

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 $\geq 2 \times 10^5$ Hrs)
- 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)	
LD50-12S05A	12	9-18	5	10000			
LD50-12S12A			12	4200			
LD50-12S15A			15	3300			
LD50-12S24A			24	2100			
LD50-18S05A	18	9-36	5	10000			
LD50-18S12A			12	4200			
LD50-18S15A			15	3300			
LD50-18S24A			24	2100			
LD50-24S05A	24	18-36	5	10000			
LD50-24S12A			12	4200			
LD50-24S15A			15	3300			
LD50-24S24A			24	2100			
LD50-36S05A	36	18-72	5	10000			
LD50-36S12A			12	4200			
LD50-36S15A			15	3300			
LD50-36S24A			24	2100			
LD50-48S05A	48	36-72	5	10000			
LD50-48S12A			12	4200			
LD50-48S15A			15	3300			
LD50-48S18A			24	2100			
LD50-48S24A	110	40-160	5	10000			
LD50-48S28A			12	4200			
LD50-48S48A			15	3300			
LD50-48D05A			24	2100			

customized accepted, pls contact sales for details

Input Specifications

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

Output Specifications

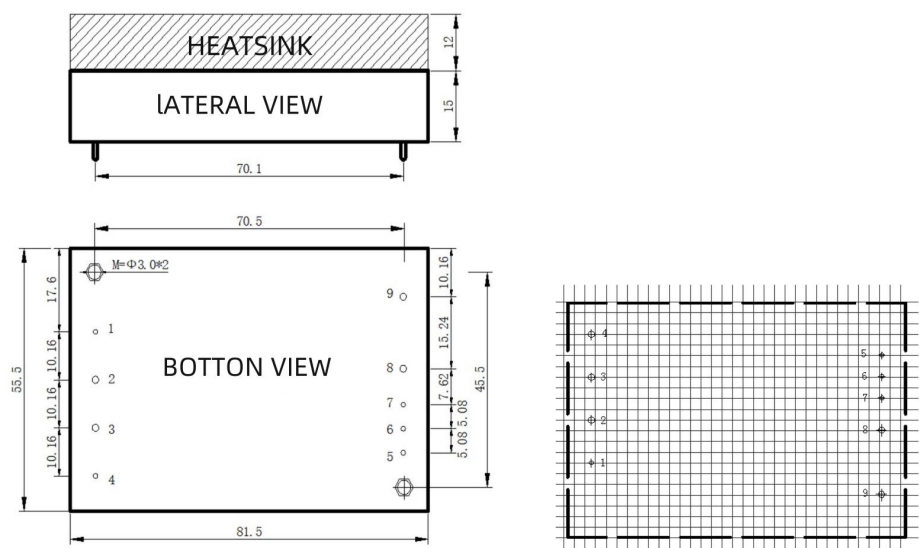
Item	Typ	Max	Test Conditions
Voltage Accuracy	±1%	±2%	0-100% load
Line Regulation	±0.2%	±0.5%	Input voltage variation from low to high at full load
Load Regulation	±0.5%	±1%	5%-100% load
Ripple&Noise	60mVp-p	80mVp-p	20MHz bandwidth, 5%-100% load
Startup delay time	50ms	-	
Over-voltage Protection	-	160%Vo	110%Vo(Min)
Over-current Protection	-	200%Io	110%Io(Min)
Short-circuit Protection			Continuous, self-recovery

General Specifications

Switching Frequency	280KHz(Typ)	PWM mode
MTBF	2X10 ⁵ Hrs	MIL-HDBK-217F@25℃
Isolation (Input-Output)	1.5KVDC	
Operating Temperature	-40~+85℃	
Storage Temperature	-55~+125℃	
Storage Humidity	5-95%RH	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.

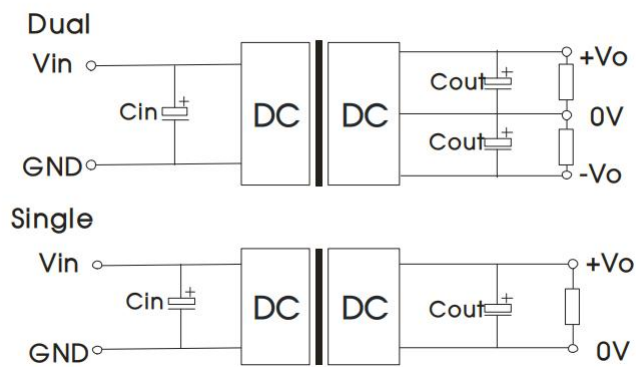
Dimensions and Recommended Layout



Unit:mm(mm)

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

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			
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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.

*The final interpretation right of the product belongs to ECCO ELECTRONICS.