

# LED DRIVER TECHNICAL SPEC

**Constant Voltage LED Driver | Input 200-240V AC | Output current 0 – 5.000mA**

- Linear type LED driver
- IP20
- helpful sinage and advertisement application
- Push-in clamps, fast connection
- SELV
- Open circuit, short circuit, overload and over temperature protection
- Compliance to ERP directive
- lifetime 30,000hrs



## Approvals / Marks:



| Items | Conditions | Request | Note |
|-------|------------|---------|------|
|-------|------------|---------|------|

### 1. 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 | 0.5A       | --      |
| Input power     |  | 70W        | --      |
| Efficiency      |  | ≥88%       | Typical |
| Standby         | 25° C, rated input voltage, output without load          | 0.5W       | average |
| Inrush current  | 25° C, rated input voltage                               | 75A        | peak    |
| PF              | 25° C, rated input voltage, output max. rated power      | ≥0.90      | --      |

### 2. 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                                  | 0-5A    |      |
| Output voltage wave          | 25° C, rated input voltage, output with max. rated power | 500mV   | 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                | --   | --      | --   |

### 3. Temperate and others

| Items             | Conditions   | Request      | Note  |
|-------------------|--|--------------|-------|
| Operation temp.   | --   | -20°C – 50°C | --    |
| Relative humidity | --   | 45% – 85%    | --    |
| Max. case temp.   | --   | 80° C        | 90° 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 | <35dB        | --    |

**4. Protection**

|                  |   |     |    |
|------------------|---|-----|----|
| 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 | 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   |     | -- |
| Latch off        | Over voltage, over heat re-start after cut off.   | yes | -- |

**5. Mechanical, mounting**

|                         |          |
|-------------------------|----------|
| Case material and size  | Plastic  |
| Mounting ways           | built in |
| Insulation type         | Class II |
| IP grade                | IP20     |
| Input cables dimension  |          |
| Output cables dimension |          |
| Output cables length    | 2000mm   |

**6.Standard**

|          |                             |
|----------|-----------------------------|
| Safety   | IEC61347-1 IEC61347-2-13    |
| Harmonic | IEC61000-3-2 class C        |
| EMI      | IEC55015                    |
| EMS      | EN61000-4-2 3 4 5 6 EN61547 |

Note: peak current of startup can't exceed 1.05 times of rated current. Otherwise product enter latch off.

# SNP60-12VFB-1

## 7. Dimensions in mm

