

SPECIFICATION

LED Surge Protective Device

Model: SS-SPD-US10/UP10

Description: Surge Protective Device

Rev.: V00

Release Date: 2018-11-23

SHENZHEN SOSEN ELECTRONICS CO.,LTD

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Features

- Input Voltage Range: 90Vac~320Vac
- Max open-circuit voltage: 10kV 1.2/50us
- Max discharge current: 10kA 8/20us
- Test Classification: Class III
- Water-proof and Dust-proof: IP66
- High temperature resistance: Ta is up to 70°C
- Safety standard: GB18802.1, EN61643-11
- Protected-type: differential-mode & common mode
- Connection mode: one-port & two-port
- High ground Insulation Resistance
- RoHS compliance



Description

SS-SPD is a special designed surge protection device which designed for the usage of outdoor LED lighting in harsh environments. The product has the characteristics of high quality, high stability, easy installation, good safety, long span life and low maintenance cost. It can bring a higher level of lightning protection effect to the driver and ensure LED power supply working. It can be widely used in display driver, road lighting, yard lighting, high bay and other occasions.

Absolute Maximum Ratings

Specification item	Value	Unit
Nominal input voltage 50/60 Hz	100-240;270	Vac
Max. continuous operating voltage	320	Vac
Rated load current	5.0	A
Max discharge current 8/20us	10000	A
Nominal discharge current 8/20us	5000	A
Ambient temperature	-40 to 70	°C
Storage Temperature	-40 to 85	°C
Relative humidity	5...95	%
Insulation Resistance (500Vdc) @L/N-G	> 1000	MΩ

CAUTION: Stresses above those listed in "Absolute Maximum Ratings" may cause permanent damage to the device, so destructive testing with other conditions is not recommended.

Protection levels Up

Uoc	Differential mode	Common mode(L-G/N-G)	Uoc	Differential mode	Common mode(L-G/N-G)
3kV	1250V	1250V/2050V	5kV	1300V	1350V/2200V
7kV	1350V	1500V/2350V	10kV	1400V	1650V/2600V

CAUTION :

1. Test condition: Default tested at 230Vac, No load, Ta=25°C
2. Tested by Combination wave (A surge delivered by a generator which has the inherent capability of applying a 1.2/50µs voltage wave across an open circuit, and delivering an 8/20 µs current wave into a short circuit. The exact wave that is delivered is determined by the generator and SPD' s fictive impedance)

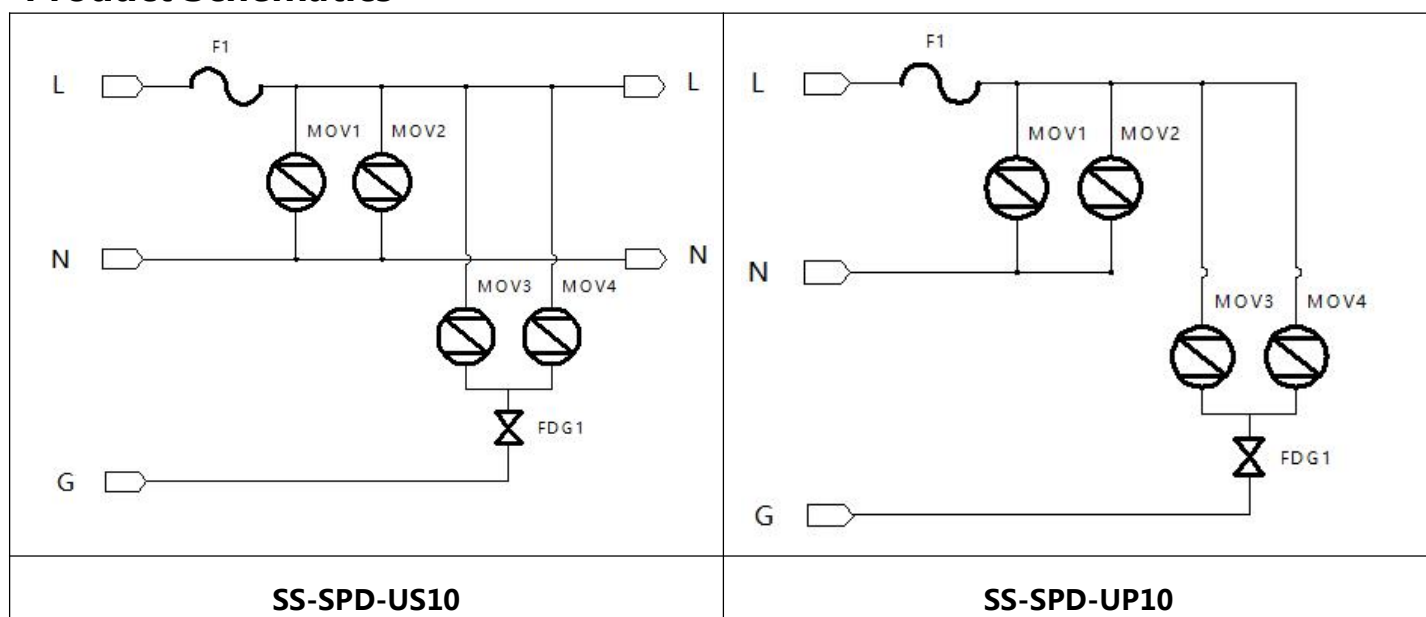
Repetitive Surge Capability

Value	Unit	Condition
1	strike	max. at 10000A @8/20us@25°C
15	strikes	max. at 5000A @8/20us@25°C
100	strikes	max. at 3000A @8/20us@25°C

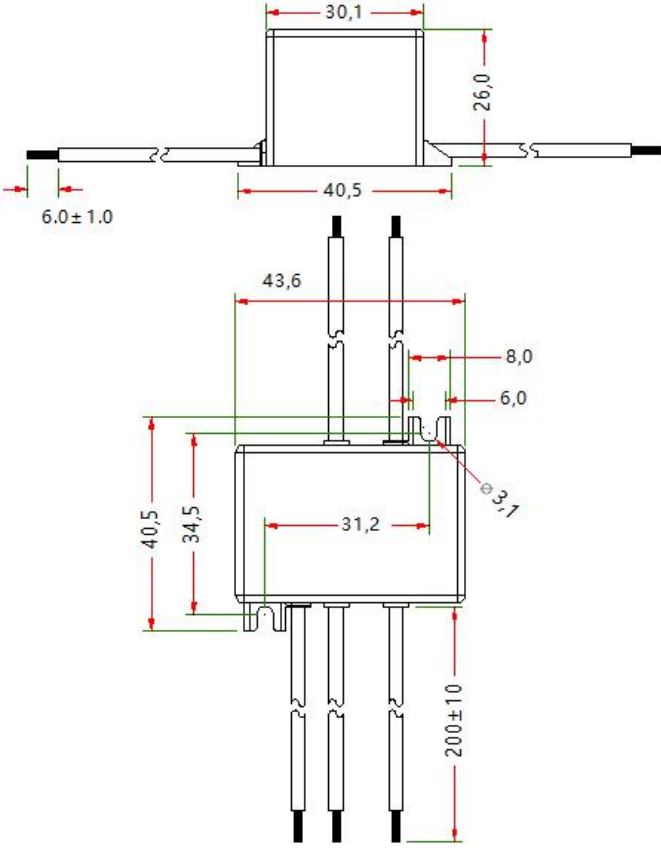
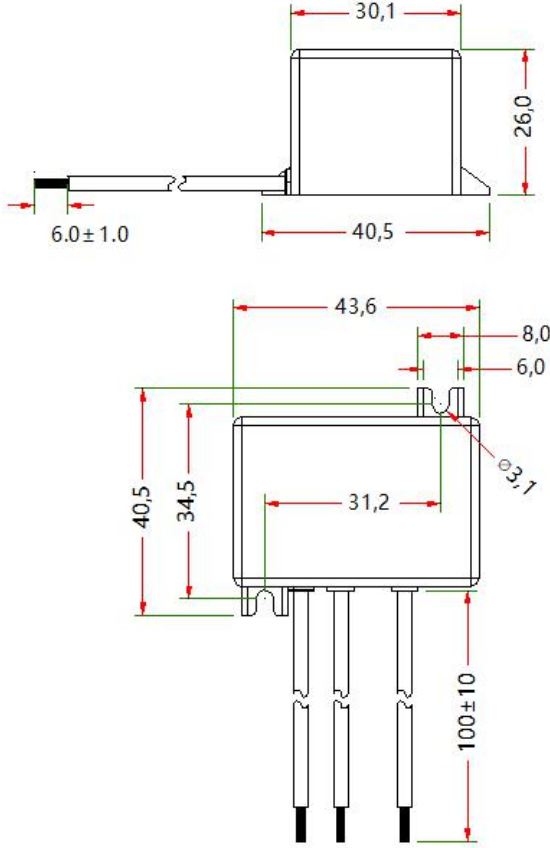
CAUTION :

- 1.Default tested at 230Vac, No load, Ta=25°C
- 2.Strikes less than 15 times, pause for 60s (Each time)
- 3.Strike more than 15 times, each 5 strikes, pause for 30 minutes

Product Schematics



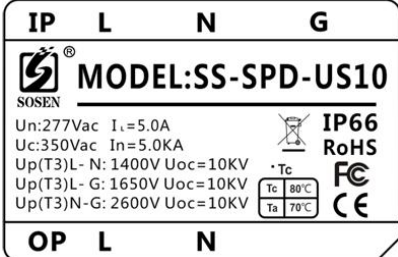
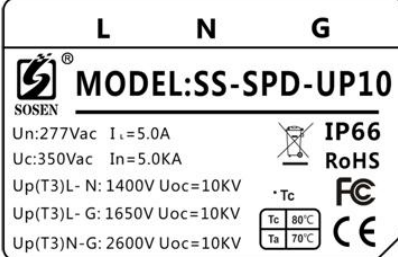
Product dimensions (Unit : mm)

	
SS-SPD-US10	SS-SPD-UP10

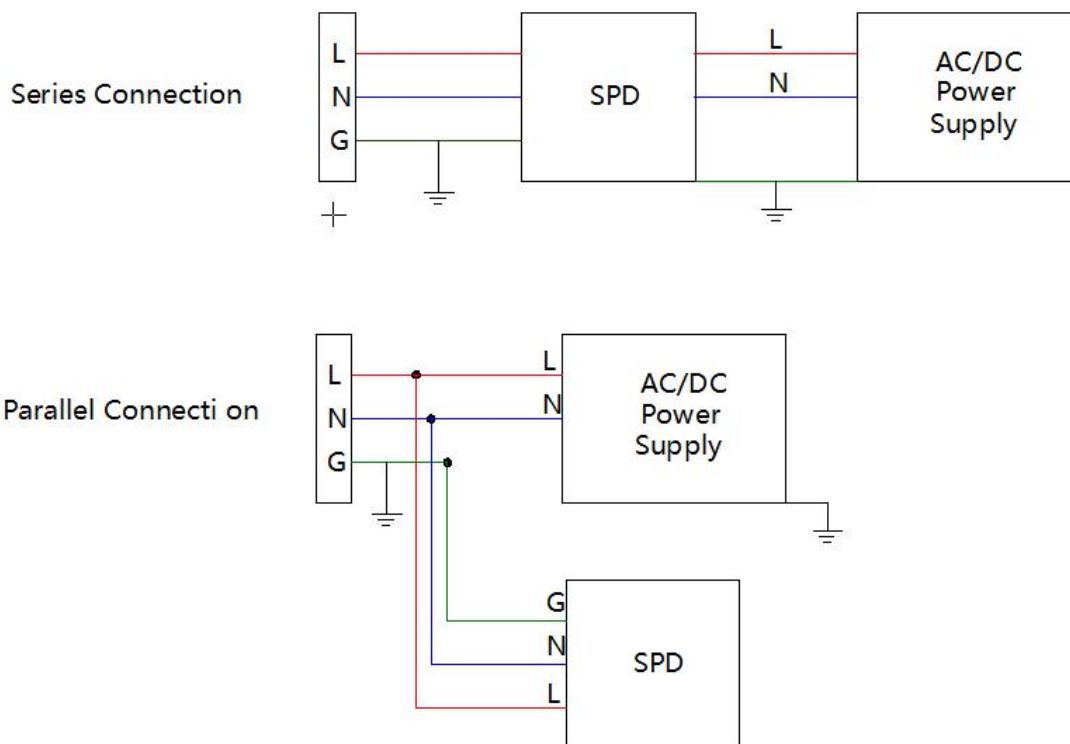
Notes:

1. Black: Line; White: Neutral; Green: Ground
2. Wire Gauge: 1015# 18AWG 600V, Wire Length: US10-200mm;UP10-100mm, wire stripping length: 6±1 mm
3. Caution: Line/neutral wires must be correctly connected to AC power grid. Wiring error on line/neutral polarity may cause module failure.
4. Plastic case colour : black, Material : PC thermoplastic material , Temperature level:105°C Max

Lable

	
SS-SPD-US10	SS-SPD-UP10

Application/Installation Schematic



PackAge, Transportation & Storage

1.Package

SPD Module	Carton size	Pcs/Carton	Module	G.W.
SS-SPD-UP10	500*390*170*6mm	189	65g	14.5Kg
SS-SPD-US10	500*390*170*6mm	189	70g	15.0 Kg

Note : There are product name, model, manufacturer, date of manufacture and certificate of approval issued by quality inspection department on the outer carton and packing list inside.

2. Transportation

Packaging is designed suitable for transportation by trucks, vessels and flights. The products should be shielded from direct sunshine, loaded/unloaded with caution.

3. Storage

The product storage meets the standard of the GB 3873—83.

Products should be rechecked if stock for over 1 year before installation.