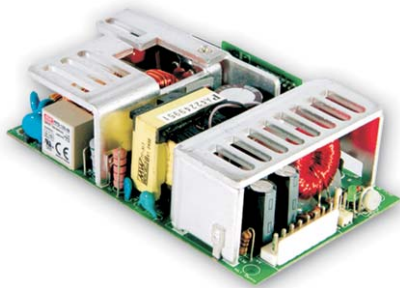


# PP125S Series

## 125W Single Output , 3"x5"



### ■ Features :

- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit/Over load/Over voltage
- PWM control and regulated
- High power density 6.117W/inch
- Built-in remote sense function
- LED indicator for power on
- 100% full load burn-in test
- 125W with 18CFM FAN
- 5"x3" compact size

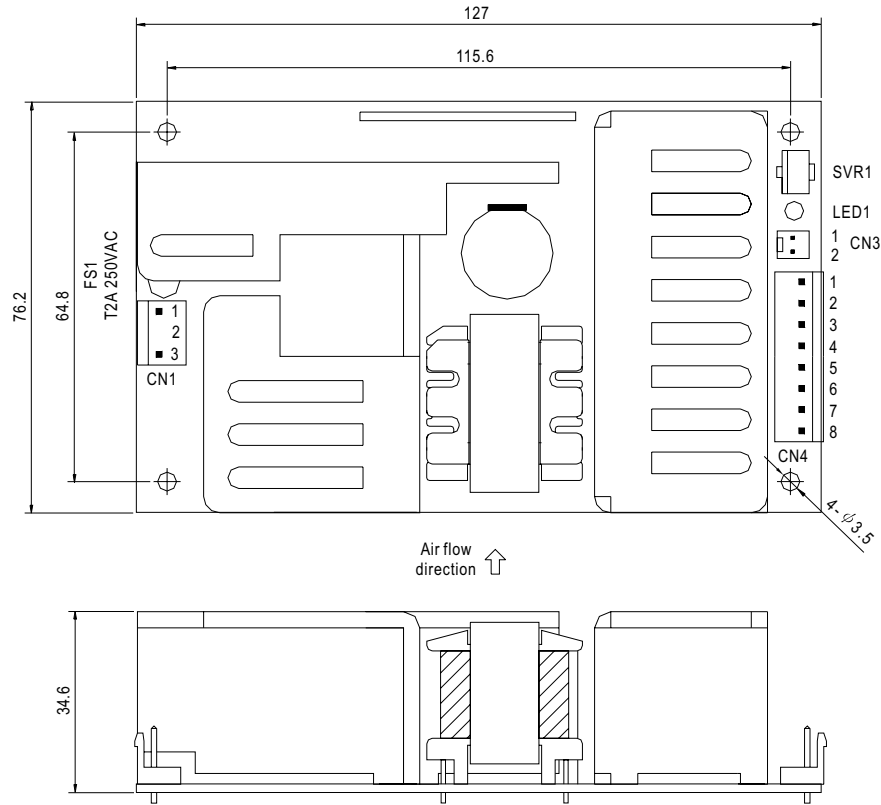


### SPECIFICATION

| MODEL                 | PP125S-3.3  | PP125S-5   | PP125S-12    | PP125S-13.5                 | PP125S-15      | PP125S-24      | PP125S-27      | PP125S-48      |                |  |
|-----------------------|---|--|--------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|--|
| OUTPUT                | DC VOLTAGE  | 3.3V   | 5V           | 12V                         | 13.5V          | 15V            | 24V            | 27V            | 48V            |  |
|                       | RATED CURRENT   | 20A  | 20A          | 8.5A                        | 7.5A           | 6.7A           | 4.2A           | 3.8A           | 2.1A           |  |
|                       | CURRENT RANGE (convection)  | 0 ~ 20A  | 0 ~ 20A      | 0 ~ 8.5A                    | 0 ~ 7.5A       | 0 ~ 6.7A       | 0 ~ 4.2A       | 0 ~ 3.8A       | 0 ~ 2.1A       |  |
|                       | CURRENT RANGE (18CFM FAN)   | 0 ~ 25A  | 0 ~ 25A      | 0 ~ 10.5A                   | 0 ~ 9.3A       | 0 ~ 8.4A       | 0 ~ 5.2A       | 0 ~ 4.6A       | 0 ~ 2.6A       |  |
|                       | RATED POWER (convection)  | 66W  | 100W         | 102W                        | 101.25W        | 100.5W         | 100.8W         | 102.6W         | 100.8W         |  |
|                       | RATED POWER (18CFM FAN)   | 82.5W  | 125W         | 126W                        | 125.55W        | 126W           | 124.8W         | 124.2W         | 124.8W         |  |
|                       | RIPPLE & NOISE (max.) Note.2  | 100mVp-p   | 100mVp-p     | 100mVp-p                    | 100mVp-p       | 100mVp-p       | 150mVp-p       | 150mVp-p       | 250mVp-p       |  |
|                       | VOLTAGE ADJ. RANGE  | 3.13 ~ 3.46V   | 4.75 ~ 5.25V | 11.40 ~ 12.60V              | 12.82 ~ 14.17V | 14.25 ~ 15.75V | 22.80 ~ 25.20V | 25.65 ~ 28.35V | 45.60 ~ 50.40V |  |
|                       | VOLTAGE TOLERANCE Note.3  | ±2.0%  | ±2.0%        | ±2.0%                       | ±2.0%          | ±2.0%          | ±1.0%          | ±1.0%          | ±1.0%          |  |
|                       | LINE REGULATION   | ±0.5%  | ±0.5%        | ±0.5%                       | ±0.5%          | ±0.5%          | ±0.5%          | ±0.5%          | ±0.5%          |  |
|                       | LOAD REGULATION   | ±1.0%  | ±1.0%        | ±1.0%                       | ±1.0%          | ±1.0%          | ±1.0%          | ±1.0%          | ±1.0%          |  |
|                       | SETUP, RISE, HOLD TIME  | 1000ms, 30ms, 20ms/230VAC      2000ms, 30ms, 20ms/115VAC at full load  |              |                             |                |                |                |                |                |  |
| INPUT                 | VOLTAGE RANGE   | 90 ~ 264VAC    127 ~ 370VDC  |              |                             |                |                |                |                |                |  |
|                       | FREQUENCY RANGE   | 47~63Hz  |              |                             |                |                |                |                |                |  |
|                       | POWER FACTOR  | PF>0.93/230VAC   |              | PF>0.98/115VAC at full load |                |                |                |                |                |  |
|                       | EFFICIENCY (Typ.)   | 70%  | 79%          | 80%                         | 80%            | 80%            | 83%            | 83%            | 84%            |  |
|                       | AC CURRENT  | 115VAC   | 1.2A         | 1.7A                        |                |                |                |                |                |  |
|                       |   | 230VAC   | 0.6A         | 0.75A                       |                |                |                |                |                |  |
|                       | INRUSH CURRENT (max.)   | COLD START 40A/230VAC  |              |                             |                |                |                |                |                |  |
| LEAKAGE CURRENT       | <2mA / 240VAC   |  |              |                             |                |                |                |                |                |  |
| PROTECTION            | OVER LOAD   | 130 ~ 160% rated output power<br>Protection type : Fold back current limiting, recovers automatically after fault condition is removed |              |                             |                |                |                |                |                |  |
|                       | OVER VOLTAGE  | 3.63 ~ 4.45V   | 5.5 ~ 6.75V  | 13.8 ~ 16.2V                | 15.5 ~ 20.25V  | 17.25 ~ 20.25V | 27.6 ~ 32.4V   | 31.05 ~ 36.45V | 57.6 ~ 67.2V   |  |
| ENVIRONMENT           | WORKING TEMP.   | -20 ~ +70°C (Refer to output load derating curve)  |              |                             |                |                |                |                |                |  |
|                       | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing   |              |                             |                |                |                |                |                |  |
|                       | STORAGE TEMP., HUMIDITY   | -40 ~ +85°C, 10 ~ 95% RH   |              |                             |                |                |                |                |                |  |
|                       | TEMP. COEFFICIENT   | ±0.05%/°C (0 ~ 50°C)   |              |                             |                |                |                |                |                |  |
|                       | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes   |              |                             |                |                |                |                |                |  |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS  | UL60950-1, TUV EN60950-1 Approved  |              |                             |                |                |                |                |                |  |
|                       | WITHSTAND VOLTAGE   | I/P-O/P:3KVAC    I/P-FG:1.5KVAC    O/P-FG:0.5KVAC  |              |                             |                |                |                |                |                |  |
|                       | ISOLATION RESISTANCE  | I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC   |              |                             |                |                |                |                |                |  |
|                       | EMI CONDUCTION & RADIATION  | Compliance to EN55022 (CISPR22) Class B  |              |                             |                |                |                |                |                |  |
|                       | HARMONIC CURRENT  | Compliance to EN61000-3-2,-3   |              |                             |                |                |                |                |                |  |
|                       | EMS IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A  |              |                             |                |                |                |                |                |  |
| OTHERS                | MTBF  | 111.7Khrs min.    MIL-HDBK-217F (25°C)   |              |                             |                |                |                |                |                |  |
|                       | DIMENSION   | 127*76.2*34.6mm (L*W*H)  |              |                             |                |                |                |                |                |  |
|                       | PACKING   | 0.37Kg; 36pcs/14.3Kg/0.91CUFT  |              |                             |                |                |                |                |                |  |
| NOTE                  | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. |  |              |                             |                |                |                |                |                |  |

**Mechanical Specification**

Unit:mm



AC Input Connector (CN1) : JST B3P-VH or equivalent

| Pin No. | Assignment | Mating Housing        | Terminal                       |
|---------|------------|-----------------------|--------------------------------|
| 1       | AC/L       | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2       | No Pin     |                       |                                |
| 3       | AC/N       |                       |                                |

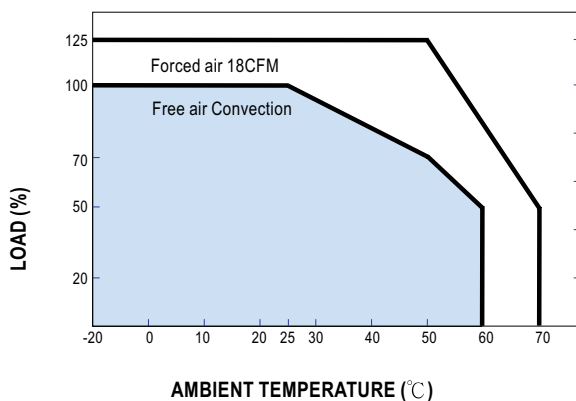
DC Output Connector (CN4) : JST B8P-VH or equivalent

| Pin No. | Assignment | Mating Housing        | Terminal                       |
|---------|------------|-----------------------|--------------------------------|
| 1~4     | -V         | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 5~8     | +V         |                       |                                |

(CN3) : Remote Sense

| Pin No. | Assignment |
|---------|------------|
| 1       | RS+        |
| 2       | RS-        |

**Derating Curve**



**Output Derating VS Input Voltage**

