

FEATURES:

- Wide input range
- Continuous short-circuit protection, self recover
- I/O isolation voltage 1.5KV
- Working temperature: -40°C~+105°C
- No additional components required
- Stable performance and high reliability (MTBF≥2 million hours)
- Industry standard pin-out
- Metal case
- DIP package

Selection Guide

Part No.	INPUT		OUTPUT			Full Load Efficiency (%) / Typ.	Capacitive Load (μF)
	Normal (Vdc)	Range (Vdc)	Voltage (V1dc)	Current Min (mA)	Current Max (mA)		
VRB2403LD-30WR3	24	18-36	3.3	0	6000	85	10000
VRB2405LD-30WR3			5	0	6000	88	10000
VRB2409LD-30WR3			9	0	3333	86	4700
VRB2412LD-30WR3			12	0	2500	88	2700
VRB2415LD-30WR3			15	0	2000	90	1680
VRB2424LD-30WR3			24	0	1250	90	680
VRB4803LD-30WR3	48	36-72	3.3	0	6000	86	10000
VRB4805LD-30WR3			5	0	6000	88	10000
VRB4812LD-30WR3			12	0	2500	88	2700
VRB4815LD-30WR3			15	0	2000	89	1680
VRB4824LD-30WR3			24	0	1250	89	680

customized accepted, pls contact sales for details

Input Specifications

Input Filter	Capacitive Filter	
Ctrl	NONE	
	NONE	
Hot Plug	Unavailable	

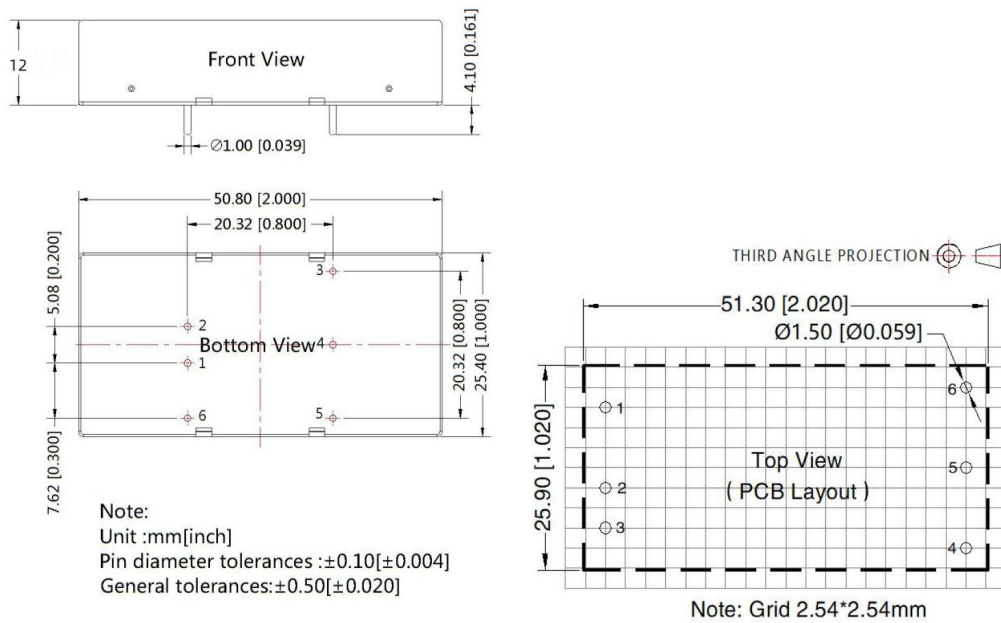
Output Specifications

Item	Typ	Max	Test Conditions	
Voltage Accuracy	±1%	±3%	5%-100% load	
No-load Output Voltage Accuracy	±1.5%	±5%	Input voltage range	
Balance Of Output Voltage	±0.5%	±1%	Dual output, balanced load	
Line Regulation	±0.2%	±0.5%	Input voltage variation from low to high at full load	
Load Regulation	±0.2%	±0.5%	5%-100% load	
Ripple&Noise	100mVp-p	120mVp-p	24VDC output	20MHz Bandwidth, full load
	50	80	Others	

General Specifications		
Switching Frequency	200KHz(Typ)	100% full load, nominal input voltage
Short-Circuit Protection	Continuous, self-recovery	
Case Temperature Rise	25°C (Typ)	
Temperature Coefficient	0.03%/°C	100% full load
Pin Soldering Resistance Temperature	300°C	Soldering spot is 1.5mm away from case for 10 seconds
Isolation (Input-Output)	1.5KVDC	Input-output electric strength test for 1 minute with a leakage current
Insulation Resistance (Input-Output)	1000MΩ	Input-output resistance 500Vdc
Operating Temperature	-40~+105°C	
Storage Temperature	-55~+125°C	
Storage Humidity	<95%	Non-condensing
Cooling Method	Free air convection	
Case Material	Aluminum alloy	
Weight	14g (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		
1	CTRL		
2	GND		
3	Vin		

4	+Vo		
5	0V		
6	TRIM		

Recommended Circuit



output voltage (VDC)	Cout (μF)	Cin (μF)
3.3/5/9	220	100
12/15/24	100	

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.