

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: 2×10^5 Hrs)
- Industry standard pin-out
- Metal case
- DIP package



Selection Guide

Part No.	INPUT		OUTPUT				Capacitive Load (μF)
	Normal (Vdc)	Range (Vdc)	Voltage (V1dc)	current (mA)	Voltage (V2dc)	current (mA)	
LD20-12S05C	12	9-18	5	4000			
LD20-12S12C			12	1667			
LD20-12S15C			15	1333			
LD20-12S24C			24	833			
LD20-12D05C			+5	+2000	-5	-2000	1000
LD20-12D12C			+12	+830	-12	-830	330
LD20-12D15C			+15	+660	-15	-660	220
LD20-12D24C			+24	+410	-24	-410	150
LD20-18S05C	18	9-36	5	4000			
LD20-18S12C			12	1667			
LD20-18S15C			15	1333			
LD20-18S24C			24	833			
LD20-18D05C			+5	+2000	-5	-2000	1000
LD20-18D12C			+12	+830	-12	-830	330
LD20-18D15C			+15	+660	-15	-660	220
LD20-18D24C			+24	+410	-24	-410	150
LD20-24S05C	24	18-36	5	4000			
LD20-24S12C			12	1667			
LD20-24S15C			15	1333			
LD20-24S24C			24	833			
LD20-24D05C			+5	+2000	-5	-2000	1000
LD20-24D12C			+12	+830	-12	-830	330
LD20-24D15C			+15	+660	-15	-660	220
LD20-24D24C			+24	+410	-24	-410	150
LD20-36S05C	36	18-75	5	4000			
LD20-36S12C			12	1667			
LD20-36S15C			15	1333			
LD20-36S24C			24	833			

LD20-36D05C			+5	+2000	-5	-2000	1000
LD20-36D12C			+12	+830	-12	-830	330
LD20-36D15C			+15	+660	-15	-660	220
LD20-36D24C			+24	+410	-24	-410	150
LD20-48S05C	48	36-72	5	4000			
LD20-48S12C			12	1667			
LD20-48S15C			15	1333			
LD20-48S24C			24	833			
LD20-48D05C			+5	+2000	-5	-2000	1000
LD20-48D12C			+12	+830	-12	-830	330
LD20-48D15C			+15	+660	-15	-660	220
LD20-48D24C			+24	+410	-24	-410	150
LD20-110S05C	110	40-160	5	4000			
LD20-110S12C			12	1667			
LD20-110S15C			15	1333			
LD20-110S24C			24	833			
LD20-110D05C			+5	+2000	-5	-2000	1000
LD20-110D12C			+12	+830	-12	-830	330
LD20-110D15C			+15	+660	-15	-660	220
LD20-110D24C			+24	+410	-24	-410	150

customized accepted,pls contact sales for details

Input Specifications

Input Voltage	Input Voltage Range (Vdc)	Nom(Vdc)	Max (Vdc)
	9-18	12	18
	9-36	18	36
	18-36	24	36
	36-72	48	72
	18-75	36	75
	40-160	110	160
Hot Plug	Unavailable		

Output Specifications

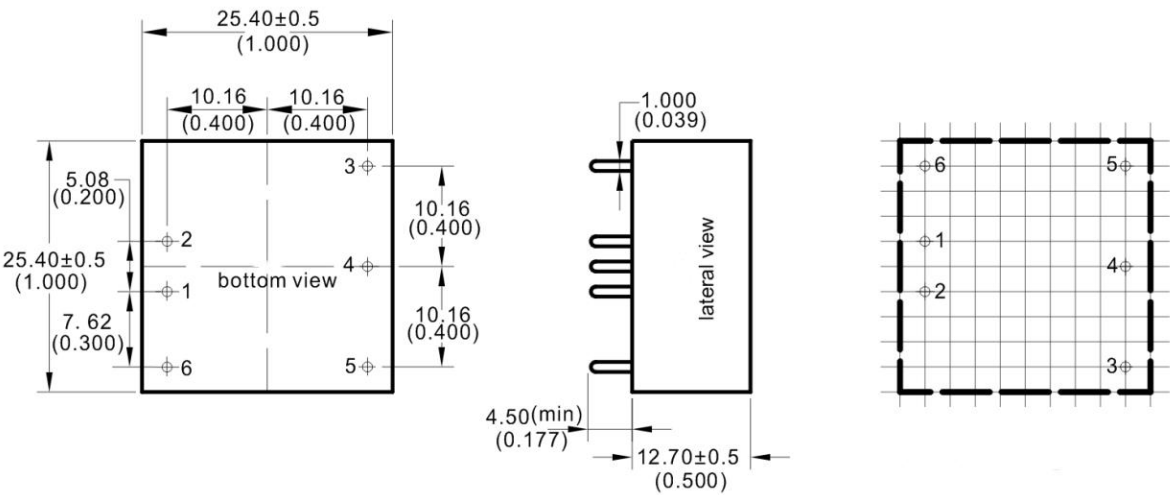
Item	Typ	Max	Test Conditions
Voltage Accuracy	±1%	±2%	0-100% load
Line Regulation	±0.2%	±0.5%	Input voltage variation from low to high at full load
Load Regulation	±0.5%	±1%	5%-100% load
Ripple&Noise	60mVp-p	80mVp-p	20MHz bandwidth, 5%-100% load
Startup delay time	50ms	-	
Over-voltage Protection	-	160%Vo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

Gernal 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	20g (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

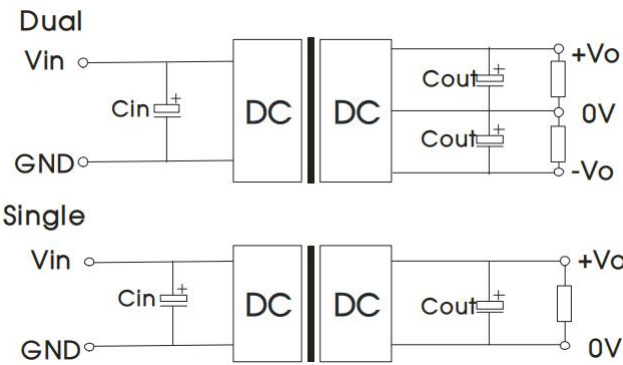


Unit:mm(inch)

Pins

Pin	Single	Dual	
1	-Vin	-Vin	
2	+Vin	+Vin	
3	+Vo	+Vo	
4	TRIM	COM	
5	-Vo	-Vo	
6	CTRL	CTRL	

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.

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