



# LED POWER SUPPLY DATASHEET

SP50-24VFT

**DESCRIPTION**

High Cost Performance, SELV. short circuit, overload and over temperature protection. Compliance to ERP directive, lifetime 30,000hrs.



**-Input**

| Items           | Conditions  | Request    | Note    |
|-----------------|---|------------|---------|
| Input voltage   | Ta  | AC220-240V | --      |
| Input frequency |   | 50Hz       | --      |
| Input current   | 25°C, rated input voltage, output with max. rated power | < 0.3A     | --      |
| Input power     |   | < 60W      | --      |
| Efficiency      |   | ≥ 85 %     | --      |
| Standby         | 25°C, rated input voltage, output without load          | --         | average |
| Inrush current  | 25°C, rated input voltage                               | <75A       | peak    |
| PF              | 25°C, rated input voltage, output max. rated power      | ≥ 0.9      | --      |

**-Temperate and others**

| Item              | Conditions  | Request  | Note |
|-------------------|---|----------|------|
| Operation temp.   | --  | -20-45°C | --   |
| Relative humidity | --  | 15%-90%  | --   |
| Max. case temp.   | --  | 85°C     | --   |
| Lifetime          | Max.Ta, rated input voltage, output with max.rated power  | 30,000hr | --   |
| Working noise     | 25°C, rated input voltage, output with rated power, mute box background noise<35dB,pickup 10cm distance from products | yes      | --   |

**-Protection**

| Items            | Conditions  | Request | Note |
|------------------|---|---------|------|
| Open circuit     | Ta, rated input voltage, no load  | yes     | --   |
| Over load        | Ta, 0.94-1.06 times of input voltage, 1.2 times of rated power                          | --      | --   |
| Short circuit    | Ta, 0.94-1.06 times of input voltage  | yes     | --   |
| Over temperature | Ta, 0.94-1.06 times of input voltage, temperature detected pointed more than 115 degree | yes     | --   |
| Over voltage     | Ta, 0.94-1.06 times of input voltage, output voltage is 1.5 times of rated one          | yes     | --   |
| Auto recovery    | Over load, short circuit revocation   | yes     | --   |
| Latch off        | Over voltage, over heat re-start after cut off  | yes     | --   |

**-Output**

| Items                        | Conditions  | Request   | Note |
|------------------------------|---|-----------|------|
| Startup time                 | 25°C, rated input voltage, output with max. rated power | --        | --   |
| Output voltage and precision | Ta, rated input voltage, output with rated power        | 24V±5%    | --   |
| Output current range         | Ta, rated input voltage                                 | 0.8-2.08A |      |
| Output voltage wave          | 25°C, rated input voltage, output with max. rated power | --        | Vp-p |
| Output overload              | 25°C, rated input voltage, output with 2 times LED load | --        | --   |
| Output current and precision | Ta, rated input voltage, output with rated power        | --        | --   |
| Rated output voltage range   | Ta, rated input voltage                                 | --        | --   |
| Output current wave          | 25°C, rated input voltage, output with max. rated power | --        | Ip-p |
| Dimming mode                 | --  | triac CV  | --   |
| Dimming range                | --  | 20%-90%   | --   |

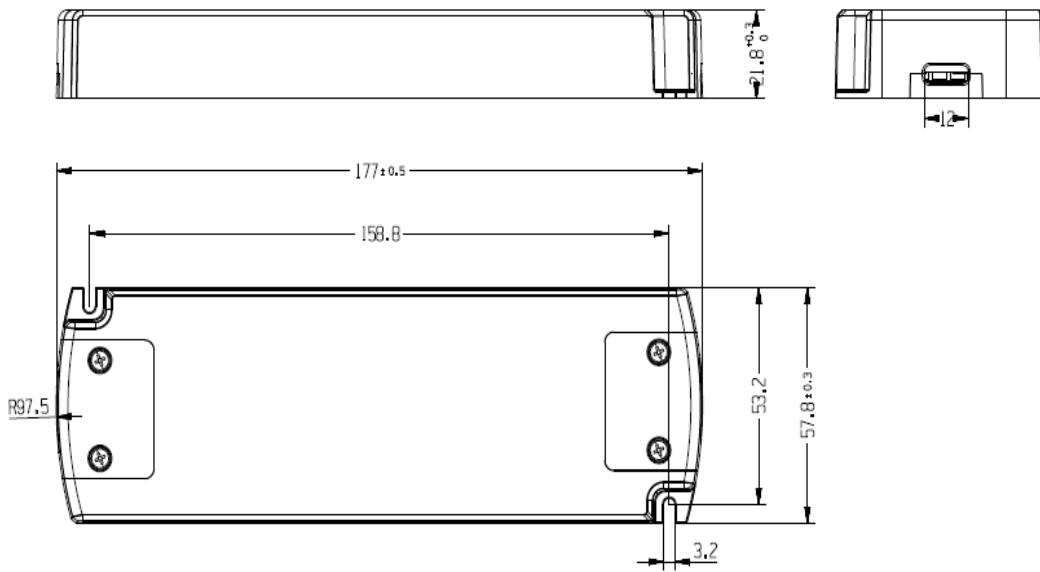
**-Mechanical, mounting**

| Items                   | Conditions                         |
|-------------------------|------------------------------------|
| Case material and size  | Plastic, 177x57.8x21.8mm           |
| Mounting ways           | Independent                        |
| Insulation type         | Class II                           |
| IP grade                | IP20                               |
| Input cables dimension  | terminal block H03VVH2-F 2x0.75mm2 |
| Output cables dimension | terminal block H03VVH2-F 2x0.75mm2 |
| Output cables length    | 2m max                             |

**-Standard**

| Items    | Conditions                |
|----------|---------------------------|
| Safety   | IEC61347-1, IEC61347-2-13 |
| Harmonic | EN61000-3-2 Class C       |
| EMI      | EN55015                   |
| EMS      | EN61547                   |

## Dimensions(mm)



## Wiring Diagram

