

FEATURES:

- Wide input range
- Continuous short-circuit protection, self recover
- I/O isolation voltage 1.5KV
- Working temperature: -40°C~+105°C
- No additional components required
- Stable performance and high reliability (MTBF≥2 million hours)
- Industry standard pin-out
- DIP package



Selection Guide

Part No.	INPUT		OUTPUT				CapacitiveLoad(μF)
	Normal (Vdc)	Range (Vdc)	Voltage (V1dc)	current (A)	Voltage (V2dc)	current (A)	
LD600H-96S24	96	65-150	24	25			
LD600H-96S28			28	21.4			
LD600H-96S48			48	12.5			
LD600H-110S24	110	82-180	24	25			
LD600H-110S28			28	21.4			
LD600H-110S48			48	12.5			
LD600H-300S24	300	200-400	24	25			
LD600H-300S28			28	21.4			
LD600H-300S48			48	12.5			

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			

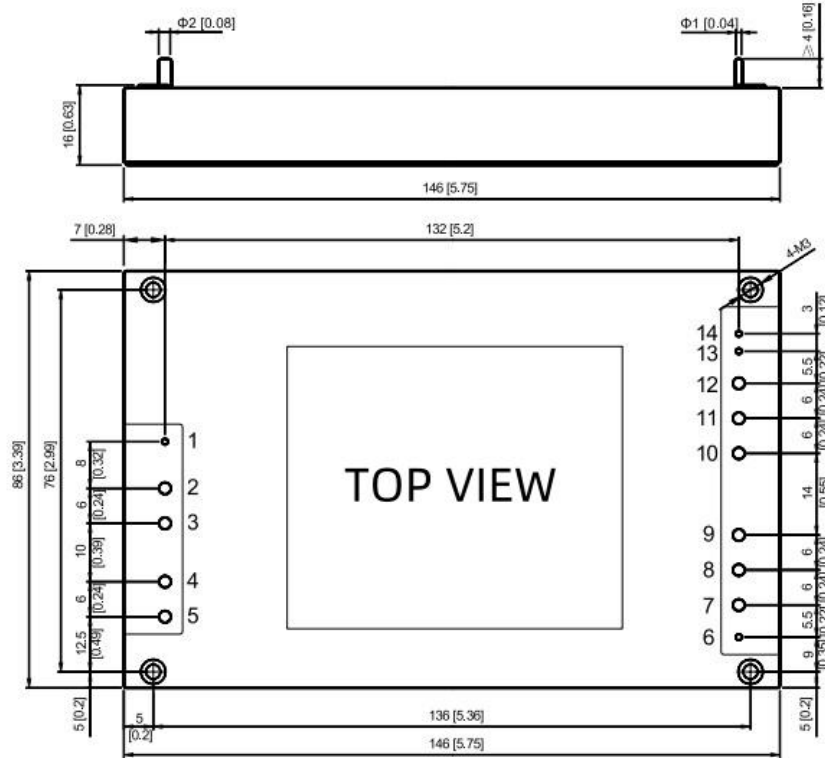
Output Specifications

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℃
MTBF	1×106Hrs	
Case Temperature	-40~+100℃	
Storage Temperature	-55~+125℃	
Relative Humidity	10%-90%	
Pin Solder Temperature	250℃	Soldering spot is 1.5mm away from case for 10 seconds
Hand Soldering Time	5s	Iron Temperature 425℃
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	300g (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



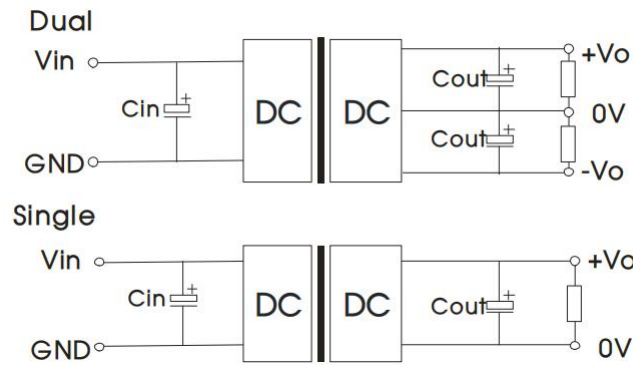
Unit:mm(inch)

TOP VIEW

Pins

Pin-Out	Mark		
1	CTL		
2	-Vin		
3	-Vin		
4	+Vin		
5	+Vin		
6	+S		
7	+Vout		
8	+Vout		
9	+Vin		
10	-Vout		
11	-Vout		
12	-Vout		
13	-S		
14	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.