



FEATURES

- ◆ Wide (2:1) Input Range
- ◆ 24Pin DIP Package
- ◆ 3000VDC Isolation
- ◆ Operating Temperature: -40℃ ~ + 85℃
- ◆ High Efficiency Up To 81%
- ◆ Low Profile Metal Package
- ◆ Continuous Short Circuit Protection
- ◆ Pin-Compatible With Multiple Manufacturers
- ◆ RoHS Compliance
- ◆ MTBF>1000Hours

MODEL SELECTION

WRE[®]24[®]15[®]Y[®]D[®]-4W(133)[®]

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

APPLICATIONS

The WRE_YD-4W & WRF_YD-4W 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≤3000VDC);
- 3) Where the regulation of the Output voltage and the output ripple noise are demanded.



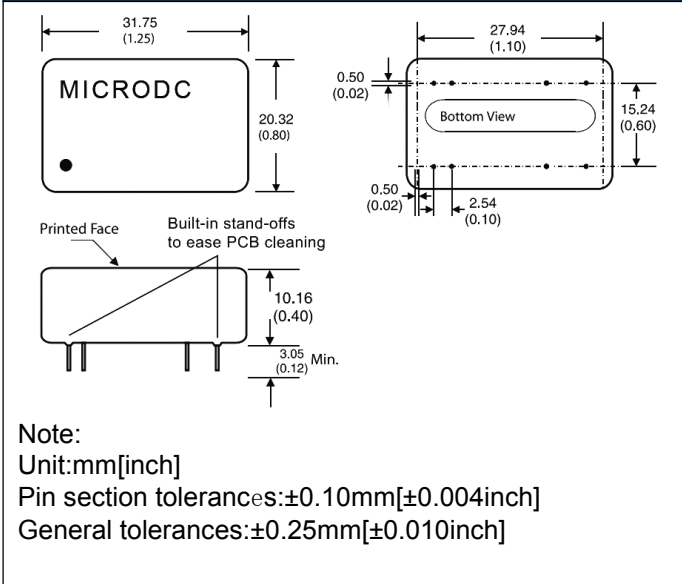
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SELECTION GUIDE

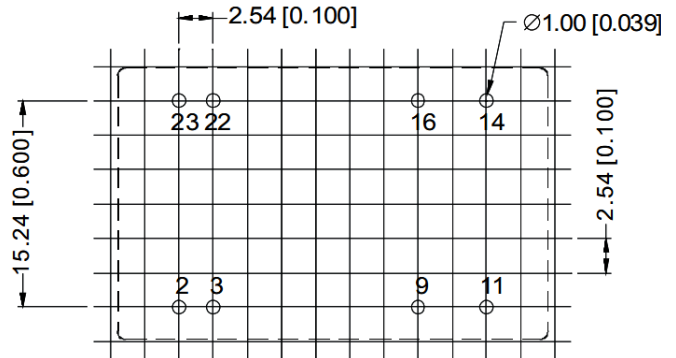
| Order code | Input | | Output | |
|----------------|--------------|---------------|---------|--------------|
| | Voltage(VDC) | | Voltage | Current max. |
| | Nominal | Range | | |
| WRF1203YD-1000 | 12 | 9VDC - 18VDC | 3.3VDC | 1000mA |
| WRF1205YD-4W | 12 | 9VDC - 18VDC | 5VDC | 800mA |
| WRF1207YD-4W | 12 | 9VDC - 18VDC | 7.2VDC | 556mA |
| WRF1209YD-4W | 12 | 9VDC - 18VDC | 9VDC | 444mA |
| WRF1212YD-4W | 12 | 9VDC - 18VDC | 12VDC | 333mA |
| WRF1215YD-4W | 12 | 9VDC - 18VDC | 15VDC | 267mA |
| WRF1218YD-4W | 12 | 9VDC - 18VDC | 18VDC | 222mA |
| WRF1224YD-4W | 12 | 9VDC - 18VDC | 24VDC | 167mA |
| WRF2403YD-1000 | 24 | 18VDC - 36VDC | 3.3VDC | 1000mA |
| WRF2405YD-4W | 24 | 18VDC - 36VDC | 5VDC | 800mA |
| WRF2407YD-4W | 24 | 18VDC - 36VDC | 7.2VDC | 556mA |
| WRF2409YD-4W | 24 | 18VDC - 36VDC | 9VDC | 444mA |
| WRF2412YD-4W | 24 | 18VDC - 36VDC | 12VDC | 333mA |
| WRF2415YD-4W | 24 | 18VDC - 36VDC | 15VDC | 267mA |
| WRF2418YD-4W | 24 | 18VDC - 36VDC | 18VDC | 222mA |
| WRF2424YD-4W | 24 | 18VDC - 36VDC | 24VDC | 167mA |
| WRF4803YD-1000 | 48 | 36VDC - 72VDC | 3.3VDC | 1000mA |
| WRF4805YD-4W | 48 | 36VDC - 72VDC | 5VDC | 800mA |
| WRF4807YD-4W | 48 | 36VDC - 72VDC | 7.2VDC | 556mA |
| WRF4809YD-4W | 48 | 36VDC - 72VDC | 9VDC | 444mA |
| WRF4812YD-4W | 48 | 36VDC - 72VDC | 12VDC | 333mA |
| WRF4815YD-4W | 48 | 36VDC - 72VDC | 15VDC | 267mA |
| WRF4818YD-4W | 48 | 36VDC - 72VDC | 18VDC | 222mA |
| WRF4824YD-4W | 48 | 36VDC - 72VDC | 24VDC | 167mA |
| WRE1203YD-500 | 12 | 9VDC - 18VDC | ±3.3VDC | ±500mA |
| WRE1205YD-4W | 12 | 9VDC - 18VDC | ±5VDC | ±400mA |
| WRE1207YD-4W | 12 | 9VDC - 18VDC | ±7.2VDC | ±278mA |
| WRE1209YD-4W | 12 | 9VDC - 18VDC | ±9VDC | ±222mA |
| WRE1212YD-4W | 12 | 9VDC - 18VDC | ±12VDC | ±167mA |
| WRE1215YD-4W | 12 | 9VDC - 18VDC | ±15VDC | ±133mA |
| WRE1218YD-4W | 12 | 9VDC - 18VDC | ±18VDC | ±111mA |
| WRE1224YD-4W | 12 | 9VDC - 18VDC | ±24VDC | ±83mA |
| WRE2403YD-500 | 24 | 18VDC - 36VDC | ±3.3VDC | ±500mA |
| WRE2405YD-4W | 24 | 18VDC - 36VDC | ±5VDC | ±400mA |
| WRE2407YD-4W | 24 | 18VDC - 36VDC | ±7.2VDC | ±278mA |
| WRE2409YD-4W | 24 | 18VDC - 36VDC | ±9VDC | ±222mA |
| WRE2412YD-4W | 24 | 18VDC - 36VDC | ±12VDC | ±167mA |
| WRE2415YD-4W | 24 | 18VDC - 36VDC | ±15VDC | ±133mA |
| WRE2418YD-4W | 24 | 18VDC - 36VDC | ±18VDC | ±111mA |
| WRE2424YD-4W | 24 | 18VDC - 36VDC | ±24VDC | ±83mA |
| WRE4803YD-500 | 48 | 36VDC - 72VDC | ±3.3VDC | ±500mA |
| WRE4805YD-4W | 48 | 36VDC - 72VDC | ±5VDC | ±400mA |
| WRE4807YD-4W | 48 | 36VDC - 72VDC | ±7.2VDC | ±278mA |
| WRE4809YD-4W | 48 | 36VDC - 72VDC | ±9VDC | ±222mA |
| WRE4812YD-4W | 48 | 36VDC - 72VDC | ±12VDC | ±167mA |
| WRE4815YD-4W | 48 | 36VDC - 72VDC | ±15VDC | ±133mA |
| WRE4818YD-4W | 48 | 36VDC - 72VDC | ±18VDC | ±111mA |
| WRE4824YD-4W | 48 | 36VDC - 72VDC | ±24VDC | ±83mA |

OUTLINE DIMENSIONS & FOOTPRINT DETAILS

MECHANICAL DIMENSIONS



RECOMMENDED FOOTPRINT



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

FOOTPRINT DETAILS

| Pin | Single | Dual |
|--------|-----------|-----------|
| 2, 3 | -V Input | -V Input |
| 9 | N.C | Common |
| 11 | N.C | -V Output |
| 14 | +V Output | +V Output |
| 16 | -V Output | Common |
| 22, 23 | +V Input | +V Input |

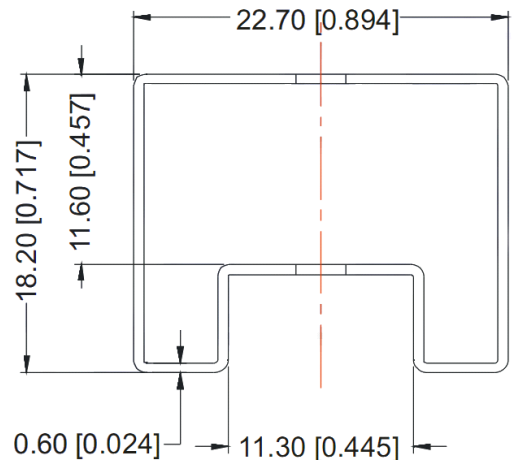
NC:No connection

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:

- The load shouldn't be less than 10%, otherwise ripple will increase dramatically.
- Operation under 10% load will not damage the converter; However, they may not meet all specification listed.
- All specifications measured at Ta=25°C, humidity<75%, nominal input voltage and rated output load unless otherwise specified.
- In this data sheet, all the test methods of indications are based on corporate standards.
- 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