



### 25W Single Output Switching Power Supply

EPS-25 series



#### ■ Features :

- Universal AC input / Full range
- High efficiency up to 90%
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 3"×2" compact size
- · LED indicator for power on
- No load power consumption<0.3W
- 3 years warranty

#### **SPECIFICATION**



| MODEL                       |                              | EPS-25-3.3  | EPS-25-5                             | EPS-25-7.5   | EPS-25-12    | EPS-25-15      | EPS-25-24    | EPS-25-27      | EPS-25-36    | EPS-25-48   |  |
|-----------------------------|------------------------------|---|--------------------------------------|--------------|--------------|----------------|--------------|----------------|--------------|-------------|--|
| ОИТРИТ                      | DC VOLTAGE                   | 3.3V  | 5V                                   | 7.5V         | 12V          | 15V            | 24V          | 27V            | 36V          | 48V         |  |
|                             | RATED CURRENT                | 5A  | 5A                                   | 3.4A         | 2.1A         | 1.7A           | 1.05A        | 0.95A          | 0.7A         | 0.53A       |  |
|                             | CURRENT RANGE                | 0 ~ 5.5A  | 0 ~ 5.5A                             | 0 ~ 3.74A    | 0 ~ 2.34A    | 0 ~ 1.87A      | 0 ~ 1.17A    | 0 ~ 1.05A      | 0~0.78A      | 0~0.59A     |  |
|                             | RATED POWER                  | 16.5W   | 25W                                  | 25.5W        | 25.2W        | 25.5W          | 25.2W        | 25.65W         | 25.2W        | 25.44W      |  |
|                             | PEAK LOAD(10sec.) Note.6     | 18.15W  | 27.5W                                | 28.05W       | 28.08W       | 28.05W         | 28.08W       | 28.35W         | 28.08W       | 28.32W      |  |
|                             | RIPPLE & NOISE (max.) Note.2 | 60mVp-p   | 60mVp-p                              | 80mVp-p      | 100mVp-p     | 100mVp-p       | 180mVp-p     | 180mVp-p       | 200mVp-p     | 240mVp-p    |  |
|                             | VOLTAGE ADJ. RANGE           | 3.1 ~ 3.6V  | 4.75 ~ 5.5V                          | 7.13 ~ 8.25V | 10.8 ~ 13.5V | 13.5 ~ 16.5V   | 21.6 ~ 27V   | 24.3 ~ 29.7V   | 32.4 ~ 39.6V | 43.2 ~ 52.8 |  |
|                             | VOLTAGE TOLERANCE Note.3     | ±2.0%   | ±2.0%                                | ±2.0%        | ±1.0%        | ±1.0%          | ±1.0%        | ±1.0%          | ±1.0%        | ±1.0%       |  |
|                             | LINE REGULATION              | ±0.5%   | ±0.5%                                | ±0.5%        | ±0.5%        | ±0.5%          | ±0.5%        | ±0.5%          | ±0.5%        | ±0.5%       |  |
|                             | LOAD REGULATION              | ±1.0%   | ±1.0%                                | ±1.0%        | ±0.5%        | ±0.5%          | ±0.5%        | ±0.5%          | ±0.5%        | ±0.5%       |  |
|                             | SETUP, RISE TIME             | 1000ms, 30ms/230VAC 1000ms, 30ms/115VAC at full load  |                                      |              |              |                |              |                |              |             |  |
|                             | HOLD UP TIME (Typ.)          | 50ms/230VAC 16ms/115VAC at full load  |                                      |              |              |                |              |                |              |             |  |
| INPUT                       | VOLTAGE RANGE Note.5         | 85 ~ 264VAC 120 ~ 370VDC  |                                      |              |              |                |              |                |              |             |  |
|                             | FREQUENCY RANGE              | 47 ~ 63Hz   | 47 ~ 63Hz                            |              |              |                |              |                |              |             |  |
|                             | EFFICIENCY (Typ.)            | 79%   | 81%                                  | 83%          | 86%          | 87%            | 88%          | 89%            | 89%          | 90%         |  |
|                             | AC CURRENT (Typ.)            | 0.6A/115VAC   |                                      |              |              |                |              |                |              |             |  |
|                             | INRUSH CURRENT (Typ.)        | COLD START 35A/230VAC   |                                      |              |              |                |              |                |              |             |  |
|                             | LEAKAGE CURRENT              | <1mA/240VAC   |                                      |              |              |                |              |                |              |             |  |
| PROTECTION                  | OVER LOAD                    | 115 ~ 170% rated output power   |                                      |              |              |                |              |                |              |             |  |
|                             |                              | Protection type: Hiccup mode, recovers automatically after fault condition is removed   |                                      |              |              |                |              |                |              |             |  |
|                             | OVER VOLTAGE                 | 3.7 ~ 4.6V  | 5.6 ~ 6.75V                          | 8.63~ 10.5V  | 14 ~ 17V     | 17.25 ~ 20.25V | 27.6 ~ 32.4V | 31.05 ~ 36.45V | 39.7 ~ 46.8V | 53.3 ~ 64.8 |  |
|                             |                              | Protection type: Shut down o/p voltage, re-power on to recover  |                                      |              |              |                |              |                |              |             |  |
| ENVIRONMENT                 | WORKING TEMP.                | -30 ~ +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, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes   |                                      |              |              |                |              |                |              |             |  |
| SAFETY &<br>EMC<br>(Note 4) | 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 EN55032 (CISPR32) Class B, EN61000-3-2,-3   |                                      |              |              |                |              |                |              |             |  |
|                             | EMC IMMUNITY                 | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level, criteria A   |                                      |              |              |                |              |                |              |             |  |
| OTHERS                      | MTBF                         | 655.3K hrs m  | 655.3K hrs min. MIL-HDBK-217F (25°C) |              |              |                |              |                |              |             |  |
|                             | DIMENSION                    | 76.2*50.8*24  | mm (L*W*H)                           |              |              |                |              |                |              |             |  |
|                             | PACKING                      | 0.081Kg; 120  | 0.081Kg; 120pcs/10.7Kg/0.97CUFT      |              |              |                |              |                |              |             |  |
| NOTE                        |                              | All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. |                                      |              |              |                |              |                |              |             |  |

- 3. Tolerance : includes set up tolerance, line regulation and load regulation.
- 4. 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 http://www.meanwell.com) 5. Derating may be needed under low input voltage. Please check the static characteristics for more details.
- 6. 33% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power.

7. EPS-25-15/24/27/36/48 without HS1.

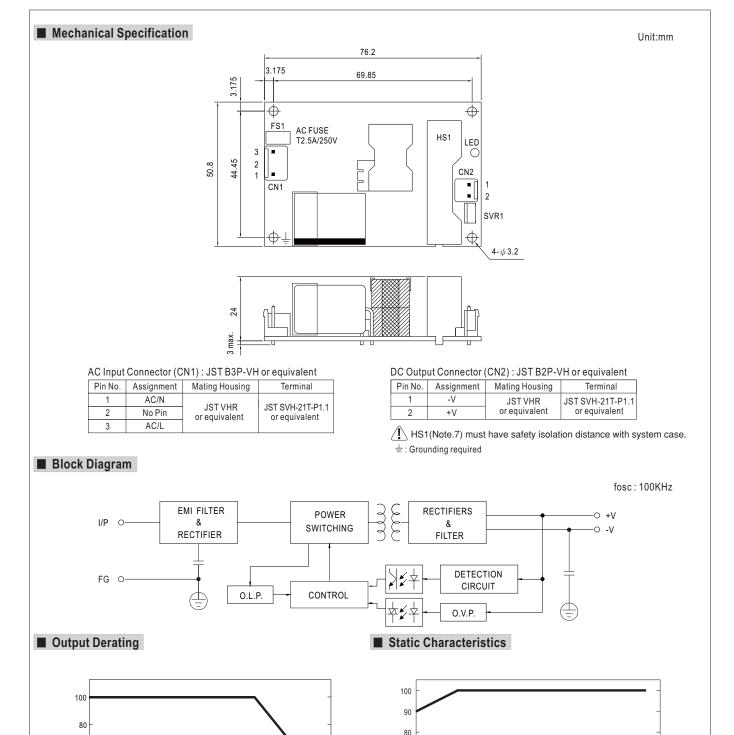


File Name:EPS-25-SPEC 2017-07-07



## 25W Single Output Switching Power Supply

# EPS-25 series





60

50

40

20

-30

LOAD (%)

File Name:EPS-25-SPEC 2017-07-07

115 120 140 160 180 200 220 240 264

INPUT VOLTAGE (V) 60Hz

70 (HORIZONTAL)

60

AMBIENT TEMPERATURE (°C)

70

50

100

(%) **GVO** 60