

FEATURES:

- Wide input range
- Continuous short-circuit protection, self recover
- I/O isolation voltage 1.5KV
- Working temperature: $-40^{\circ}\text{C}\sim+105^{\circ}\text{C}$
- No additional components required
- Stable performance and high reliability (MTBF \geq 2 million hours)
- Industry standard pin-out
- DIP package

Selection Guide

Part No.	INPUT		OUTPUT				CapacitiveLoad(μF)
	Normalal (Vdc)	Range (Vdc)	Voltage (V1dc)	current (mA)	Voltage (V2dc)	current (mA)	
LD50H-96S05	96	65-150	5	1000			
L50H-96S12			12	4167			
LD50H-96S15			15	3333			
LD50H-96S24			24	2083			
LD50H-96S28			28	1786			
LD50H-96S48			48	1042			
LD50H-110S05	110	82-180	5	1000			
L50H-110S12			12	4167			
LD50H-110S15			15	3333			
LD50H-110S24			24	2083			
LD50H-110S28			28	1786			
LD50H-110S48			48	1042			
LD50H-300S05	300	200-400	5	1000			
LD50H-300S12			12	4167			
LD50H-300S15			15	3333			
LD50H-300S24			24	2083			
LD50H-300S28			28	1786			
LD50H-300S48			48	1042			

customized accepted, pls contact sales for details

Input Specifications

Input Voltage Range	Input Voltage Range (Vdc)	Nom(Vdc)	Max (Vdc)
	65-150	96	150
	82-180	110	180
	200-400	300	400
Input Filter	Capacitive Filter		
Ctrl	NONE		
	NONE		
Hot Plug	Unavailable		

Output Specifications

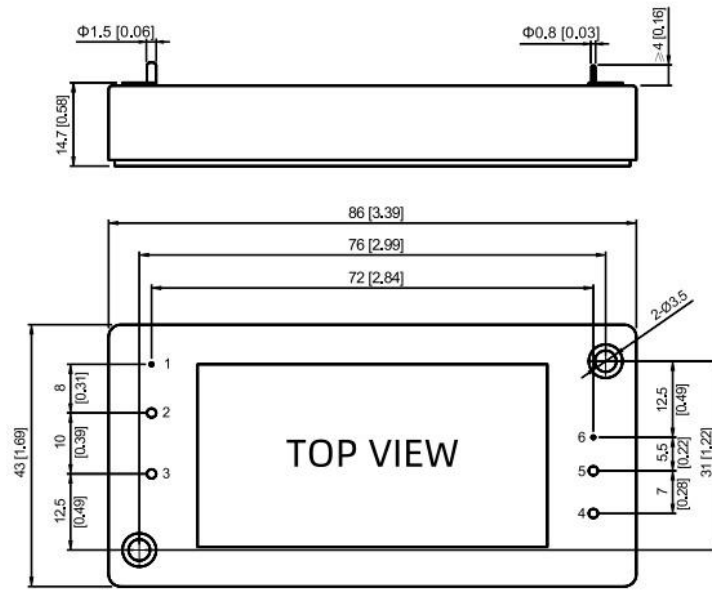
Item	Min	Typ	Max	Test Conditions
Voltage Accuracy		±1%	±3%	
Line Regulation		±0.2%	±1%	
Load Regulation		±0.5%	±1%	
TRIM Range			±10%	
Temperature Regulation		±0.02%/°C		
Over Current Protect	110%		160%	
Over Voltage Protect	110%		140%	
Over Temperature Protect	110%	115%	125%	
Short Circuit Protect	Continuous, self-recovery			
Dynamic Response	4%Vo Pk deviation 100µS settling time		50~75% load 50~25% load	

General Specifications

Isolation Resistor	20MΩ	Input-Output
Isolation Voltage	1500VDC	Input-Output
	1000VDC	Input-Case
	500VDC	Output-Case
Switching Frequency	300KHz	Mil HDBK 217F Tc=25°C
MTBF	1×10 ⁶ Hrs	
Case Temperature	-40~+100°C	
Storage Temperature	-55~+125°C	
Relative Humidity	10%-90%	
Pin Solder Temperature	250°C	Soldering spot is 1.5mm away from case for 10 seconds
Hand Soldering Time	5s	Iron Temperature 425 °C
Vibration		Sine, 10Hz-55Hz, amplitude 0.35mm, X, Y, Z three directions 30min each
Shock		Half-sine, peak acceleration is 300m/s ² , standard pulse duration is 6ms, X, Y, Z three 6 consecutive shocks in each direction;
Weight	100g (Typ)	

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

Dimensions and Recommended Layout



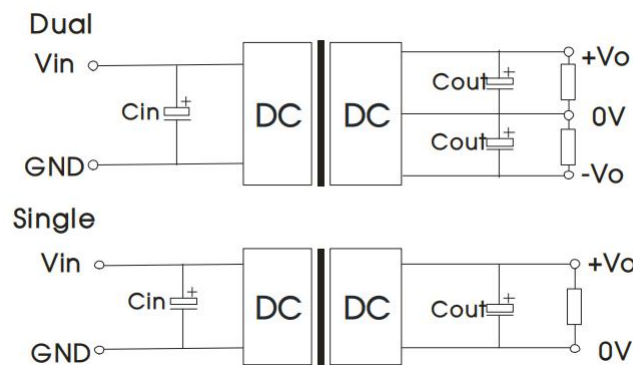
Unit:mm(inch)

TOP VIEW

Pins

Pin-Out	Mark		
1	CTL		
2	-Vin		
3	+Vin		
4	+Vout		
5	-Vout		
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.