

**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≥500K hours)
- Industry standard pin-out
- Industry standard 1/2 brick package



**Selection Guide**

Part No.	INPUT		OUTPUT				CapacitiveLoad(μF)
	Normal (Vdc)	Range (Vdc)	Voltage (V1dc)	current (mA)	Voltage (V2dc)	current (mA)	
LD150Q-12S12	12	9-18	12	12500			
LD150Q-12S15			15	10000			
LD150Q-12S24			24	6250			
LD150Q-12S28			28	5357			
LD150Q-12S48			48	3125			
LD150Q-18S12	18	9-36	12	12500			
LD150Q-18S15			15	10000			
LD150Q-18S24			24	6250			
LD150Q-18S28			28	5357			
LD150Q-18S48			48	3125			
LD150Q-24S3V3	24	18-36	3.3	45455			
LD150Q-24S05			5	30000			
LD150Q-24S12			12	12500			
LD150Q-24S15			15	10000			
LD150Q-24S18			18	8333			
LD150Q-24S18V5			18.5	8108			
LD150Q-24S19			19	7895			
LD150Q-24S24			24	6250			
LD150Q-24S28			28	5357			
LD150Q-24S36			36	4167			
LD150Q-24S48			48	3125			
LD150Q-48S3V3	48	36-72	3.3	45455			
LD150Q-48S05			5	30000			
LD150Q-48S12			12	12500			
LD150Q-48S15			15	10000			
LD150Q-48S18			18	8333			
LD150Q-48S24			24	6250			
LD150Q-48S28			28	5357			
LD150Q-48S36			36	4167			

LD150Q-48S48			48	3125		
LD150Q-36S12	36	18-72	12	12500		
LD150Q-36S15			15	10000		
LD150Q-36S24			24	6250		
LD150Q-36S28			28	5357		
LD150Q-36S48			48	3125		
LD150Q-110S3V3			110	72-144	3.3	45455
LD150Q-110S05	5	30000				
LD150Q-110S12	12	12500				
LD150Q-110S15	15	10000				
LD150Q-110S18	18	8333				
LD150Q-110S24	24	6250				
LD150Q-110S28	28	5357				
LD150Q-110S36	36	4167				
LD150Q-110S48	48	3125				

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

**Input Specifications**

Input Voltage Range	Input Voltage Range (Vdc)	Nom(Vdc)	Max (Vdc)
	9-18	12	18
	9-36	18	36
	18-36	24	36
	36-72	48	72
	18-72	36	72
	72-144	110	144
Input Filter	Capacitive Filter		
Ctrl	NONE		
	NONE		
Hot Plug	Unavailable		

**Output Specifications**

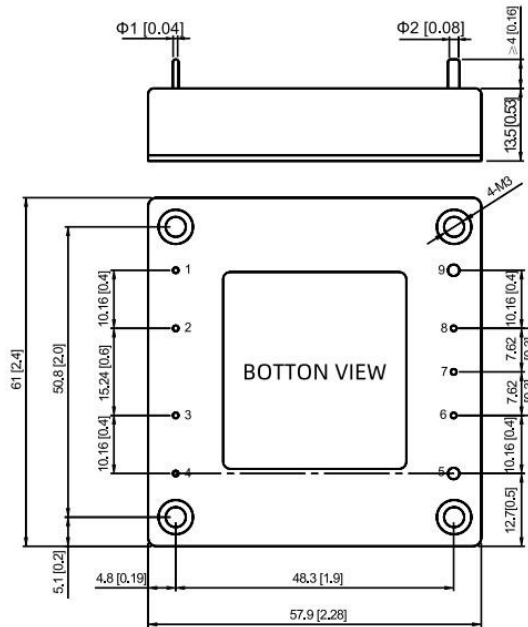
Item	Min	Typ	Max	Test Conditions
Voltage Accuracy		±1%	±3%	
Line Regulation		±0.2%	±1%	
Load Regulation		±0.5%	±1%	
TRIM Range			±10%	
Temperature Regulation		±0.02%/°C		
Over Current Protect	110%		160%	
Over Voltage Protect	110%		140%	
Over Temperature Protect	110%	115%	125%	
Short Circuit Protect	Continuous, 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	1×106Hrs	
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	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**

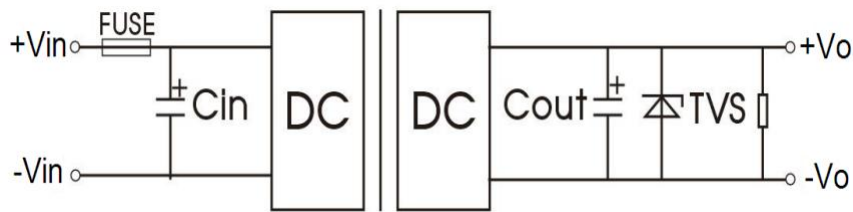


Note:  
Unit: mm[inch]  
Pin diameter tolerances: ± 0.10 [± 0.004]  
General tolerances: ± 0.50 [± 0.020]

**Pins**

Pin-Out	Mark		
1	-Vin		
2	CASE		
3	CTRL		
4	+Vin		
5	+Vo		
6	+S		
7	TRIM		
8	-S		
9	-Vo		

**Recommended Circuit**



Vo(VDC)	FUSE	Cin	Cout	TVS
5	20A	220uF	470uF	SMDJ7.0A
12			220uF	SMDJ15A
15			220uF	SMDJ18A
24			100uF	SMDJ30A
28			100uF	SMDJ36A
48			100uF	SMDJ64A

**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.