{out}$ ) <100mVpp (for $\pm 12V, \pm 15V_{out}$ )
Transient response:	150mV max(for $\pm 5V_{out}$ ) 300mV max(for $\pm 12V_{out}$ ) 350mV max(for $\pm 15V_{out}$ ) recovery<150us max (25%~50%~25% $I_{omax}$ ) di/dt: 1A/10uS

#### Control

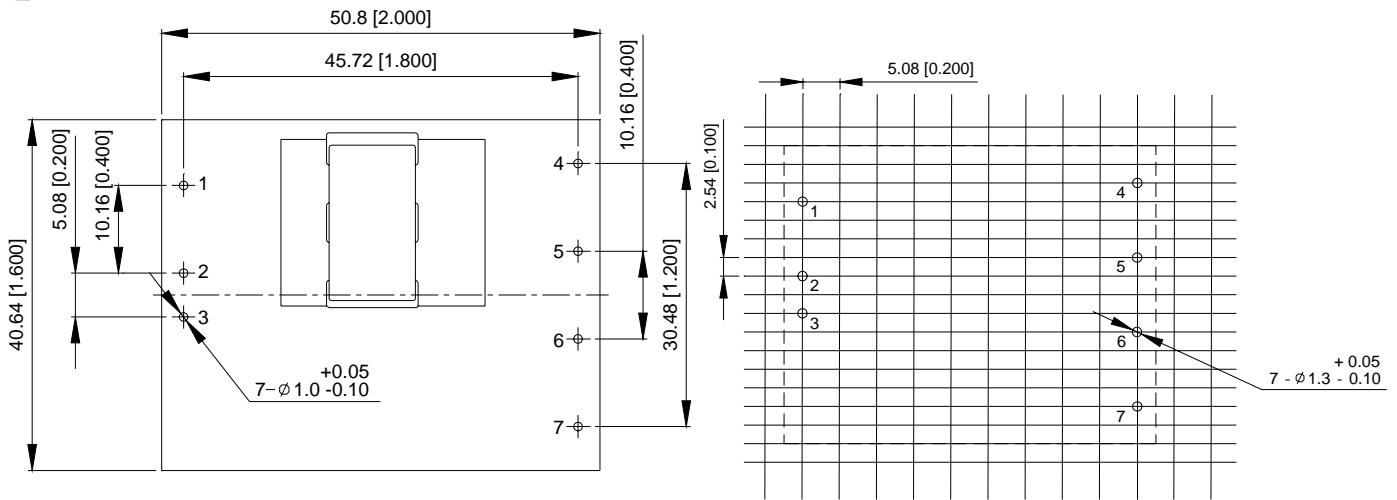
Control voltage:	
Positive logic	
High =on	3.5 to 70Vdc
Low=off	-0.7 to 1.5Vdc
Negative logic	
Low =on	-0.7 to 1.5Vdc
High=off	3.5 to 70Vdc
Control current::	2mA max



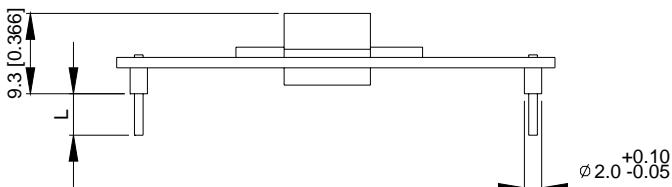
## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number
24V	±5V	3A	86%	PDM30-24D05-4
24V	±12V	1.25A	86%	PDM30-24D12-4
24V	±15V	1A	88%	PDM30-24D15-4
48V	±5V	3A	86%	PDM30-48D05-4
48V	±12V	1.25A	86%	PDM30-48D12-4
48V	±15V	1A	88%	PDM30-48D15-4

## Dimensions



Top View



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

Unit:mm[inch]

## Pin Assignments

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