

# PDQ-D Series 30W/50W Quarter Brick Dual Outputs DC/DC Converter

## Features

- Industry standard footprint:  
2.28"x1.45"x0.37"(57.9 x 36.8 x 9.3mm<sup>3</sup>)
- Typical efficiency: 85%
- 2:1 wide input voltage range: 36-75V
- Dual outputs: 5V/3.3V,3.3V/2.5V,  
3.3V/1.8V,3.3V/1.2V
- Remote control ;Trim function
- Input under-voltage shutdown
- Output over-current,short-circuit protection
- Output over-voltage protection  
(for PDQ50)
- Over-temperature protection
- No minimum load requirement

## Environmental

- Operating ambient temperature range:  
-40°C to 85°C
- Operating board temperature range:  
-40°C to 100°C
- Storage temperature range:  
-55°C to 125°C
- Over-temperature protection:  
>120°C typical
- Temperature coefficient:  
<±0.02%/°C
- MTBF:  
>2 million hrs

## Electrical Specifications

### Input

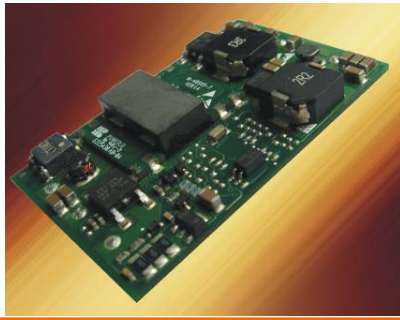
Input range:	36-75Vdc
Input under-voltage shutdown:	32-34Vdc

### Output

Voltage setpoint accuracy:	±1.0%Vo max
Voltage adjust:	90% to 110%Vo
Line regulation:	0.5%Vo max
Load regulation:	1.5%Vo max
Over-current protection:	>110%Io, auto-recovery (or hiccup)
Over-voltage protection:	>110%Vo, latch off (or auto-recovery)
Short-circuit protection:	continuous, hiccup
Ripple and noise:	<70mVpp max
Transient response:	200mV max recovery<120us max (25%~50%~25% Iomax) di/dt: 1A/10uS

### Control

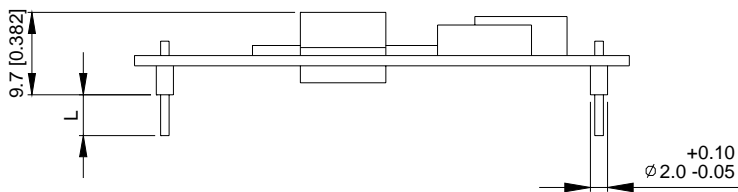
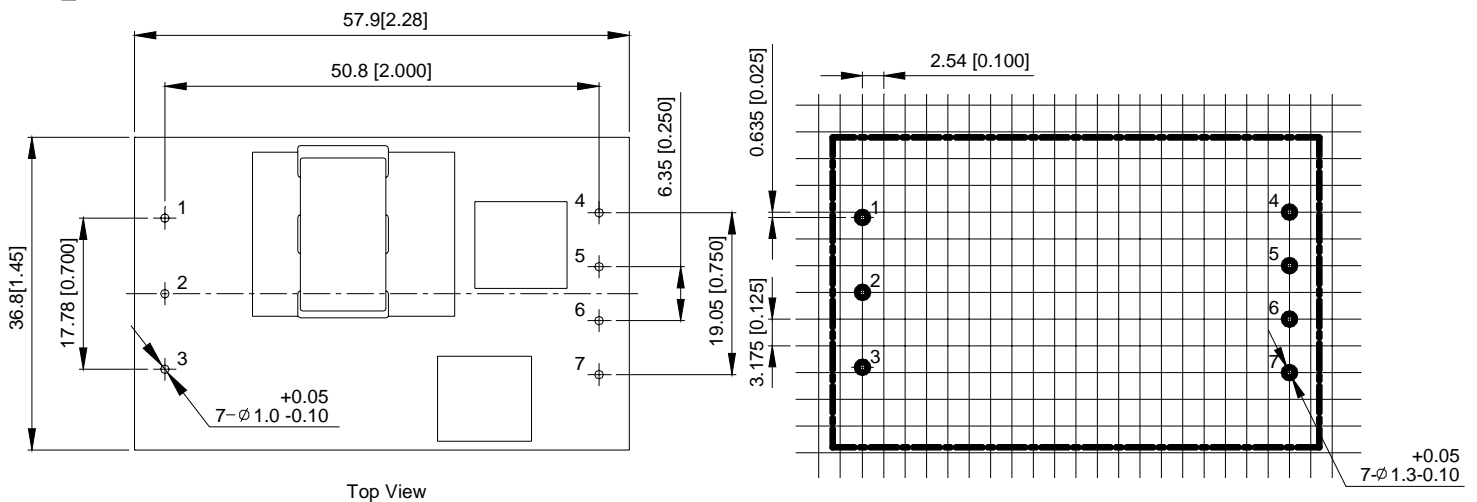
Control voltage:	
Positive logic	
High =on	3.5 to 75Vdc
Low=off	-0.7 to 1.5Vdc
Negative logic	
Low =on	-0.7 to 1.5Vdc
High=off	3.5 to 75Vdc
Control current::	2mA max



## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number
48V	5V/3.3V	6A/7A	85%	PDQ30-48D050033-4
48V	3.3V/1.8V	6A/6A	81%	PDQ30-48D033018-4
48V	3.3V/1.2V	8A/8A	81%	PDQ30-48D033012-4
48V	3.3V/2.5V	9A/8A	85%	PDQ50-48D033025-4

## Dimensions



TOLERANCES: X.Xmm=+/-0.5mm  
 X.XXmm=+/-0.25mm  
 Unit:mm[inch]

## Pin Assignments

1	+Vin		
2	CNT	Pin Length:	
3	-Vin	4.8mm	-4
4	Vout1	3.8mm	-6
5	Trim	2.8mm	-8
6	COM	5.8mm	None
7	Vout2		