

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)	
URA2405LD-20WR3	24	9-36	±5	0	±2000	86	4800
URA2409LD-20WR3			±9	0	±1111	88	1000
URA2412LD-20WR3			±12	0	±834	88	800
URA2415LD-20WR3			±15	0	±667	88	625
URB2403LD-20WR3			3.3	0	5000	86	10000
URB2405LD-20WR3			5	0	4000	88	10000
URB2409LD-20WR3			9	0	2222	88	4700
URB2412LD-20WR3			12	0	1667	89	1600
URB2415LD-20WR3			15	0	1333	90	1000
URB2424LD-20WR3			24	0	834	90	500
URA4805LD-20WR3			48	18-72	±5	0	±2000
URA4812LD-20WR3	±12	0			±834	88	800
URA4815LD-20WR3	±15	0			±667	89	625
URB4803LD-20WR3	3.3	0			5000	86	10000
URB4805LD-20WR3	5	0			4000	86	10000
URB4809LD-20WR3	9	0			2222	89	4700
URB4812LD-20WR3	12	0			1667	87	1600
URB4815LD-20WR3	15	0			1333	90	1000
URB4824LD-20WR3	24	0			834	88	500
URA1D05LD-20WR3	110	40-160			±5	0	±2000
URA1D12LD-20WR3			±12	0	±834	88	800
URA1D15LD-20WR3			±15	0	±667	89	625
URB1D03LD-20WR3			3.3	0	5000	86	10000
URB1D05LD-20WR3			5	0	4000	86	10000
URB1D09LD-20WR3			9	0	2222	89	4700
URB1D12LD-20WR3			12	0	1667	87	1600
URB1D15LD-20WR3			15	0	1333	90	1000
URB1D24LD-20WR3			24	0	834	88	500

customized accepted,pls contact sales for details

Input Specifications

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

Output Specifications

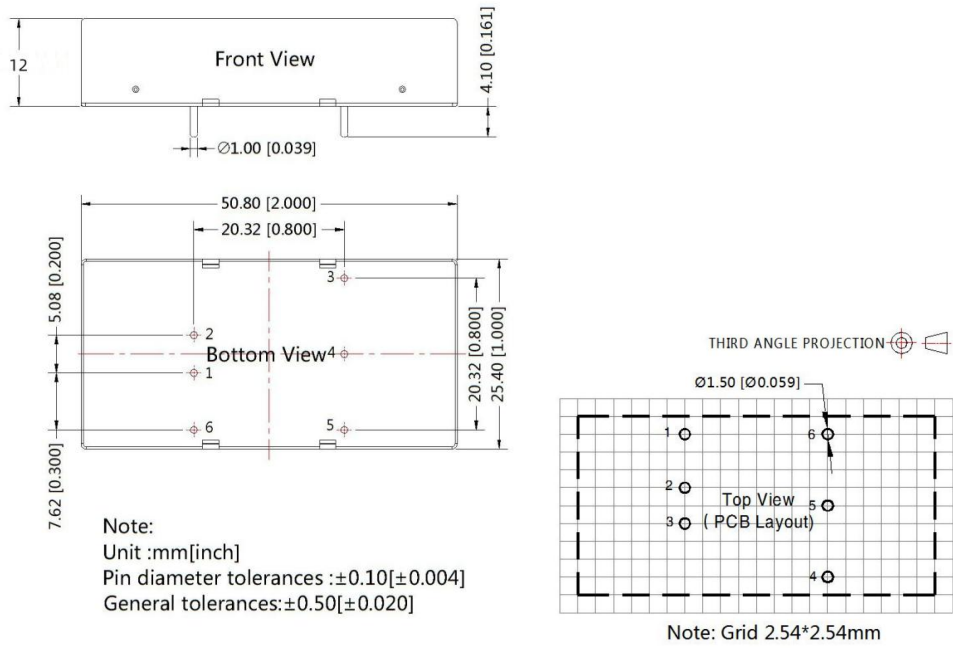
Item	Typ	Max	Test Conditions
Voltage Accuracy	±1%	±3%	0-100% load
Line Regulation	±0.2%	±0.5%	Input voltage variation from low to high at full load
Load Regulation	±0.5%	±1%	5%-100% load
Ripple&Noise	-	100mVp-p	20MHz bandwidth, 5%-100% load
Transient Recovery Time	300μs	500μs	25% load step change, Nominal 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	60g (Typ)	

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

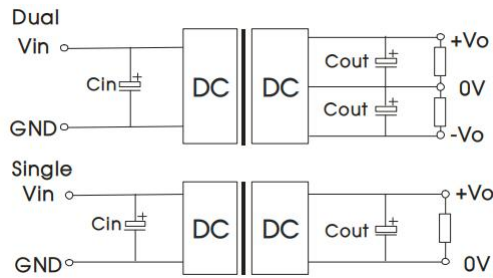
Dimensions and Recommended Layout



Pins

Pin	Single	Dual
1	CTRL	CTRL
2	GND	GND
3	Vin	Vin
4	+Vo	+Vo
5	TRIM	0V
6	0V	-Vo

Recommended Circuit



Cin		Single Vo (VDC)	Cout	Dual Vo (VDC)	Cout
Vin: 24VDC	Vin: 48VDC				
100µF/50V	100µF/100V	3.3/5	470µF/16V	±5	220µF/16V
		9	220µF/16V	±9	100µF/16V
		12/15	220µF/25V	±12/±15	100µF/25V
		24	100µF/50V	--	--

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.