

FEATURES:

- Wide input range
- Continuous short-circuit protection, self recover
- I/O isolation voltage 1.5KV
- Working temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- No additional components required
- Stable performance and high reliability (MTBF $\geq$ 1000K hours)
- Industry standard pin-out
- Metal case
- DIP package



Selection Guide

Part No.	INPUT		OUTPUT				CapacitiveLoad(μF)
	Normal (Vdc)	Range (Vdc)	Voltage (V1dc)	current (mA)	Voltage (V2dc)	current (mA)	
LD40-12S05C	12	9-18	5	8000			
LD40-12S12C			12	3333			
LD40-12S15C			15	2667			
LD40-12S24C			24	1667			
LD40-18S05C	18	9-36	5	8000			
LD40-18S12C			12	3333			
LD40-18S15C			15	2667			
LD40-18S24C			24	1667			
LD40-48S12C	48	36-72	12	3333			
LD40-48S15C			15	2667			
LD40-48S24C			24	1667			
LD40-110S12C	110	40-160	12	3333			
LD40-110S15C			15	2667			
LD40-110S24C			24	1667			

customized accepted ,pls contact sales for details

Input Specifications

Input Voltage	Input Voltage Range (Vdc)	Nom(Vdc)	Max (Vdc)
	9-18	12	18
	9-36	18	36
	36-72	48	72
	40-160	110	160
Hot Plug	Unavailable		

Output Specifications

Item	Typ	Max	Test Conditions
Voltage Accuracy	$\pm 1\%$	$\pm 3\%$	0-100% load
Line Regulation	$\pm 0.2\%$	$\pm 0.5\%$	Input voltage variation from low to high at full load

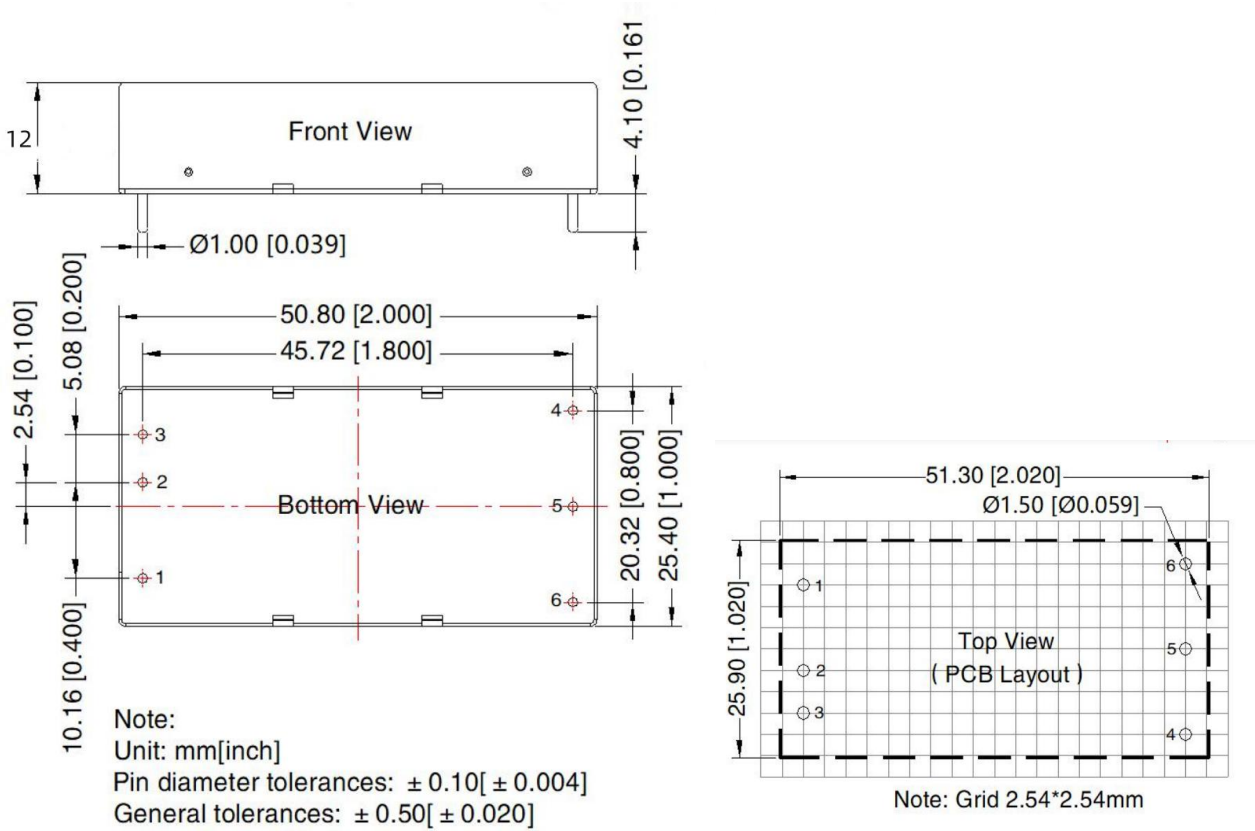
Load Regulation	$\pm 0.5\%$	$\pm 1\%$	5%-100% load
Ripple&Noise	-	100mVp-p	20MHz bandwidth, 5%-100% load
Transient Recovery Time	300 μ s	500 μ s	25% load step change, Nominal input voltage
Over-voltage Protection	-	160%Vo	110%Vo(Min)
Over-current Protection	140%Io	190%Io	110%Io(Min)
Short-circuit Protection			Continuous, self-recovery

General Specifications

Switching Frequency	300KHz(Typ)	PWM mode
MTBF	1000 K hours	MIL-HDBK-217F@25℃
Temperature Coefficient	0.03%/℃	100% full load
Isolation (Input-Output)	1.5KVDC	
Insulation Resistance	1000M Ω	Input-output resistance 500Vdc
Operating Temperature	-40~+85℃	
Storage Temperature	-55~+125℃	
Storage Humidity	5-95%	Non-condensing
Cooling Method	Free air convection	
Case Material	Aluminum alloy	
Weight	60g (Typ)	

**Unless specified, otherwise all other parameters are tested under the following conditions: nominal input voltage, pure resistive load, 25℃ room temperature environment.

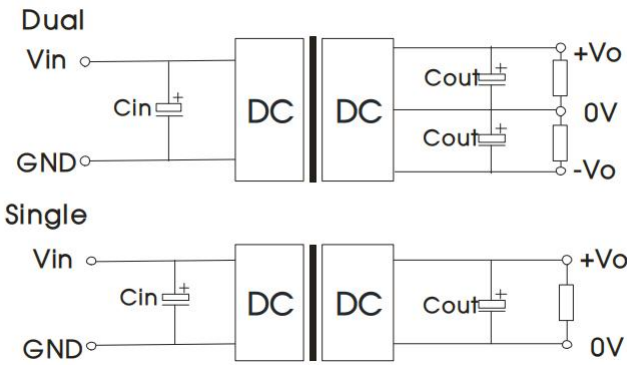
Dimensions and Recommended Layout



Pins

Pin-Out	Mark		
1	Ctrl		
2	GND		
3	Vin		
4	+Vo		
5	0V		
6	TRIM		

Recommended Circuit



Recommended input and output capacitor values

Vin	Cin	Cout		
5	100uF/16V			
12	100uF/25V			
24	10uF/50V-47uF/50V			
48	10uF/100V-47uF/100V			

Noted

1. Input current: Ensure that the output current of the power supply meets the instantaneous starting current of the power module (that is, twice the average input current of the power module).
2. Output load requirements: Avoid no-load use. When the actual power consumption of the load is less than 10% of the rated output power of the module or no load occurs, connect an external resistance to the output end (the sum of the external resistance and the load power is greater than or equal to 10% of the rated load) or select a module with a smaller rated power.
3. The external capacitance of the output end should not be too large; otherwise, the module may be overcurrent or poorly started. For details, see the external capacitance recommendation table.
4. External LC filter circuit can be connected for occasions with high ripple noise requirements.