



FEATURES

- ◆ Wide (2:1) Input Range
- ◆ Short Circuit Protection(automatic recovery)
- ◆ 1500VDC Isolation
- ◆ Operating Temperature: -40°C ~ +85°C
- ◆ Five sided metal shielding
- ◆ No external component required
- ◆ Internal SMD construction
- ◆ RoHS Compliance
- ◆ MTBF>1000Hours

MODEL SELECTION

WRB^① 24^② 15^③ Y^④ D^⑤ -6W^⑥

- ① Product Series ② Input Voltage
 ③ Output Voltage ④ Wide (2:1) Input Range
 ⑤ DIP Package Style ⑥ Rated Power

APPLICATIONS

The WRA_YD-6W&WRB_YD-6W Series are specially designed for applications where a wide range input voltage power supplies are isolated from the input power supply in a distributed power supply system on a circuit board. These products apply to:

- 1) Where the voltage of the input power supply is wide range (Voltage range ≤ 2:1);
- 2) Where isolation is necessary between input and output (Isolation voltage ≤ 1500VDC);
- 3) Where the regulation of the Output voltage and the output ripple noise are demanded.



CE REACH

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SELECTION GUIDE

Order code	Input			Output			Efficiency (%Typ.)
	Voltage(VDC)			Voltage (VDC)	Current(mA)		
	Nominal	Range	Max*		Max.	Min.	
WRA0505YD-6W	5	4.5-9	11	±5	±600	±60	76
WRA0512YD-6W	5	4.5-9	11	±12	±250	±25	81
WRA0515YD-6W	5	4.5-9	11	±15	±200	±20	83
WRB0505YD-6W	5	4.5-9	11	5	1200	120	76
WRB0512YD-6W	5	4.5-9	11	12	500	50	81
WRB0515YD-6W	5	4.5-9	11	15	400	40	81
WRA1205YD-6W	12	9-18	22	±5	±600	±60	76
WRA1212YD-6W	12	9-18	22	±12	±250	±25	81
WRA1215YD-6W	12	9-18	22	±15	±200	±20	83
WRB1203YD-6W	12	9-18	22	3.3	1500	150	74
WRB1205YD-6W	12	9-18	22	5	1200	120	76
WRB1212YD-6W	12	9-18	22	12	500	50	81
WRB1215YD-6W	12	9-18	22	15	400	40	81
WRA2405YD-6W	24	18-36	40	±5	±600	±60	76
WRA2412YD-6W	24	18-36	40	±12	±250	±25	81
WRA2415YD-6W	24	18-36	40	±15	±200	±20	83
WRB2403YD-6W	24	18-36	40	3.3	1500	150	74
WRB2405YD-6W	24	18-36	40	5	1200	120	76
WRB2407YD-6W	24	18-36	40	7	857.1	85.71	78
WRB2412YD-6W	24	18-36	40	12	500	50	81
WRB2415YD-6W	24	18-36	40	15	400	40	81
WRA4805YD-6W	48	36-72	80	±5	±600	±60	85
WRA4812YD-6W	48	36-72	80	±12	±250	±25	83
WRA4815YD-6W	48	36-72	80	±15	±200	±20	85
WRB4803YD-6W	48	36-72	80	3.3	1500	150	74
WRB4805YD-6W	48	36-72	80	5	1200	120	78
WRB4812YD-6W	48	36-72	80	12	500	50	80
WRB4815YD-6W	48	36-72	80	15	400	40	80

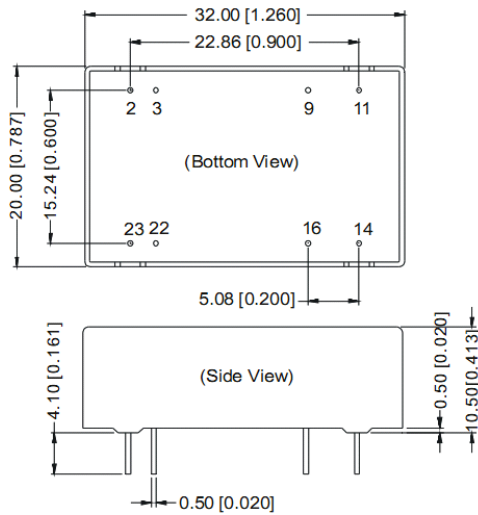
*Input voltage can't exceed this value, or will cause the permanent damage.

COMMON SPECIFICATIONS

Parameter	Conditions	Min.	Typ.	Max.	Units
Storage humidity				95	%
Operating temperature		-40		85	°C
Storage temperature		-55		125	°C
Temp. rise at full load			40		°C
Lead temperature	1.5mm from case for 10 seconds			300	°C
No-load power			0.2		W
Cooling	Free Air Convection				
Short circuit protection	Continuous, automatic recovery				
Case material	Steel, nickel coated, copper				
Isolation voltage	Tested for 1 minute and 1mA	1500			VDC
Isolation resistance	Test at 500VDC	1000			MΩ
Isolation Capacitance	Input/Output		85		pF
MTBF		1000			K hours
Weight			17		g

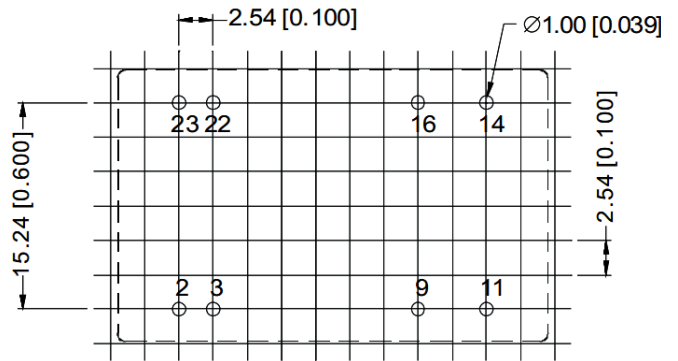
OUTLINE DIMENSIONS & FOOTPRINT DETAILS

MECHANICAL DIMENSIONS



Note:
 Unit:mm[inch]
 Pin section tolerances:±0.10mm[±0.004inch]
 General tolerances:±0.25mm[±0.010inch]

RECOMMENDED FOOTPRINT



RECOMMENDED FOOTPRINT
 Top view grid:2.54mm(0.1inch)
 diameter:1.00mm(0.039inch)

FOOTPRINT DETAILS

Pin	Single	Dual
2, 3	GND	GND
9	NC	0V
11	NC	-Vo
14	+Vo	+Vo
16	0V	0V
22, 23	Vin	Vin

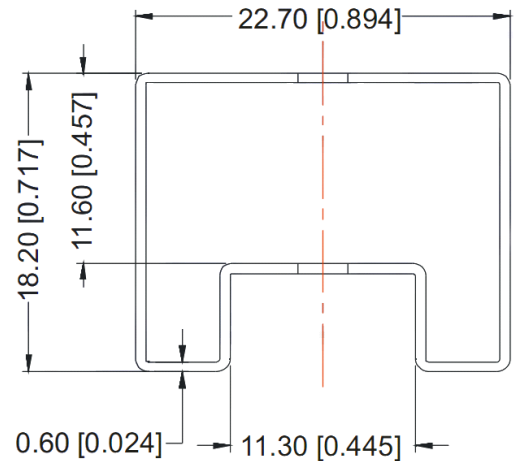
NC:No connection

When the environment temperature is higher than 71°C, the product output power should be less than 60% of the rated power.
No parallel connection or plug and play.
Use dual output simultaneously,forbid pening output pin (0V) to use as single output.

Note:

1. The load shouldn't be less than 10%, otherwise ripple will increase dramatically.
2. Operation under 10% load will not damage the converter; However, they may not meet all specification listed.
3. All specifications measured at Ta=25°C, humidity<75%, nominal input voltage and rated output load unless otherwise specified.
4. In this datasheet, all the test methods of indications are based on corporate standards.
5. Only typical models listed, other models may be different, please contact our technical person for more details.

TUBE OUTLINE DIMENSIONS



Note:

Unit :mm[inch]
 General tolerances:±0.50mm[±0.020inch]
 L=530mm[20.866inch] Tube Quantity: 15pcs
 L=220mm[8.661inch] Tube Quantity: 6pcs