



FEATURES

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

MODEL SELECTION

WRB^①24^②15^③Y^④D^⑤-3W^⑥

- ① Product Series ② Input Voltage
 ③ Output Voltage ④ Wide (2:1) Input Range
 ⑤ DIP24 Package Style ⑥ Rated Power

APPLICATIONS

The WRA_YD-3W&WRB_YD-3W 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.



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SELECTION GUIDE

Order code	Input			Output			Efficiency (%.Typ.)
	Voltage(VDC)			Voltage (VDC)	Current(mA)		
	Nominal	Range	Max*		Max.	Min.	
WRA0505YD-3W	5	4.5-9	11	±5	±300	±30	76
WRA0512YD-3W	5	4.5-9	11	±12	±125	±12	81
WRA0515YD-3W	5	4.5-9	11	±15	±100	±10	83
WRB0505YD-3W	5	4.5-9	11	5	600	60	76
WRB0512YD-3W	5	4.5-9	11	12	250	25	81
WRB0515YD-3W	5	4.5-9	11	15	200	20	81
WRA1205YD-3W	12	9-18	22	±5	±300	±30	76
WRA1212YD-3W	12	9-18	22	±12	±125	±12	81
WRA1215YD-3W	12	9-18	22	±15	±100	±10	83
WRB1203YD-3W	12	9-18	22	3.3	909	91	74
WRB1205YD-3W	12	9-18	22	5	600	60	76
WRB1212YD-3W	12	9-18	22	12	250	25	81
WRB1215YD-3W	12	9-18	22	15	200	20	81
WRA2405YD-3W	24	18-36	40	±5	±300	±30	76
WRA2412YD-3W	24	18-36	40	±12	±125	±12	81
WRA2415YD-3W	24	18-36	40	±15	±100	±10	83
WRB2403YD-3W	24	18-36	40	3.3	909	91	74
WRB2405YD-3W	24	18-36	40	5	600	60	76
WRB2412YD-3W	24	18-36	40	12	250	25	81
WRB2415YD-3W	24	18-36	40	15	200	20	81
WRB2424YD-3W	24	18-36	40	24	125	20	80
WRA4805YD-3W	48	36-72	80	±5	±300	±30	85
WRA4812YD-3W	48	36-72	80	±12	±125	±12	83
WRA4815YD-3W	48	36-72	80	±15	±100	±10	85
WRB4803YD-3W	48	36-72	80	3.3	909	91	74
WRB4805YD-3W	48	36-72	80	5	600	60	78
WRB4812YD-3W	48	36-72	80	12	250	25	80
WRB4815YD-3W	48	36-72	80	15	200	20	80
WRB11012YD-3W	110	72-144	155	12	250	25	80
WRB11024YD-3W	110	72-144	155	24	125	12	78

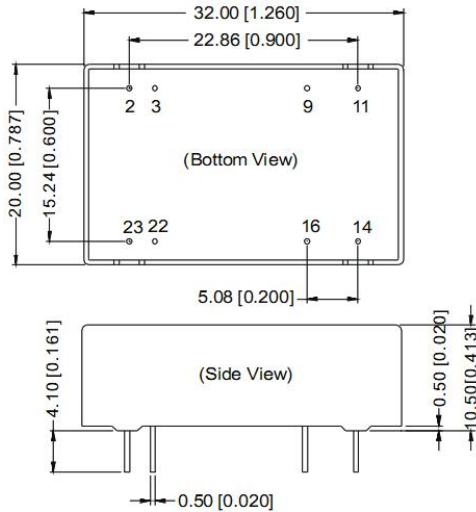
*Input voltage can't exceed this value, or will cause the permanent damage.

COMMON SPECIFICATIONS

Parameter	Conditions	Min.	Typ.	Max.	Units
Storage humidity				95	%
Operating temperature		-40		85	℃
Storage temperature		-55		125	℃
Temp. rise at full load			15		℃
Lead temperature	1.5mm from case for 10 seconds			300	℃
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			15		g

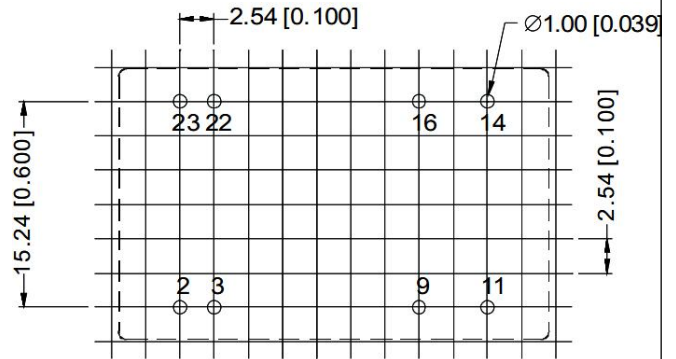
OUTLINE DIMENSIONS & FOOTPRINT DETAILS

MECHANICAL DIMENSIONS



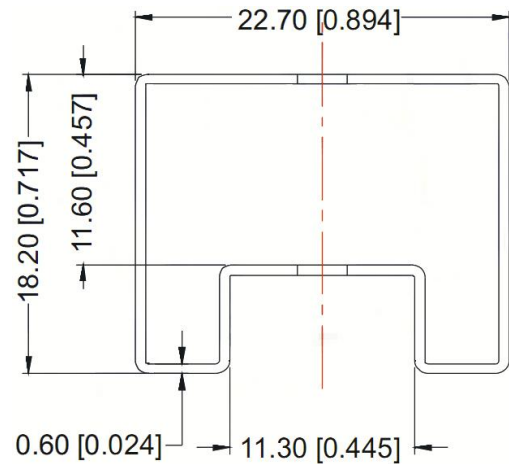
Note:
Unit:mm[inch]
Pin section tolerances:±0.10mm[±0.004inch]
General tolerances:±0.25mm[±0.010inch]

RECOMMENDED FOOTPRINT



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

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

FOOTPRINT DETAILS

Pin	Single	Dual
2、3	GND	GND
9	NO PIN	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 then 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.