FEATURES：

- Wide input range
- Continuous short-circuit protection,self recover
- I/O isolation voltage 1.5KV
- Working temperature：-40℃～+85℃
- 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 Min(mA)	Current Max(mA)	Full Load Efficiency (%)/Typ.	
URA2405ZP-10WR3	24	9-36	±5	0	±1000	83	1000
URA2412ZP-10WR3			±12	0	±416	87	470
URA2415ZP-10WR3			±15	0	±333	87	330
URB2403ZP-10WR3			3.3	0	2400	86	1200
URB2405ZP-10WR3			5	0	2000	87	1000
URB2412ZP-10WR3			12	0	833	87	470
URB2415ZP-10WR3			15	0	667	87	330
URB2424ZP-10WR3			24	0	416	88	100
URA4805ZP-10WR3	48	18-72	±5	0	±1000	83	1000
URA4812ZP-10WR3			±12	0	±416	87	470
URA4815ZP-10WR3			±15	0	±333	87	330
URB4803ZP-10WR3			3.3	0	2400	85	1200
URB4805ZP-10WR3			5	0	2000	86	1000
URB4812ZP-10WR3			12	0	833	87	470
URB4815ZP-10WR3			15	0	667	87	330
URB4824ZP-10WR3			24	0	416	88	100

customized accepted,pls contact sales for details

Input Specifications

	Input Voltage Range（Vdc）	Nom(Vdc)	Max（Vdc）
Input Voltage	9-36	24	36
	18-72	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

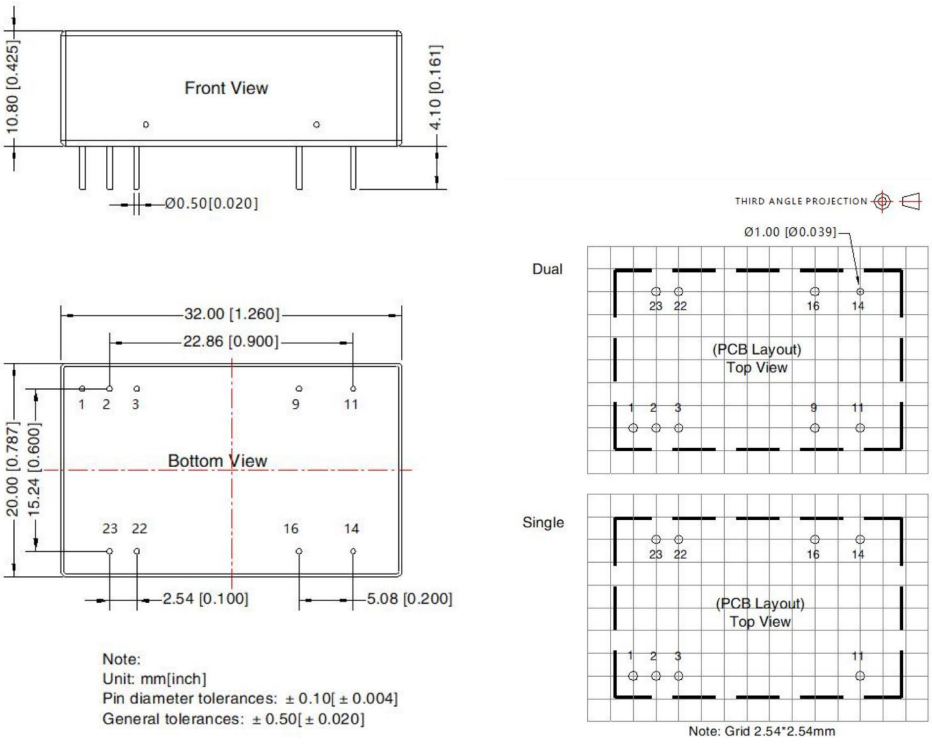
Load Regulation	±0.5%	±1%	5%-100% load
Ripple&Noise	-	100mVp-p	20MHz bandwidth, 5%-100% load
Transient Recovery Time	300μs	500μs	25% load step change, Nominal input voltage
Over-voltage Protection	-	160%Vo	110%Vo(Min)
Over-current Protection	140%Io	190%Io	110%Io(Min)
Short-circuit Protection			Continuous,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

Gerneral Specifications

Switching Frequency	300KHz(Typ)	PWM mode
MTBF	1000 K hours	MIL-HDBK-217F@25℃
Temperature Coefficient	0.03%/℃	100% full load
Isolation（Input-Output）	1.5KVDC	
Insulation Resistance	1000MΩ	Input-output resistance 500Vdc
Operating Temperature	-40～+85℃	
Storage Temperature	-55～+125℃	
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℃ room temperature environment.

Dimensions and Recommended Layout

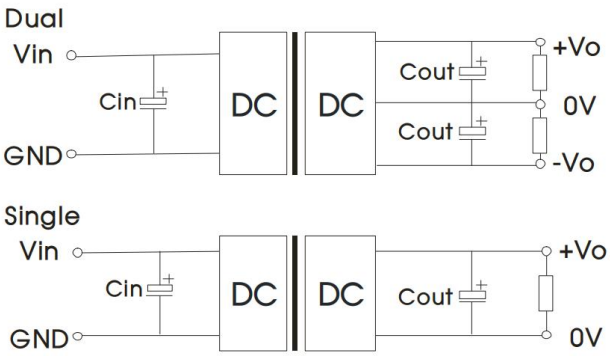


Pins

Pin	Single	Dual	

1	CTRL	CTRL	
2.3	GND	GND	
9	No Pin	0V	
11	NC	-Vo	
14	+Vo	+Vo	
16	0V	0V	
22,23	Vin	Vin	

Recommended Circuit



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