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# RDS100-24

## SPECIFICATIONS

B029-01-01D

| ITEMS \ MODEL | | | | RDS100-24-5 | RDS100-24-12 | RDS100-24-15 | RDS100-24-24 |
|---|---|---|---|---|---|---|---|
| 1 | Nominal Output Voltage | | V | 5 | 12 | 15 | 24 |
| 2 | Maximum Output Current | | A | 20 | 8.3 | 6.6 | 4.2 |
| 3 | Maximum Output Power | | W | 100 | 99.6 | 99 | 100.8 |
| 4 | Efficiency (Typ) | (*1) | % | 78 | 79 | | 80 |
| 5 | Input Voltage Range | | - | 18 - 32VDC | | | |
| 6 | Input Current (Typ) | (*1) | A | 5.4 | | | |
| 7 | Inrush Current (Typ) | (*1) | - | 4.7A at Cold Start | | | |
| 8 | Output Voltage Range | (*8) | V | 4.0 - 6.0 | 9.6 - 14.4 | 12.0 - 18.0 | 19.2 - 28.8 |
| 9 | Maximum Ripple | (*2) | mV | 50 | 80 | 80 | 100 |
| 10 | Maximum Ripple & Noise | (*2) | mV | 100 | 170 | 200 | 290 |
| 11 | Maximum Line Regulation | (*3) | mV | 40 | 96 | 120 | 192 |
| 12 | Maximum Load Regulation | (*4) | mV | 50 | 100 | 100 | 200 |
| 13 | Temperature Coefficient | | - | Less than 0.02 %/℃ | | | |
| 14 | Over Current Protection | (*5) | A | 22 - 24 | 9.3 - 9.9 | 7.4 - 7.9 | 4.7 - 5.1 |
| 15 | Over Voltage Protection | (*6) | V | 6.2 - 7.5 | 15.0 - 18.0 | 18.5 - 22.5 | 29.5 - 36.0 |
| 16 | Remote ON/OFF control | | - | Possible | | | |
| 17 | Parallel Operation | | - | - | | | |
| 18 | Series Operation | | - | Possible | | | |
| 19 | Operating Temperature | (*7) | - | -20 - +60°C (-20 - +50°C:100%, +60°C:70%) | | | |
| 20 | Operating Humidity | | - | 20 - 95%RH (No Condensing) | | | |
| 21 | Storage Temperature | | - | -25 - +75°C | | | |
| 22 | Storage Humidity | | - | 20 - 95%RH (No Condensing) | | | |
| 23 | Cooling | | - | Convection Cooling | | | |
| 24 | Withstand Voltage | | - | I/P - O/P, I/P - FG : 2kVAC (10mA) for 1min.,<br>O/P - CNT(RC) : 100VAC (100mA) for 1min. | | | |
| 25 | Isolation Resistance | | - | O/P - FG : 500VDC 100Mohm, O/P - CNT(RC) : 100VDC 10Mohm | | | |
| 26 | Vibration | | - | 10 - 55Hz : 19.6m/s$^2$, X,Y,Z 1hour each.<br>Designed to meet JIS E 3014-2-B | | | |
| 27 | Shock | | - | 294m/s$^2$ (time : 6±3ms)<br>Designed to meet JIS E 3015-2-B | | | |
| 28 | Safety | | - | Approved by UL60950-1 & CSA60950-1,<br>Designed to meet EN60950-1 | | | |
| 29 | Conducted Emission | | - | Designed to meet EN55011/EN55022-A, FCC-ClassA, VCCI-A | | | |
| 30 | Radiated Emission | | - | Designed to meet EN55011/EN55022-A, FCC-ClassA, VCCI-A | | | |
| 31 | Immunity | | - | Designed to meet IEC61000-4-2(Level 2,3), -4(Level 3), -8(Level 4) | | | |
| 32 | Weight (Typ) | | g | 850 | | | |
| 33 | Size (W x H x D) | | mm | 60 x 95 x 220 ( Refer to Outline Drawing ) | | | |

*Read instruction manual carefully, before using the power supply unit.

=NOTES=

*1. At 24VDC, Ta=25°C, nominal output voltage and maximum output power.

*2. Measure with JEITA RC-9131A probe, Bandwidth of scope :100MHz.

*3. 18 - 32VDC, constant load.

*4. No load-Full load, constant input voltage.

*5. OCP TYPE : Constant current limit with automatic recovery.

*6. OVP circuit will shut the output down, manual reset (Re power on).

*7. Ratings
- Derating at standard mounting. Refer to output derating curve(B029-01-02_).
- Load (%) is percent of maximum output power or maximum output current, whichever is greater.

*8. At 24VDC Input.(Refer to instruction manual.)

# RDS100-24

## OUTPUT DERATING

B029-01-02A

*COOLING : CONVECTION COOLING

| Ta (°C) | LOAD (%) | |
|---|---|---|
| | MOUNTING A | MOUNTING B |
| -20 - +40 | 100 | 100 |
| 50 | 100 | 70 |
| 60 | 70 | - |