



# LED POWER SUPPLY DATASHEET

## SNP20-12VF-E

### DESCRIPTION

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



#### -Input

| Items           | Conditions  | Request    | Note    |
|-----------------|---|------------|---------|
| Input voltage   | Ta  | AC200-240V | --      |
| Input frequency |   | 50/60Hz    | --      |
| Input current   | 25°C, rated input voltage, output with max. rated power | < 0.23A    | --      |
| Input power     |   | < 25W      | --      |
| efficiency      |   | ≥ 85%      | --      |
| Standby         | 25°C, rated input voltage, output without load          | < 0.50W    | average |
| Inrush current  | 25°C, rated input voltage                               | < 60A      | peak    |
| PF              | 25°C, rated input voltage, output max. rated power      | ≥ 0.5      | --      |

#### -Temperate and others

| Item              | Conditions   | Request  | Note |
|-------------------|--|----------|------|
| Operation temp.   | --   | -20-45°C | --   |
| Relative humidity | --   | 45%-85%  | --   |
| Max. case temp.   | --   | 80°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  | --      | --   |
| Over load        | Ta, 0.94-1.06 times of input voltage, 1.2 times of rated power                          | yes     | --   |
| 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 | --      | --   |
| Over voltage     | Ta, 0.94-1.06 times of input voltage, output voltage is 1.5 times of rated one          | --      | --   |
| Auto recovery    | Over load, short circuit revocation   | yes     | --   |
| Latch off        | Over voltage, over heat re-start after cut off  | --      | --   |

#### -Output

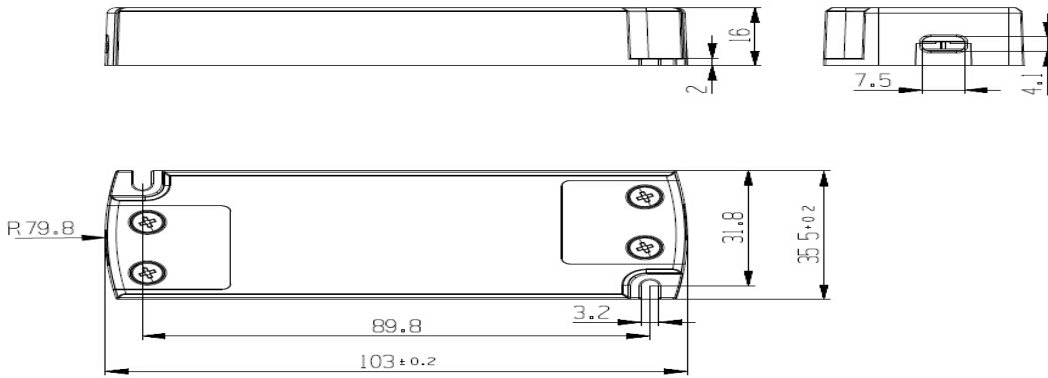
| Items                        | Conditions  | Request | Note |
|------------------------------|---|---------|------|
| Startup time                 | 25°C, rated input voltage, output with max. rated power | < 0.5S  | --   |
| Output voltage and precision | Ta, rated input voltage, output with rated power        | 12V±5%  | --   |
| Output current range         | Ta, rated input voltage                                 | 0-1.67A | --   |
| Output voltage wave          | 25°C, rated input voltage, output with max. rated power | < 200mV | 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                 | --  | --      | --   |
| Dimming range                | --  | --      | --   |

#### -Mechanical, mounting

| Items                   | Conditions                     |
|-------------------------|--------------------------------|
| Case material and size  | Plastic case                   |
| Mounting ways           | Independent                    |
| Insulation type         | Class II                       |
| IP grade                | IP20                           |
| Input cables dimension  | H03VVH2-F 2X1.0mm <sup>2</sup> |
| Output cables dimension | H03VVH2-F 2X1.0mm <sup>2</sup> |
| Output cables length    | max. 2m                        |

#### -Standard

| Items    | Conditions                     |
|----------|--------------------------------|
| Safety   | IEC61347-1、IEC61347-2-13       |
| Harmonic | EN61000-3-2 Class C            |
| EMI      | EN55015                        |
| EMS      | EN61000-4-2、3、4、5、6<br>EN61547 |



### Wiring Diagram

