

PDM25-S Series

25 Watt Single Output DC/DC Converter

Features

- Industry standard footprint:
2"x1.6"x0.38"(50.80 x 40.6 x 9.66mm³)
- Typical efficiency: 88%
- 2:1 wide input voltage range:
18-36V,36-75V
- Single output: 3.3V, 5V, 12V, 15V
- Trim function; Remote control
- Input under-voltage shutdown
- No minimum load requirement
(not commended for PDM25-24S12)
- Output over-current ,over-voltage,
short-circuit protection
- Over-temperature protection

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

Output

Voltage setpoint accuracy:	±1.0%Vo max
Voltage adjust:	90% to 110%Vo
Line regulation:	0.2%Vo max
Load regulation:	0.5%Vo max
Over-current protection:	>120%Io, auto-recovery
Over-voltage protection:	>120%Vo, latch off
Short-circuit protection:	Continuous,auto-recovery
Ripple and noise:	<75mVpp (for3.3V,5Vout) <100mVpp (for12V,15Vout)
Transient response:	120mV max(for3.3Vout) 150mV max(for5Vout) 300mV max(for12Vout) 350mV max(for15Vout) Recovery<150us max (25%~50%~25% Iomax) di/dt: 1A/10uS

Control

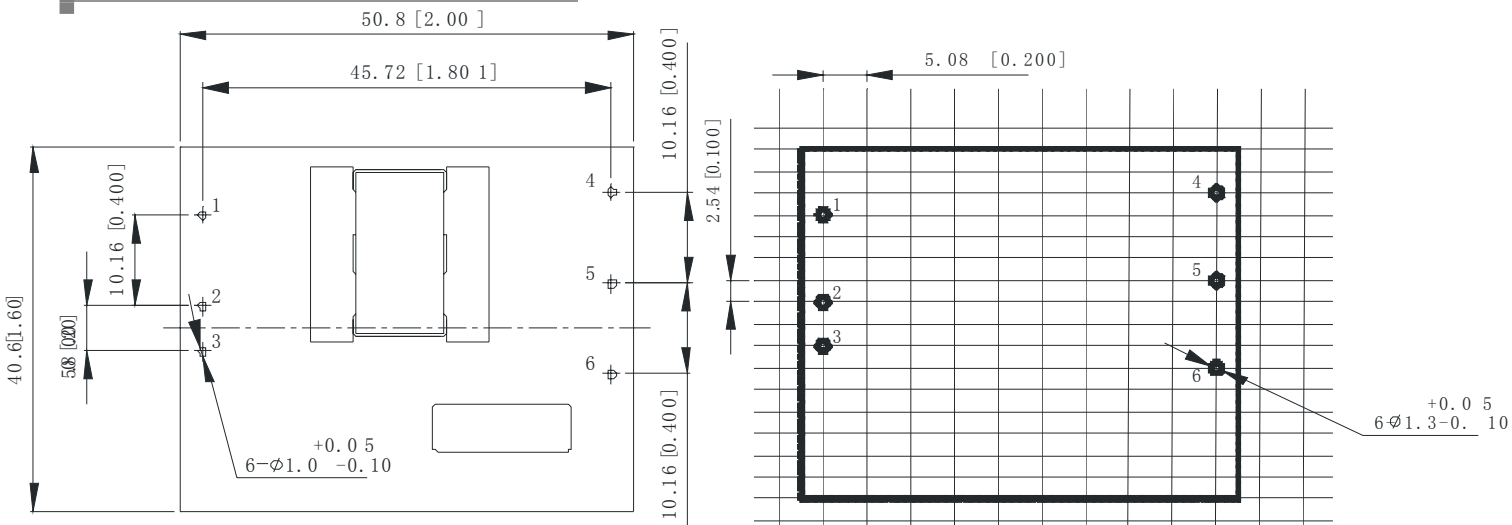
Control voltage:	
Positive logic	
High =on	3.5 to 10Vdc
Low=off	-0.7 to 1.5Vdc
Negative logic	
Low =on	-0.7 to 1.5Vdc
High=off	3.5 to 10Vdc
Control current::	2mA max



Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number
24V	3.3V	6A	85%	PDM25-24S3V3-4
24V	5V	5A	88%	PDM25-24S05-4
24V	12V	2.1A	87%	PDM25-24S12-4
24V	15V	1.67A	88%	PDM25-24S15-4
48V	3.3V	6A	85%	PDM25-48S3V3-4
48V	5V	5A	87%	PDM25-48S05-4
48V	12V	2.1A	86%	PDM25-48S12-4
48V	15V	1.67A	88%	PDM25-48S15-4

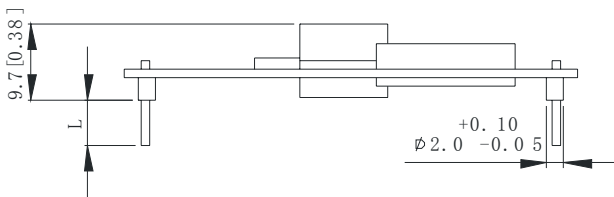
Dimensions



Top View

Pin Assignments

Pin Number	Assignment	Pin Length	Notes
1	CNT		
2	-Vin	4.8mm	-4
3	+Vin	3.8mm	-6
4	Trim	2.8mm	-8
5	-Vo	5.8mm	None
6	+Vo		



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