

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				CapacitiveLoad(μF)
	Normal (Vdc)	Range (Vdc)	Voltage (V1dc)	current (mA)	Voltage (V2dc)	current (mA)	
LD15-12S3V3A	12	9-18	3.3	3000			
LD15-12S05A			5	3000			
LD15-12S09A			9	1600			
LD15-12S12A			12	1250			
LD15-12S15A			15	1000			
LD15-12S18A			18	833			
LD15-12S24A			24	630			
LD15-12S28A			28	536			
LD15-12S48A			48	313			
LD15-12D3V3A			+3.3	500	-3.3	500	
LD15-12D05A			+5	500	-5	500	
LD15-12D09A			+9	830	-9	830	
LD15-12D12A			+12	625	-12	625	
LD15-12D15A			+15	500	-15	500	
LD15-12D24A			+24	310	-24	310	
LD15-18S3V3A	18	9-36	3.3	3000			
LD15-18S05A			5	3000			
LD15-18S09A			9	1600			
LD15-18S15A			15	1000			
LD15-18S18A			18	833			
LD15-18S24A			24	630			
LD15-18S28A			28	536			
LD15-18S48A			48	313			
LD15-18D3V3A			+3.3	500	-3.3V	500	
LD15-18D05A			+5	500	-5V	500	
LD15-18D09A			+9	830	-9V	830	
LD15-18D12A			+12	625	-12V	625	
LD15-18D15A			+15	500	-15V	500	

LD15-18D24A			+24	310	-24	310	
LD15-24S3V3A	24	18-36	3.3	3000			
LD15-24S05A			5	3000			
LD15-24S09A			9	1600			
LD15-24S12A			12	1250			
LD15-24S15A			15	1000			
LD15-24S18A			18	833			
LD15-24S24A			24	630			
LD15-24S28A			28	536			
LD15-24S48A			48	313			
LD15-24D3V3A			+3.3	500	-3.3	500	
LD15-24D05A			+5	500	-5	500	
LD15-24D09A			+9	830	-9	830	
LD15-24D12A			+12	625	-12	625	
LD15-24D15A			+15	500	-15	500	
LD15-24D24A			+24	310	-24	310	
LD15-36S3V3A	36	18-72	3.3	3000			
LD15-36S05A			5	3000			
LD15-36S09A			9	1600			
LD15-36S12A			12	1250			
LD15-36S15A			15	1000			
LD15-36S18A			18	833			
LD15-36S24A			24	630			
LD15-36S28A			28	536			
LD15-36S48A			48	313			
LD15-36D3V3A			+3.3	500	-3.3	500	
LD15-36D05A			+5	500	-5	500	
LD15-36D09A			+9	830	-9	830	
LD15-36D12A			+12	625	-12	625	
LD15-36D15A			+15	500	-15	500	
LD15-36D24A			+24	310	-24	310	
LD15-48S3V3A	48	36-72	3.3	3000			
LD15-48S05A			5	3000			
LD15-48S09A			9	1600			
LD15-48S12A			12	1250			
LD15-48S15A			15	1000			
LD15-48S18A			18	833			
LD15-48S24A			24	630			
LD15-48S28A			28	536			
LD15-48S48A			48	313			
LD15-48D3V3A			+3.3	500	-3.3	500	
LD15-48D05A			+5	500	-5	500	

LD15-48D09A			+9	830	-9	830	
LD15-48D12A			+12	625	-12	625	
LD15-48D15A			+15	500	-15	500	
LD15-48D24A			+24	310	-24	310	
LD15-110S3V3A	110	40-160	3.3	3000			
LD15-110S05A			5	3000			
LD15-110S09A			9	1600			
LD15-110S12A			12	1250			
LD15-110S15A			15	1000			
LD15-110S18A			18	833			
LD15-110S24A			24	630			
LD15-110S28A			28	536			
LD15-110S48A			48	313			
LD15-110D3V3A			+3.3	500	-3.3	500	
LD15-110D05A			+5	500	-5	500	
LD15-110D09A			+9	830	-9	830	
LD15-110D12A			+12	625	-12	625	
LD15-110D15A			+15	500	-15	500	
LD15-110D24A			+24	310	-24	310	

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
	18-72	36	72
	40-160	110	160
Hot Plug	Unavailable		

Output Specifications

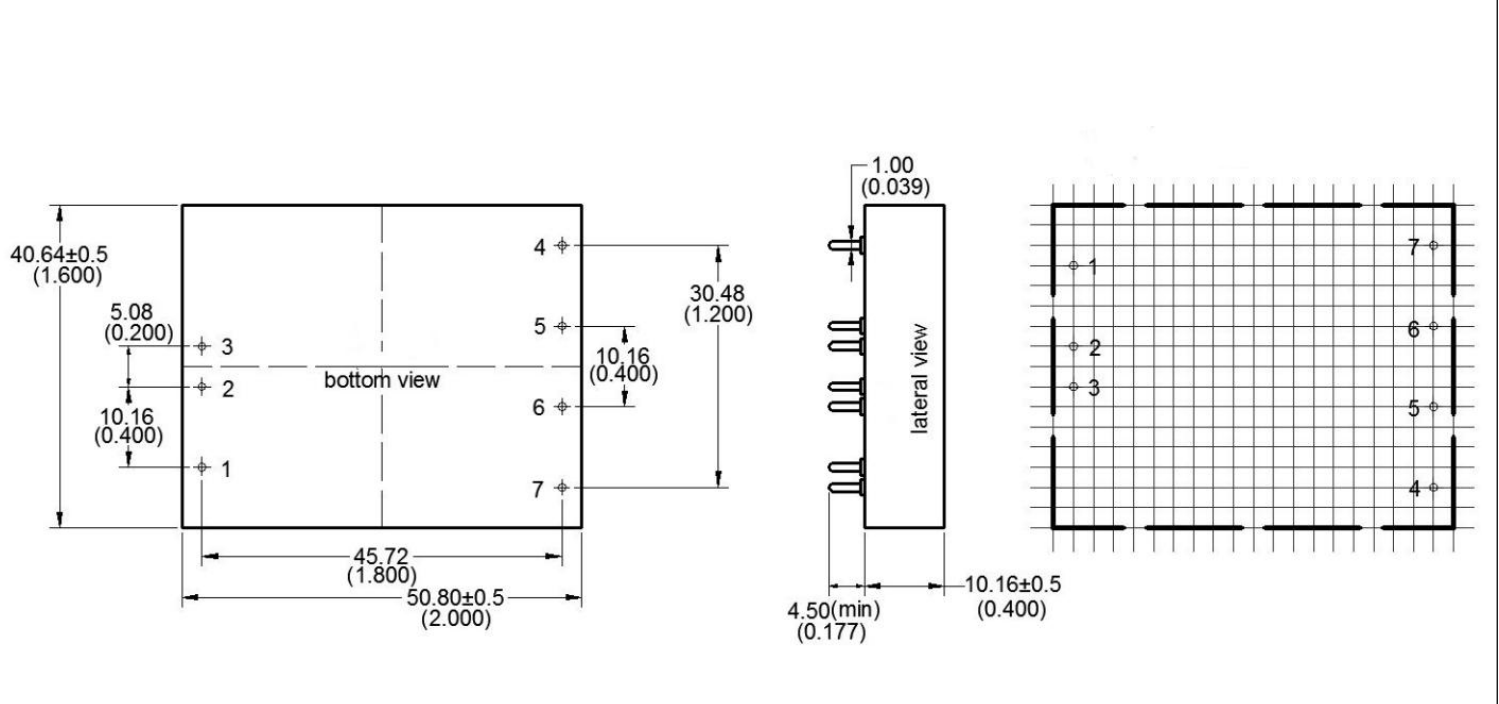
Item	Typ	Max	Test Conditions
Voltage Accuracy	±1%	±2%	0-100% load
Line Regulation	±0.2%	±0.5%	Input voltage variation from low to high at full load
Load Regulation	±0.5%	±1%	5%-100% load
Startup delay time	50ms	-	
Ripple&Noise	60mVp-p	80mVp-p	20MHz bandwidth, 5%-100% load
Over-voltage Protection	-	160%Vo	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	45g (Typ)	

**Unless specified, otherwise all other parameters are tested under the following conditions: nominal input voltage, pure resistive load, 25℃ room temperature environment.

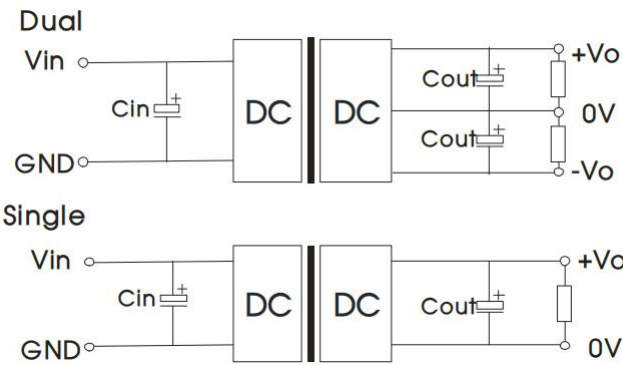
Dimensions and Recommended Layout



Pins

Pin	Single	Dual	
1	CTRL	CTRL	
2	-Vin	-Vin	
3	+Vin	+Vin	
4	NO PIN	+Vo	
5	+Vo	COM	
6	-Vo	-Vo	
7	TRIM	TRIM	

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. The product should be used within the specified range; otherwise, it may cause permanent damage to the product.
 2. If the product operates beyond its load range, it cannot be guaranteed that all performance indicators of the product comply with those in this manual.
 3. Unless otherwise specified, all the above data were measured at $T_a=25^{\circ}\text{C}$, humidity $<75\%$, input nominal voltage and output rated load (pure resistance load).
 4. The above are all performance indicators of the product models listed in this manual. Some indicators of non-standard models may exceed the above requirements. For specific situations, you can directly contact our technical personnel.
 5. Product specification changes will not be notified separately. Please pay attention to the latest manual published on our company's official website.

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