

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)			
LD30-12S3X3C	12	9-18	3.3	6000					
LD30-12S05C			5	6000					
LD30-12S09C			9	3333					
LD30-12S12C			12	2500					
LD30-12S15C			15	2000					
LD30-12S24C			24	1250					
LD30-12D05C			+5	3000	-5	3000			
LD30-12D12C			+12	1250	-12	1250			
LD30-12D15C			+15	1000	-15	1000			
LD30-12D24C			+24	625	-24	625			
LD30-18S3X3C			18	9-36	3.3	6000			
LD30-18S05C					5	6000			
LD30-18S09C	9	3333							
LD30-18S12C	12	2500							
LD30-18S15C	15	2000							
LD30-18S24C	24	1250							
LD30-18D05C	+5	3000			-5	3000			
LD30-18D12C	+12	1250			-12	1250			
LD30-18D15C	+15	1000			-15	1000			
LD30-18D24C	+24	625			-24	625			
LD30-24S3X3C	24	18-36			3.3	6000			
LD30-24S05C					5	6000			
LD30-24S09C			9	3333					
LD30-24S12C			12	2500					
LD30-24S15C			15	2000					
LD30-24S24C			24	1250					
LD30-24D05C			+5	3000	-5	3000			
LD30-24D12C			+12	1250	-12	1250			

LD30-24D15C			+15	1000	-15	1000			
LD30-24D24C			+24	625	-24	625			
LD30-36S3X3C	36	18-72	3.3	6000					
LD30-36S05C			5	6000					
LD30-36S09C			9	3333					
LD30-36S12C			12	2500					
LD30-36S15C			15	2000					
LD30-36S24C			24	1250					
LD30-36D05C			+5	3000	-5	3000			
LD30-36D12C			+12	1250	-12	1250			
LD30-36D15C			+15	1000	-15	1000			
LD30-48S3X3C			48	36-72	3.3	6000			
LD30-48S05C					5	6000			
LD30-48S09C					9	3333			
LD30-48S12C	12	2500							
LD30-48S15C	15	2000							
LD30-48S24C	24	1250							
LD30-48D05C	+5	3000			-5	3000			
LD30-48D12C	+12	1250			-12	1250			
LD30-48D15C	+15	1000			-15	1000			
LD30-48D24C	+24	625			-24	625			
LD30-110S05C	110	40-160			5	6000			
LD30-110S09C					9	3333			
LD30-110S12C			12	2500					
LD30-110S15C			15	2000					
LD30-110S24C			24	1250					
LD30-110D05C			+5	3000	-5	3000			
LD30-110D12C			+12	1250	-12	1250			
LD30-110D15C			+15	1000	-15	1000			
LD30-110D24C			+24	625	-24	625			

customized accepted ,pls contact sales for details

Input Specifications

	Input Voltage Range (Vdc)	Nom(Vdc)	Max (Vdc)
Input Voltage	9-18	12	18
	9-36	18	36
	18-36	24	36
	18-72	36	72
	36-72	48	72
	40-160	110	160

Hot Plug Unavailable

Output Specifications

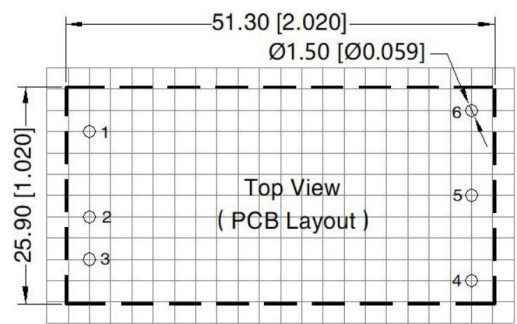
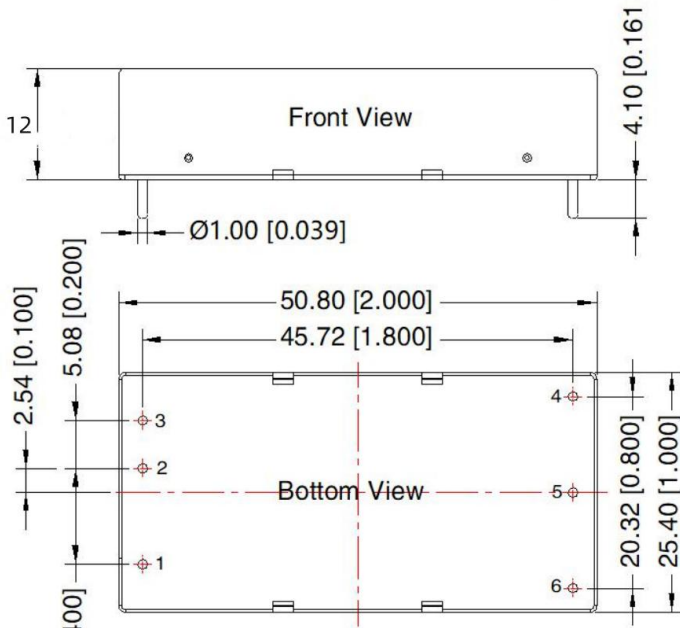
Item	Typ	Max	Test Conditions
Voltage Accuracy	±1%	±3%	0-100% load
Line Regulation	±0.2%	±0.5%	Input voltage variation from low to high at full load
Load Regulation	±0.5%	±1%	5%-100% load
Ripple&Noise	-	100mVp-p	20MHz bandwidth, 5%-100% load
Transient Recovery Time	300μs	500μs	25% load step change, Nominal 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°C
Temperature Coefficient	0.03%/°C	100% full load
Isolation (Input-Output)	1.5KVDC	
Insulation Resistance	1000MΩ	Input-output resistance 500Vdc
Operating Temperature	-40~+85°C	
Storage Temperature	-55~+125°C	
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°C room temperature environment.

Dimensions and Recommended Layout



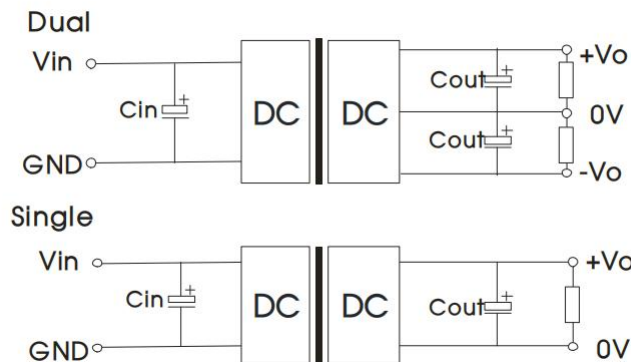
Note:
Unit: mm[inch]
Pin diameter tolerances: ± 0.10 [± 0.004]
General tolerances: ± 0.50 [± 0.020]

Note: Grid 2.54*2.54mm

Pins

Pin	Single	Dual	
1	Ctrl	Ctrl	
2	GND	GND	
3	Vin	Vin	
4	+Vo	+Vo	
5	TRIM	0V	
6	0V	-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.