

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

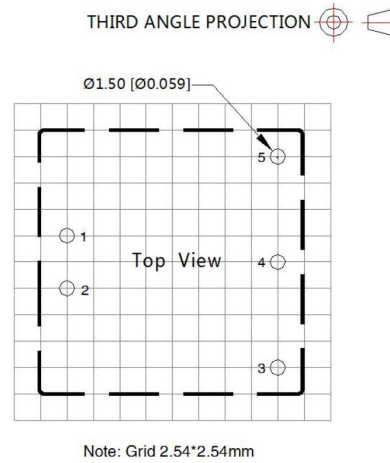
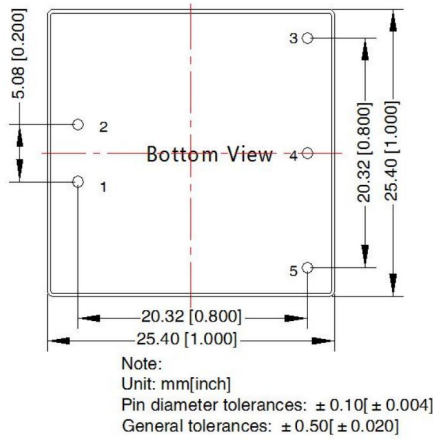
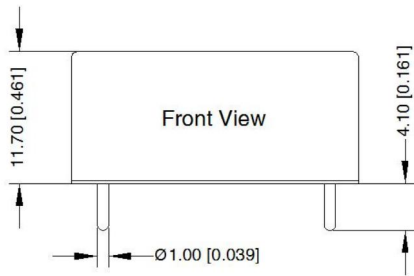
Part No.	INPUT		OUTPUT			Full Load Efficiency (%) / Typ.	Capacitive Load (μF)
	Normal (Vdc)	Range (Vdc)	Voltage (V1dc)	Current Min (mA)	Current Max (mA)		
VRA1205YMD-6WR3	12	9-18	±5	0	±600	81	470
VRA1212YMD-6WR3			±12	0	±250	85	100
VRA1215YMD-6WR3			±15	0	±200	83	100
VRB1205YMD-6WR3			5	0	1200	81	1000
VRB1212YMD-6WR3			12	0	500	85	470
VRA2405YMD-6WR3	24	18-36	±5	0	±600	83	470
VRA2412YMD-6WR3			±12	0	±250	87	100
VRA2415YMD-6WR3			±15	0	±200	87	100
VRB2403YMD-6WR3			3.3	0	1500	77	1800
VRB2405YMD-6WR3			5	0	1200	82	1000
VRB2409YMD-6WR3			9	0	667	85	470
VRB2412YMD-6WR3			12	0	500	85	470
VRB2415YMD-6WR3			15	0	400	86	220
VRB2424YMD-6WR3			24	0	250	85	100
VRB4803YMD-6WR3			48	36-72	3.3	0	1500
VRB4805YMD-6WR3	5	0			1200	83	1000
VRB4812YMD-6WR3	12	0			500	87	470
VRB4815YMD-6WR3	15	0			400	88	220
VRB4824YMD-6WR3	24	0			250	88	100

customized accepted, pls contact sales for details

Input Specifications

Input Voltage Range	Input Voltage Range (Vdc)	Nom(Vdc)	Max (Vdc)
	9-18	12	18
	18-36	24	36
	36-72	48	72
Input Filter	Capacitive Filter		
Ctrl	NONE		
	NONE		

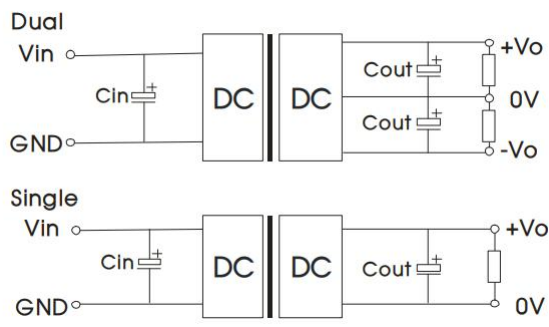
Hot Plug	Unavailable		
Output Specifications			
Item	Typ	Max	Test Conditions
Voltage Accuracy	±1%	±3%	5%-100% load
No-load Output Voltage Accuracy	±1.5%	±5%	Input voltage range
Balance Of Output Voltage	±0.5%	±1%	Dual output, balanced load
Line Regulation	±0.2%	±0.5%	Input voltage variation from low to high at full load
Load Regulation	±0.2%	±0.5%	5%-100% load
Ripple&Noise	100mVp-p	120mVp-p	24Vout
	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	Dual	
1	GND	GND	
2	Vin	Vin	
3	+Vo	+Vo	
4	No Pin	0V	
5	0V	-Vo	

Recommended Circuit



Recommended input and output capacitor values

Vin(VDC)	Cin(uF)	Cout(uF)
12	100μF/25V	Vo(3/±3/5/±5/9/±9):10μF/16V Vo(12/±12/15/±15V):10μF/25V
24	10 - 47μF/50V	Vo(24/±24V):10μF/50V
48	100μF/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.