

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)	
LD50-12S05B	12	9-18	5	10000			
LD50-12S09B			9	5556			
LD50-12S12B			12	4200			
LD50-12S15B			15	3300			
LD50-12S18B			18	2778			
LD50-12S24B			24	2100			
LD50-12S28B			28	1786			
LD50-12S48B			48	1042			
LD50-12D05B			+5	5000	-5	5000	
LD50-12D12B	24	18-36	+12	2100	-12	2100	
LD50-24S05B			5	10000			
LD50-24S09B			9	5556			
LD50-24S12B			12	4200			
LD50-24S15B			15	3300			
LD50-24S18B			18	2778			
LD50-24S24B			24	2100			
LD50-24S28B			28	1786			
LD50-24S48B			48	1042			
LD50-24D05B	48	36-72	+5	5000	-5	5000	
LD50-24D12B			+12	2100	-12	2100	
LD50-48S05B			5	10000			
LD50-48S09B			9	5556			
LD50-48S12B			12	4200			
LD50-48S15B			15	3300			
LD50-48S18B			18	2778			
LD50-48S24B			24	2100			
LD50-48S28B			28	1786			
LD50-48S48B			48	1042			

LD50-48D05B			+5	5000	-5	5000	
LD50-48D12B			+12	2100	-12	2100	
LD50-110S05B	110	72-144	5	10000			
LD50-110S09B			9	5556			
LD50-110S12B			12	4200			
LD50-110S15B			15	3300			
LD50-110S18B			18	2778			
LD50-110S24B			24	2100			
LD50-110S28B			28	1786			
LD50-110S48B			48	1042			
LD50-110D05B			+5	5000	-5	5000	
LD50-110D12B			+12	2100	-12	2100	

customized accepted ,pls contact sales for details

Input Specifications

Input Voltage	Input Voltage Range (Vdc)	Nom(Vdc)	Max (Vdc)
	9-18	12	18
	18-36	24	36
	36-72	48	72
	72-144	110	144
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

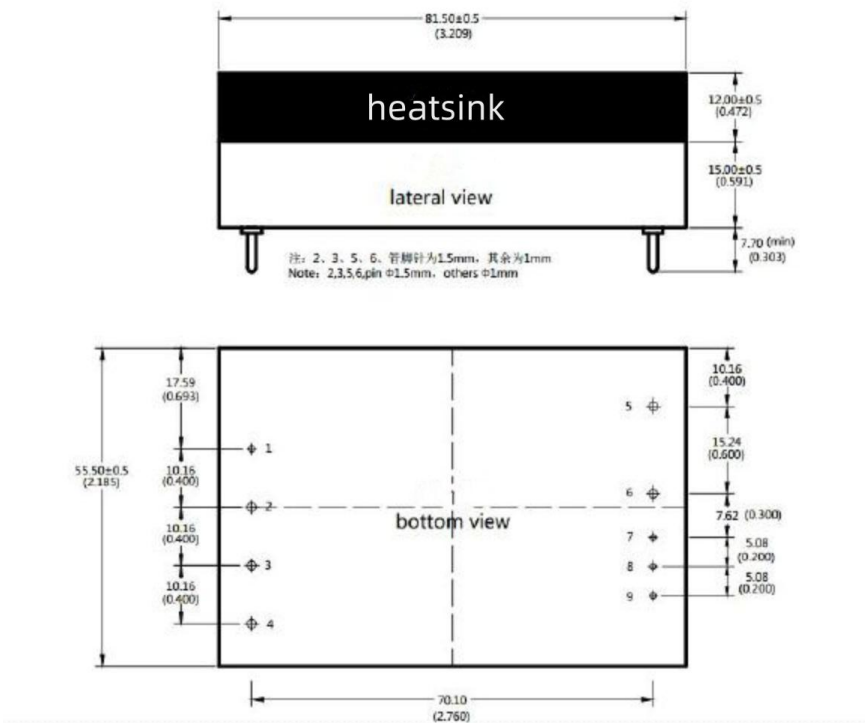
General Specifications

Switching Frequency	300KHz(Typ)	PWM mode
MTBF	1000 K hours	MIL-HDBK-217F@25℃
Temperature Coefficient	0.03%/℃	100% full load
Isolation (Input-Output)	1.5KVDC	
Insulation Resistance	1000MΩ	Input-output resistance 500Vdc
Operating Temperature	-40~+85℃	
Storage Temperature	-55~+125℃	
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℃ room temperature environment.

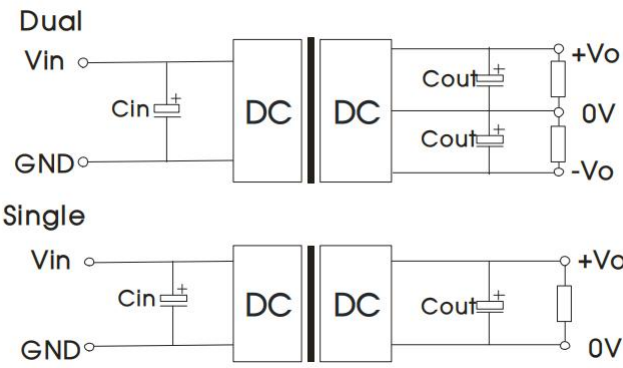
Dimensions and Recommended Layout



Pins

1	FG	6	TRIM
2	+Vin	7	+S
3	-Vin	8	GND
4	REM	9	Vo1
5	-S		

Recommended Circuit



Recommended input and output capacitor values				
V_{in}	C_{in}	C_{out}		
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.