

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)
	Norminal (Vdc)	Range (Vdc)	Voltage (V1dc)	current (mA)	Voltage (V2dc)	current (mA)	
VRA1215LD-20WR3	12	9-18	±15	0	±667	87	625
VRA1224LD-20WR3			±24	0	±417	88	220
VRB121DLD-20WR3			110	9	182	88	66
VRA2405LD-20WR3	24	18-36	±5	0	±2000	84	4800
VRA2409LD-20WR3			±9	0	±1111	86	1000
VRA2412LD-20WR3			±12	0	±834	86	800
VRA2415LD-20WR3			±15	0	±667	86	625
VRA2424LD-20WR3			±24	0	±417	86	500
VRB2403LD-20WR3			3.3	0	5000	86	10000
VRB2405LD-20WR3			5	0	4000	90	10000
VRB2409LD-20WR3			9	0	2222	87	4700
VRB2412LD-20WR3			12	0	1667	87	1600
VRB2415LD-20WR3			15	0	1333	88	1000
VRB2424LD-20WR3			24	0	834	88	500
VRA4805LD-20WR3			48	36-72	±5	0	±2000
VRA4812LD-20WR3	±12	0			±834	88	800
VRA4815LD-20WR3	±15	0			±667	89	625
VRB4803LD-20WR3	3.3	0			5000	86	10000
VRB4805LD-20WR3	5	0			4000	90	10000
VRB4809LD-20WR3	9	0			2222	89	4700
VRB4812LD-20WR3	12	0			1667	89	1600
VRB4815LD-20WR3	15	0			1333	90	1000
VRB4824LD-20WR3	24	0			834	90	500

customized accepted,pls contact sales for details

Input Specifications

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

Input Voltage	18-36	24	36
	36-72	48	72
Hot Plug	Unavailable		

Output Specifications

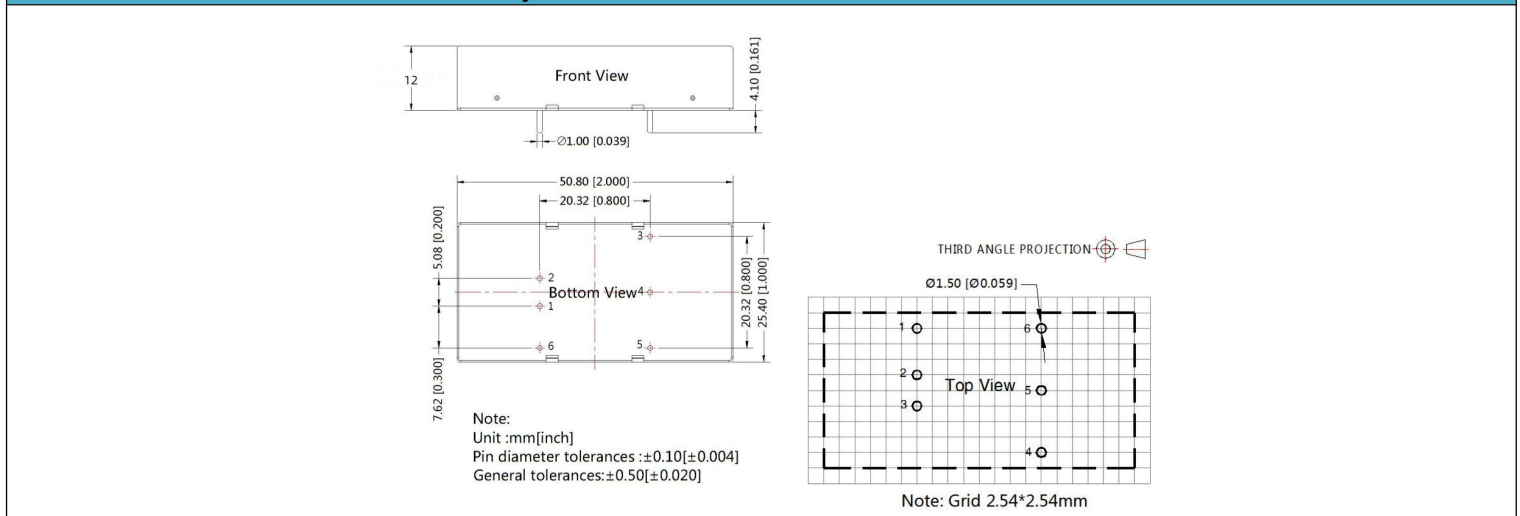
Item	Typ	Max	Test Conditions
Voltage Accuracy	±1%	±3%	0-100% load
Line Regulation	±0.2%	±0.5%	Input voltage variation from low to high at full load
Load Regulation	±0.5%	±1%	5%-100% load
Ripple&Noise	-	100mVp-p	20MHz bandwidth, 5%-100% load
Transient Recovery Time	300µs	500µs	25% load step change, Nominal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

Vin(VDC)		Cin(uF)	
12		100uF/25V	
24		100uF/50V	
48		100uF/100V	
Single Vout (VDC)	Cout (uF)	Dual Vout (VDC)	Cout (uF)
3.3/5	470/16V	±5	220/16V
9/12/15	220/25V	±9/±12/±15	100/25V
24	100/50V	±24	100/50V
110	--	--	--

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.