

Typical Performance

FEATURES

- 2:1 Wide Input range, isolation, regulated output, 1W
- I/O Isolation : 3000VDC
- Efficiency : up to 80%
- Short circuit protection (automatic recovery)
- Working temperature -40°C ~ +85°C
- MTBF ≥ 10×10⁵ Hrs
- In line with RoHS Compliant
- Positive voltage accuracy: ±1% (typ)
- Negative voltage accuracy: ±3% (typ)
- Line regulation (Vin from low to high): ±0.2% (typ)
- Load regulation (10%-100% load) : ±0.5%
- Ripple & noise (20MHz Band width) < 75mVp-p
- Temperature drift (100% full load): ±0.03%/°C (max)
- Switching Frequency (Full load, nominal input): 300Khz (PFM)
- Storage Temperature: -55°C ~ +125°C
- Isolation Resistance: 1000MΩ/1min
- Cooling: Free air convection



3-Years Product Warranty

Product Program

Part #	Input voltage range	Nominal output voltage / output current						Efficiency (%, typ)
		VO1			VO2			
		Voltage (VDC)	Min (mA)	Max (mA)	Voltage (VDC)	Min (mA)	Max (mA)	
WRE0505S-1WR2	5V(4. 5~9VDC)	±5	±5	±100				67
WRE0512S-1WR2		±12	±2	±42				72
WRE0515S-1WR2		±15	±2	±33				73
WRF0505S-1WR2		5	10	200				
WRF0512S-1WR2		12	4	83				
WRF0515S-1WR2		15	3	67				
WRE1205S-1WR2	12V(9~18VDC)	±5	±5	±100				67
WRE1212S-1WR2		±24	±2	±42				78
WRE1215S-1WR2		±15	±2	±33				77
WRF1203S-1WR2		3.3	15	303				72
WRF1205S-1WR2		5	10	200				
WRF1209S-1WR2		9	6	111				73

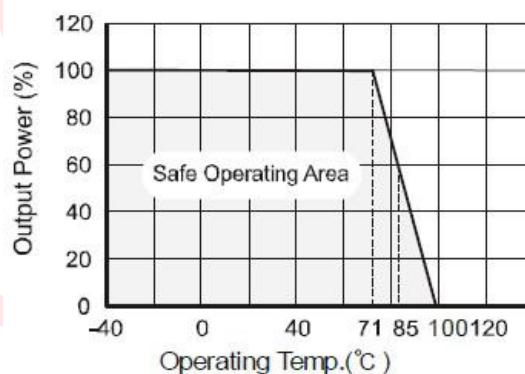
WRF1212S-1WR2		24	4	83				
WRF1215S-1WR2		15	3	67				
WRE2405S-1WR2		±5	±5	±100				
WRE2412S-1WR2	24V(18~36VDC)	±12	±2	±42				68
WRE2415S-1WR2		±15	±2	±33				75
WRF2403S-1WR2		3.3	15	303				77
WRF2405S-1WR2		5	10	200				79
WRF2412S-1WR2		12	4	83				80
WRF2415S-1WR2		15	3	67				78
WRF2424S-1WR2		24	2	42				76
WRE4805S-1WR2		±5	±5	±100				78
WRE4812S-1WR2	48V(36~72VDC)	±12	±2	±42				79
WRE4815S-1WR2		±15	±2	±33				78
WRF4803S-1WR2		3.3	20	200				67
WRF4805S-1WR2		5	10	200				77
WRF4812S-1WR2		12	4	83				79
WRF4815S-1WR2		15	3	67				80

- Shows the nominal value of input voltage,due to space limitations ,the above list is only for some products,If other than a list of products, please contact the Company's sales department.

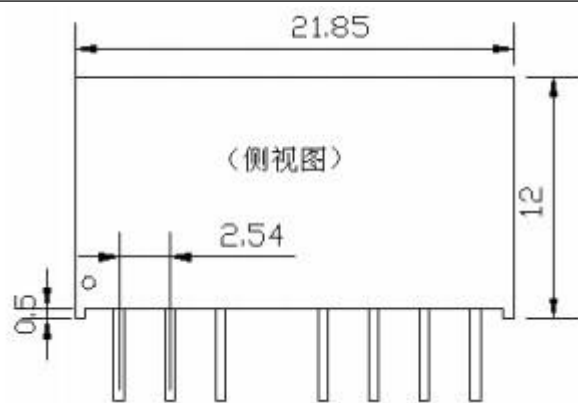
Mechanical Data

Packing Code	L x W x H : mm	Packing No.
WRF(E)_S-1WR2	22.00*9.5 *12	

Typical Temperature Curve



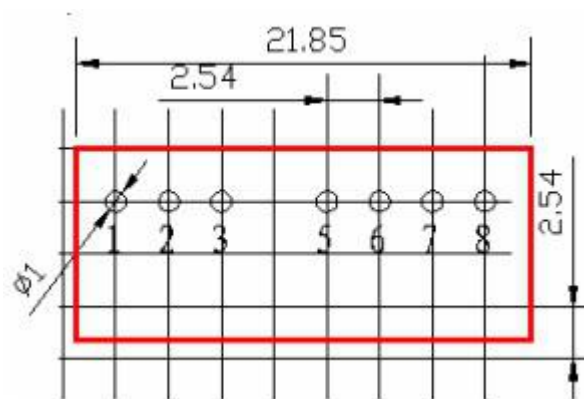
Mechanical Dimension



LATERAL VIEW



BOTTOM VIEW



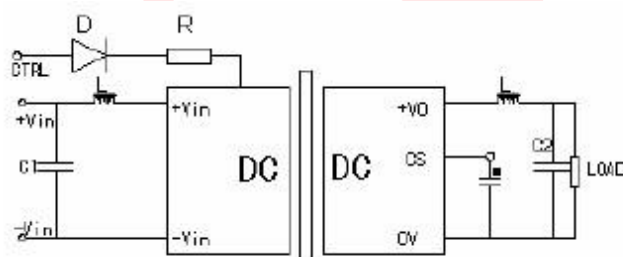
Recommended PCB Layout

UNIT:mm

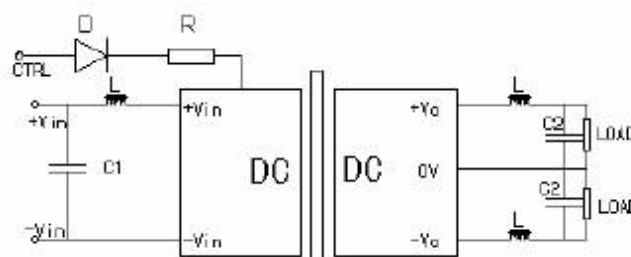
Pin Assignment

PIN	1	2	3	5	6	7	8			
Single output	GND	Vin	CTRL	NC	+Vo	0V	CS			
Dual output	GND	Vin	CTRL	NC	+Vo	0V	-Vo			

Recommend Circuit



Single O/P



Dual O/P

C1、C2 select

Single O/P	C1	Dual O/P	C2
3.3VDC	1000uF	±5 VDC	330uF
5VDC	680uF	±9 VDC	330uF
9VDC	560uF	±12 VDC	220uF

12VDC	470uF	±15 VDC	150uF
15VDC	330uF	±24VDC	100uF
24VDC	220uF	---	---

Application Note

1. The load shouldn't be over the max load and shouldn't be less than 10%, otherwise the ripple will increase dramatically, then they may not meet all specification listed.
2. To be more reliable, if your circuit load power demand is smaller, please connect an appropriate resistor to increase Load in following output.
3. This product doesn't support hot-swappable, can't be used in parallel.

*Note: The power modules such as the definition of the pin does not match with the hand book, please refer to the actual item.