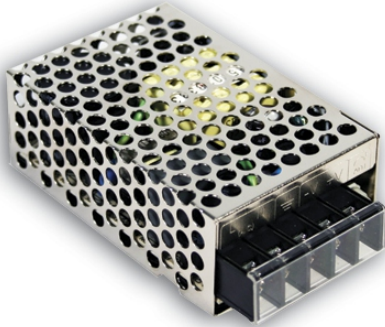




## 25W Single Output Switching Power Supply

# RS-25 series



### ■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- All using 105°C long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- High operating temperature up to 70°C
- Withstand 5G vibration test
- No load power consumption < 0.5W
- High efficiency, long life and high reliability
- 3 years warranty

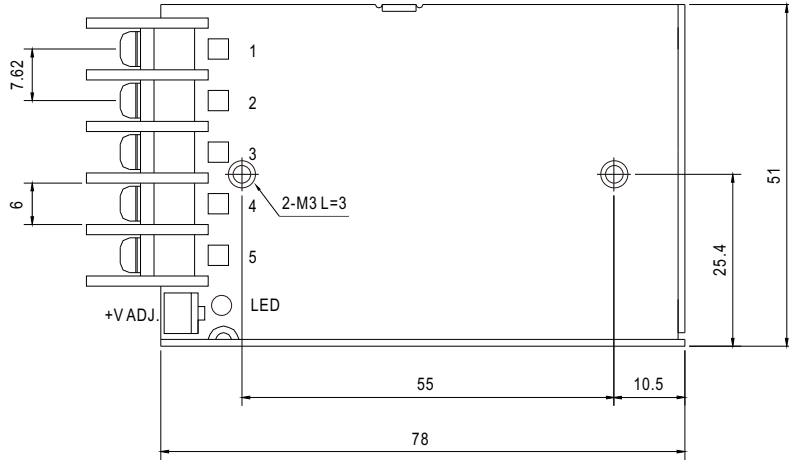


### SPECIFICATION

| MODEL                 | RS-25-3.3  | RS-25-5   | RS-25-12     | RS-25-15     | RS-25-24       | RS-25-48     |              |
|-----------------------|--|---|--------------|--------------|----------------|--------------|--------------|
| OUTPUT                | DC VOLTAGE   | 3.3V  | 5V           | 12V          | 15V            | 24V          | 48V          |
|                       | RATED CURRENT  | 6A  | 5A           | 2.1A         | 1.7A           | 1.1A         | 0.57A        |
|                       | CURRENT RANGE  | 0 ~ 6A  | 0 ~ 5A       | 0 ~ 2.1A     | 0 ~ 1.7A       | 0 ~ 1.1A     | 0 ~ 0.57A    |
|                       | RATED POWER  | 19.8W   | 25W          | 25.2W        | 25.5W          | 26.4W        | 27.36W       |
|                       | RIPPLE & NOISE (max.) Note.2   | 80mVp-p   | 80mVp-p      | 120mVp-p     | 120mVp-p       | 120mVp-p     | 200mVp-p     |
|                       | VOLTAGE ADJ. RANGE   | 2.85 ~ 3.6V   | 4.75 ~ 5.5V  | 10.8 ~ 13.2V | 13.5 ~ 16.5V   | 22 ~ 27.6V   | 42 ~ 54V     |
|                       | VOLTAGE TOLERANCE Note.3   | ± 3.0%  | ± 2.0%       | ± 1.0%       | ± 1.0%         | ± 1.0%       | ± 1.0%       |
|                       | LINE REGULATION Note.4   | ± 0.5%  | ± 0.5%       | ± 0.5%       | ± 0.5%         | ± 0.5%       | ± 0.5%       |
|                       | LOAD REGULATION Note.5   | ± 2.0%  | ± 1.0%       | ± 0.5%       | ± 0.5%         | ± 0.5%       | ± 0.5%       |
|                       | SETUP, RISE TIME   | 1800ms, 23ms/230VAC      4000ms, 30ms/115VAC at full load   |              |              |                |              |              |
| HOLD UP TIME (Typ.)   | 80ms/230VAC      14ms/115VAC at full load  |   |              |              |                |              |              |
| INPUT                 | VOLTAGE RANGE  | 88 ~ 264VAC      125 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage)   |              |              |                |              |              |
|                       | FREQUENCY RANGE  | 47 ~ 63Hz   |              |              |                |              |              |
|                       | EFFICIENCY(Typ.)   | 73.5%   | 78.5%        | 81.5%        | 83.5%          | 86%          | 85%          |
|                       | AC CURRENT (Typ.)  | 0.7A/115VAC      0.4A/230VAC  |              |              |                |              |              |
|                       | INRUSH CURRENT (Typ.)  | COLD START 30A/230VAC   |              |              |                |              |              |
|                       | LEAKAGE CURRENT  | <2mA / 240VAC   |              |              |                |              |              |
| PROTECTION            | OVERLOAD   | 110 ~ 180% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |              |              |                |              |              |
|                       | OVER VOLTAGE   | 3.8 ~ 4.45V   | 5.75 ~ 6.75V | 13.8 ~ 16.2V | 17.25 ~ 20.25V | 27.6 ~ 32.4V | 55.2 ~ 64.8V |
| ENVIRONMENT           | WORKING TEMP.  | -20 ~ +70°C (Refer to "Derating Curve")   |              |              |                |              |              |
|                       | WORKING HUMIDITY   | 20 ~ 90% RH non-condensing  |              |              |                |              |              |
|                       | STORAGE TEMP., HUMIDITY  | -40 ~ +85°C, 10 ~ 95% RH  |              |              |                |              |              |
|                       | TEMP. COEFFICIENT  | ± 0.03%/°C (0 ~ 50°C)   |              |              |                |              |              |
|                       | VIBRATION  | 10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes   |              |              |                |              |              |
| SAFETY & EMC (Note 6) | SAFETY STANDARDS   | UL60950-1, TUV EN60950-1 approved   |              |              |                |              |              |
|                       | WITHSTAND VOLTAGE  | I/P-O/P:3KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC   |              |              |                |              |              |
|                       | ISOLATION RESISTANCE   | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH  |              |              |                |              |              |
|                       | EMC EMISSION   | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3   |              |              |                |              |              |
| OTHERS                | EMC IMMUNITY   | Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A  |              |              |                |              |              |
|                       | MTBF   | 309.7Khrs min.    MIL-HDBK-217F (25°C)  |              |              |                |              |              |
|                       | DIMENSION  | 78*51*28mm (L*W*H)  |              |              |                |              |              |
|                       | PACKING  | 0.2Kg; 60pcs/13Kg/0.46CUFT  |              |              |                |              |              |
| NOTE                  | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Line regulation is measured from low line to high line at rated load.</p> <p>5. Load regulation is measured from 0% to 100% rated load.</p> <p>6. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p> |   |              |              |                |              |              |

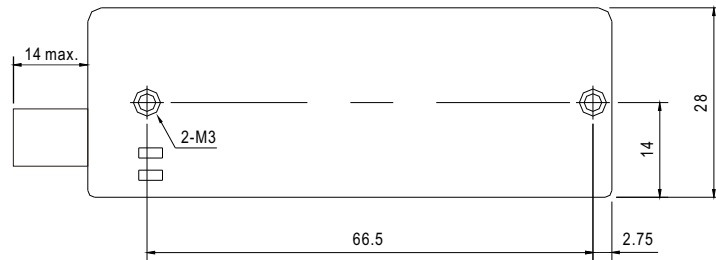
■ Mechanical Specification

Case No.931A Unit:mm



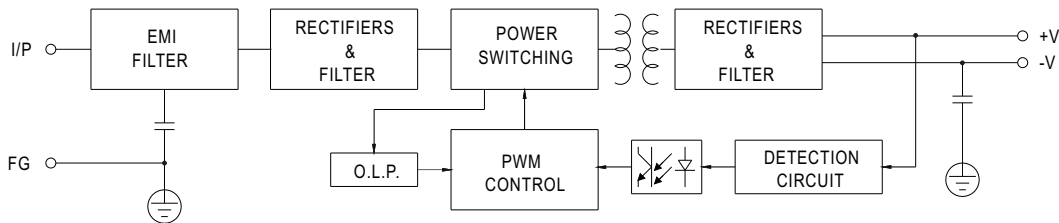
Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment   |
|---------|------------|---------|--------------|
| 1       | AC/L       | 4       | DC OUTPUT -V |
| 2       | AC/N       | 5       | DC OUTPUT +V |
| 3       | FG $\perp$ |         |              |

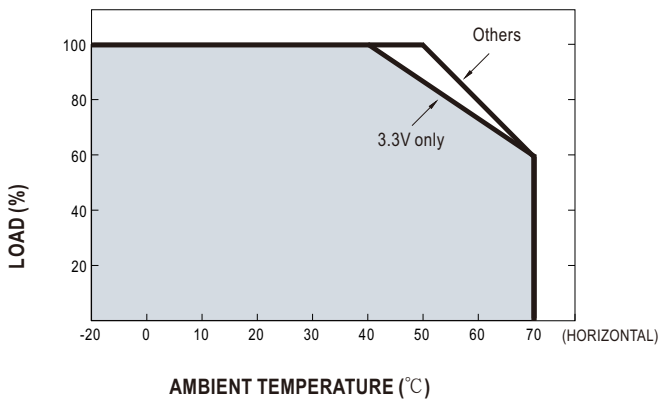


■ Block Diagram

fosc : 60KHz



■ Derating Curve



■ Output Derating VS Input Voltage

