

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)
	Normina I (Vdc)	Range (Vdc)	Voltage (V1dc)	current (mA)	Voltage (V2dc)	current (mA)	
LD5-12S05A	5	4.5-9	5	1000			
LD5-12S12A			12	410			
LD5-12S15A			15	330			
LD5-12S24A			24	210			
LD5-12D05A			+5	500	-5	500	
LD5-12D12A			+12	205	-12	205	
LD5-12D15A			+15	165	-15	165	
LD5-12D24A			+24	100	-24	100	
LD5-18S3X3A	18	9-36	3.3	1515			
LD5-18S05A			5	1000			
LD5-18S12A			12	410			
LD5-18S15A			15	330			
LD5-18S24A			24	210			
LD5-18D05A			+5	500	-5	500	
LD5-18D12A			+12	205	-12	205	
LD5-18D15A			+15	165	-15	165	
LD5-18D24A	+24	100	-24	100			
LD5-24S05A	24	18-36	5	1000			
LD5-24S12A			12	410			
LD5-24S15A			15	330			
LD5-24S24A			24	210			
LD5-24D05A			+5	500	-5	500	
LD5-24D12A			+12	205	-12	205	
LD5-24D15A			+15	165	-15	165	
LD5-24D24A			+24	100	-24	100	
LD5-36S05A	36	18-72	5	1000			
LD5-36S12A			12	410			

LD5-36S15A			15	330			
LD5-36S24A			24	210			
LD5-36D05A			+5	500	-5	500	
LD5-36D12A			+12	205	-12	205	
LD5-36D15A			+15	165	-15	165	
LD5-36D24A			+24	100	-24	100	
LD5-48S05A			48	36-72	5	1000	
LD5-48S12A	12	410					
LD5-48S15A	15	330					
LD5-48S24A	24	210					
LD5-48D05A	+5	500			-5	500	
LD5-48D12A	+12	205			-12	205	
LD5-48D15A	+15	165			-15	165	
LD5-48D24A	+24	100			-24	100	

customized accepted,pls contact sales for details

Input Specifications

Input Voltage	Input Voltage Range (Vdc)	Nom(Vdc)	Max (Vdc)
		4.5-9	5
	9-18	12	18
	9-36	18	36
	18-36	24	36
	18-72	36	72
	36-72	48	72

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

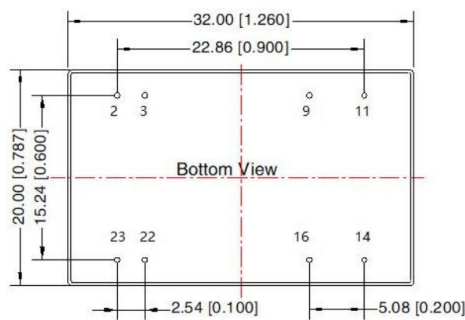
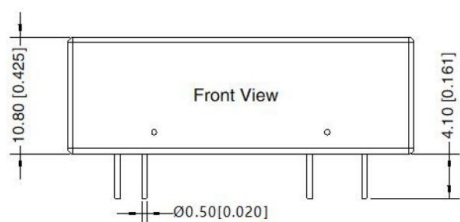
General Specifications

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	

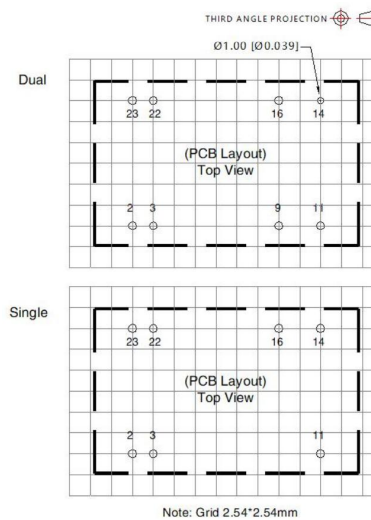
Insulation Resistance	1000MΩ	Input-output resistance 500Vdc
Operating Temperature	-40~+85°C	
Storage Temperature	-55~+125°C	
Storage Humidity	5-95%	Non-condensing
Cooling Method	Free air convection	
Case Material	Aluminum alloy	
Weight	12g (Typ)	

**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



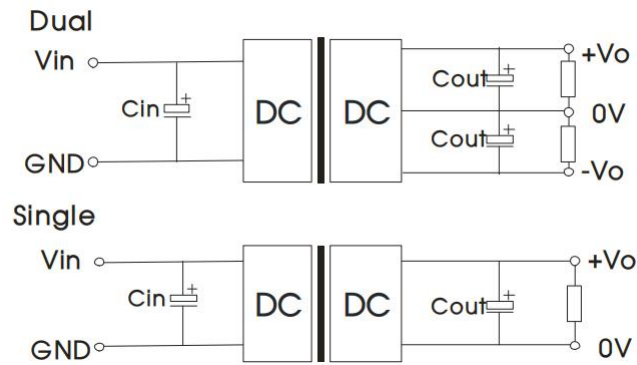
Note:
Unit: mm[inch]
Pin diameter tolerances: ± 0.10 [± 0.004]
General tolerances: ± 0.50 [± 0.020]



Pins

Pin	Single	Dual	
2,3	GND	GND	
9	No Pin	0V	
11	NC	-Vo	
14	+Vo	+Vo	
16	0V	0V	
22,23	Vin	Vin	

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.