

**FEATURES:**

- Wide input range
- Continuous short-circuit protection, self recover
- I/O isolation voltage 1.5KV
- Working temperature: -40°C~+85°C
- No additional components required
- Stable performance and high reliability (MTBF≥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)			
LD3-05S3X3B	5	4.5-9	3.3	600					
LD3-05S05B			5	600					
LD3-05S09B			9	330					
LD3-05S12B			12	250					
LD3-05S15B			15	200					
LD3-05S18B			18	167					
LD3-05S24B			24	125					
LD3-05S28B			28	107					
LD3-05S48B			48	104					
LD3-05D3X3B					+3.3	300	-3.3	300	
LD3-05D05B					+5	300	-5	300	
LD3-05D09B					+9	165	-9	165	
LD3-05D12B					+12	125	-12	125	
LD3-05D15B					+15	100	-15	100	
LD3-05D24B					+24	60	-24	60	
LD3-12S3V3B			12	9-18	3.3	600			
LD3-12S05B	5	600							
LD3-12S09B	9	330							
LD3-12S12B	12	250							
LD3-12S15B	15	200							
LD3-12S18B	18	167							
LD3-12S24B	24	125							
LD3-12S28B	28	107							
LD3-12S48B	48	104							
LD3-12D3V3B					+3.3	300	-3.3	300	
LD3-12D05B					+5	300	-5	300	
LD3-12D09B					+9	165	-9	165	
LD3-12D12B					+12	125	-12	125	

LD3-12D15B			+15	100	-15	100			
LD3-12D24B			+24	60	-24	60			
LD3-18S3V3B	18	9-36	3.3	600					
LD3-18S05B			5	600					
LD3-18S09B			9	330					
LD3-18S12B			12	250					
LD3-18S15B			15	200					
LD3-18S18B			18	167					
LD3-18S24B			24	125					
LD3-18S28B			28	107					
LD3-18S48B			48	104					
LD3-18D3V3B			+3.3	300	-3.3	300			
LD3-18D05B			+5	300	-5	300			
LD3-18D09B			+9	165	-9	165			
LD3-18D12B			+12	125	-12	125			
LD3-18D15B			+15	100	-15	100			
LD3-18D24B			+24	60	-24	60			
LD3-24S3V3B			24	18-36	3.3	600			
LD3-24S05B					5	600			
LD3-24S09B					9	330			
LD3-24S12B	12	250							
LD3-24S15B	15	200							
LD3-24S18B	18	167							
LD3-24S24B	24	125							
LD3-24S28B	28	107							
LD3-24S48B	48	104							
LD3-24D3V3B	+3.3	300			-3.3	300			
LD3-24D05B	+5	300			-5	300			
LD3-24D09B	+9	165			-9	165			
LD3-24D12B	+12	125			-12	125			
LD3-24D15B	+15	100			-15	100			
LD3-24D24B	+24	60			-24	60			
LD3-36S3V3B	36	18-72			3.3	600			
LD3-36S05B					5	600			
LD3-36S09B					9	330			
LD3-36S12B			12	250					
LD3-36S15B			15	200					
LD3-36S18B			18	167					
LD3-36S24B			24	125					
LD3-36S28B			28	107					
LD3-36S48B			48	104					
LD3-36D3V3B			+3.3	300	-3.3	300			

LD3-36D05B			+5	300	-5	300	
LD3-36D09B			+9	165	-9	165	
LD3-36D12B			+12	125	-12	125	
LD3-36D15B			+15	100	-15	100	
LD3-36D24B			+24	60	-24	60	
LD3-48S3V3B	48	36-72	3.3	600			
LD3-48S05B			5	600			
LD3-48S09B			9	330			
LD3-48S12B			12	250			
LD3-48S15B			15	200			
LD3-48S18B			18	167			
LD3-48S24B			24	125			
LD3-48S28B			28	107			
LD3-48S48B			48	104			
LD3-48D3V3B			+3.3	300	-3.3	300	
LD3-48D05B			+5	300	-5	300	
LD3-48D09B			+9	165	-9	165	
LD3-48D12B			+12	125	-12	125	
LD3-48D15B			+15	100	-15	100	
LD3-48D24B			+24	60	-24	60	
LD3-110S3V3B			110	72-144	3.3	600	
LD3-110S05B	5	600					
LD3-110S09B	9	330					
LD3-110S12B	12	250					
LD3-110S15B	15	200					
LD3-110S18B	18	167					
LD3-110S24B	24	125					
LD3-110S28B	28	107					
LD3-110S48B	48	104					
LD3-110D3V3B	+3.3	300			-3.3	300	
LD3-110D05B	+5	300			-5	300	
LD3-110D09B	+9	165			-9	165	
LD3-110D12B	+12	125			-12	125	
LD3-110D15B	+15	100			-15	100	
LD3-110D24B	+24	60			-24	60	

\*\*customized accepted ,pls contact sales for details\*\*

**Input Specifications**

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

	18-36	24	36
	18-72	36	72
	36-72	48	72
	72-144	110	144
Hot Plug	Unavailable		

**Output Specifications**

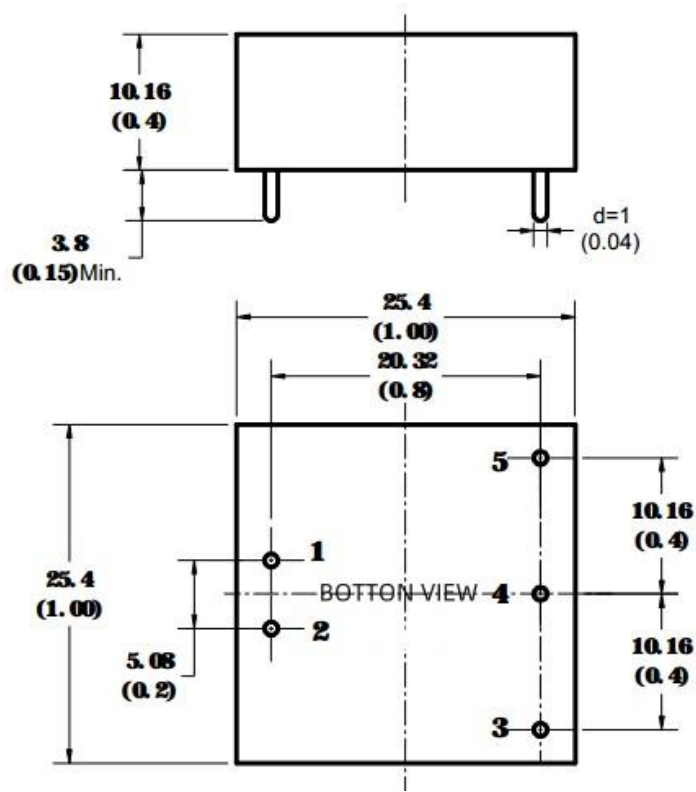
Item	Typ	Max	Test Conditions
Voltage Accuracy	±1%	±3%	0-100% load
Line Regulation	±0.2%	±0.5%	Input voltage variation from low to high at full load
Load Regulation	±0.5%	±1%	5%-100% load
Ripple&Noise	-	100mVp-p	20MHz bandwidth, 5%-100% load
Transient Recovery Time	300μs	500μs	25% load step change, Nominal 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°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**

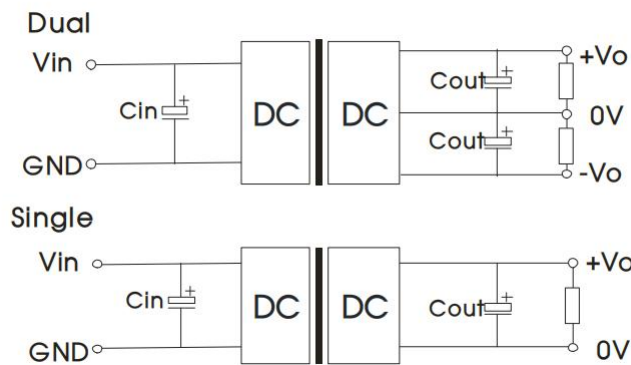


Note:  
Unit: mm[inch]  
Pin diameter tolerances:  $\pm 0.10[\pm 0.004]$   
General tolerances:  $\pm 0.50[\pm 0.020]$

Pins

Pin	Single	Dual	
1	+Vin	+Vin	
2	-Vin	-Vin	
3	GND	-Vo2	
4	No Pin	COM	
5	Vo1	+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			

## 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.