

## 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( $\mu\text{F}$ )		
	Normal (Vdc)	Range (Vdc)	Voltage (V1dc)	current (mA)	Voltage (V2dc)	current (mA)			
LD25-12S3V3	12	9-18	3.3	5000					
LD25-12S05			5	5000					
LD25-12S09			9	2770					
LD25-12S12			12	2080					
LD25-12S15			15	1660					
LD25-12S18			18	1389					
LD25-12S24			24	1040					
LD25-12S28			28	893					
LD25-12S48			48	521					
LD25-12D05			+5	2500	-5	2500			
LD25-12D09			+9	1390	-9	1390			
LD25-12D12			+12	1040	-12	1040			
LD25-12D15			+15	830	-15	830			
LD25-12D24			+24	520	-24	520			
LD25-12T5-12			+5	3500	+12	250	-12		
LD25-12T5-15			+5	3500	+15	200	-15		
LD25-18S3V3			18	9-36	3.3	5000			
LD25-18S05					5	5000			
LD25-18S09	9	2770							
LD25-18S12	12	2080							
LD25-18S15	15	1660							
LD25-18S18	18	1389							
LD25-18S24	24	1040							
LD25-18S28	28	893							
LD25-18S48	48	521							
LD25-18D05	+5	2500			-5	2500			
LD25-18D09	+9	1390			-9	1390			
LD25-18D12	+12	1040			-12	1040			

LD25-18D15			+15	830	-15	830			
LD25-18D24			+24	520	-24	520			
LD25-18T5-12			+5	3500	+12	250	-12		
LD25-18T5-15			+5	3500	+15	200	-15		
LD25-24S3V3	24	18-36	3.3	5000					
LD25-24S05			5	5000					
LD25-24S09			9	2770					
LD25-24S12			12	2080					
LD25-24S15			15	1660					
LD25-24S18			18	1389					
LD25-24S24			24	1040					
LD25-24S28			28	893					
LD25-24S48			48	521					
LD25-24D05			+5	2500	-5	2500			
LD25-24D09			+9	1390	-9	1390			
LD25-24D12			+12	1040	-12	1040			
LD25-24D15			+15	830	-15	830			
LD25-24D24			+24	520	-24	520			
LD25-24T5-12			+5	3500	+12	250	-12		
LD25-24T5-15			+5	3500	+15	200	-15		
LD25-36S3V3			36	18-72	3.3	5000			
LD25-36S05					5	5000			
LD25-36S09					9V	2770			
LD25-36S12					12	2080			
LD25-36S15	15	1660							
LD25-36S18	18	1389							
LD25-36S24	24	1040							
LD25-36S28	28	893							
LD25-36S48	48	521							
LD25-36D05	+5	2500			-5	2500			
LD25-36D09	+9	1390			-9	1390			
LD25-36D12	+12	1040			-12	1040			
LD25-36D15	+15	830			-15	830			
LD25-36D24	+24	520			-24	520			
LD25-36T5-12	+5	3500			+12	250	-12		
LD25-36T5-15	+5	3500			+15	200	-15		
LD25-48S3V3					3.3	5000			
LD25-48S05					5	5000			
LD25-48S09					9	2770			
LD25-48S12					12	2080			
LD25-48S15			15	1660					
LD25-48S18			18	1389					

LD25-48S24	48	36-72	24	1040			
LD25-48S28			28	893			
LD25-48S48			48	521			
LD25-48D05			+5	2500	-5	2500	
LD25-48D09			+9	1390	-9	1390	
LD25-48D12			+12	1040	-12	1040	
LD25-48D15			+15	830	-15	830	
LD25-48D24			+24	520	-24	520	
LD25-48T5-12			+5	3500	+12	250	-12
LD25-48T5-15			+5	3500	+15	200	-15
LD25-110S3V3			110	72-144	3.3	5000	
LD25-110S05	5	5000					
LD25-110S09	9	2770					
LD25-110S12	12	2080					
LD25-110S15	15	1660					
LD25-110S18	18	1389					
LD25-110S24	24	1040					
LD25-110S28	28	893					
LD25-110S48	48	521					
LD25-110D05	+5	2500			-5	2500	
LD25-110D09	+9	1390			-9	1390	
LD25-110D12	+12	1040			-12	1040	
LD25-110D15	+15	830			-15	830	
LD25-110D24	+24	520			-24	520	
LD25-110T5-12	+5	3500	+12	250	-12		
LD25-110T5-15	+5	3500	+15	200	-15		

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

## Input Specifications

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

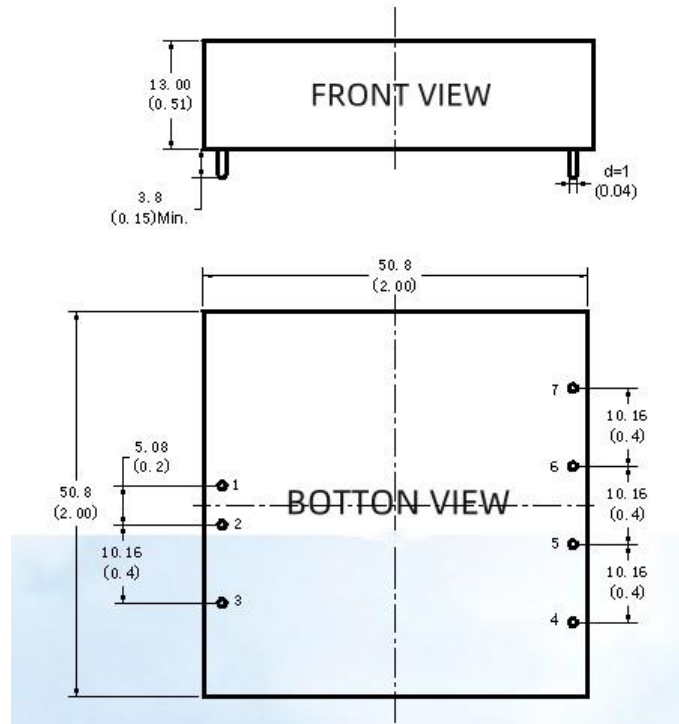
Load Regulation	±0.5%	±1%	5%-100% load
Ripple&Noise	-	100mVp-p	20MHz bandwidth, 5%-100% load
Transient Recovery Time	300μs	500μs	25% load step change, Nominal input voltage
Over-voltage Protection	-	160%Vo	110%Vo(Min)
Over-current Protection	140%Io	190%Io	110%Io(Min)
Short-circuit Protection			Continuous, 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

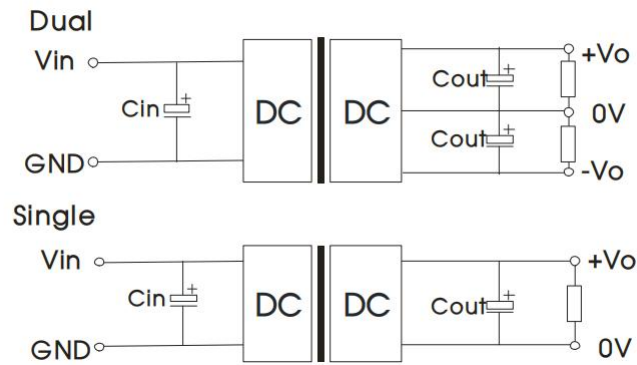


Note:  
Unit: mm[inch]  
Pin diameter tolerances:  $\pm 0.10[\pm 0.004]$   
General tolerances:  $\pm 0.50[\pm 0.020]$

**Pins**

Pin	Single	Dual	Triple
1	+Vin	+Vin	+Vin
2	-Vin	-Vin	-Vin
3	REM	REM	REM
4	TRIM	TRIM	Vo3
5	GND	-Vo2	COM
6	Vo1	COM	+Vo1
7	No Pin	-Vo1	-Vo2

**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.