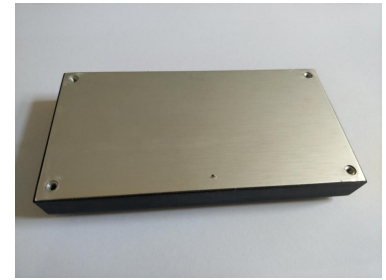


**FEATURES:**

- 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)	
LD1200F-300S12	300	200-400	12	100			
LD1200F-300S24			24	50			
LD1200F-300S28			28	42.8			

\*\*customized accepted, pls contact sales for details\*\*

**Input Specifications**

Input Voltage Range	Input Voltage Range (Vdc) 200-400	Nom(Vdc) 300	Max (Vdc) 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	

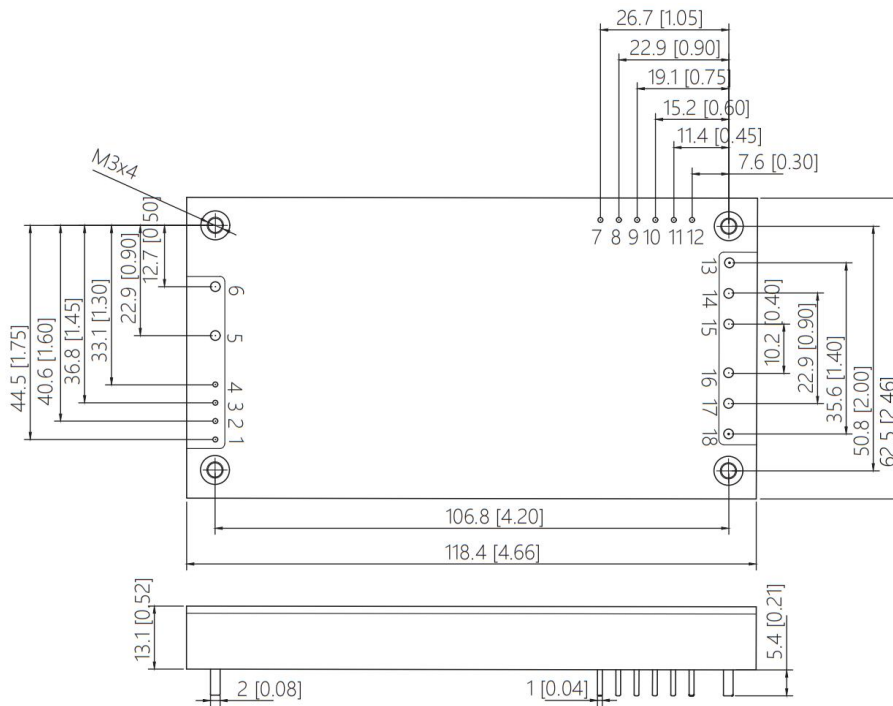
**General Specifications**

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 <sup>6</sup> 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 <sup>2</sup> , standard pulse duration is 6ms, X, Y, Z three 6 consecutive shocks in each direction;
Weight	200g (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)

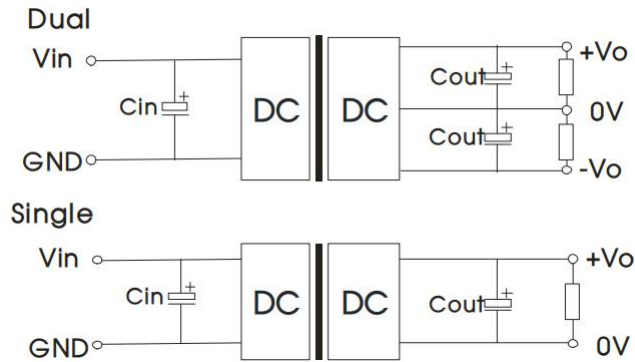
TOP VIEW

**Pins**

Pin-Out	Mark		
1	SLEEP	10	TRIM
2	+ON/OFF	11	+S

3	P10V	12	-S
4	PGND	13	-Vo
5	+Vin	14	-Vo
6	-Vin	15	-Vo
7	AUX	16	+Vo
8	STARTSYN	17	+Vo
9	ISHARE	18	+Vo

**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.