SOSEN

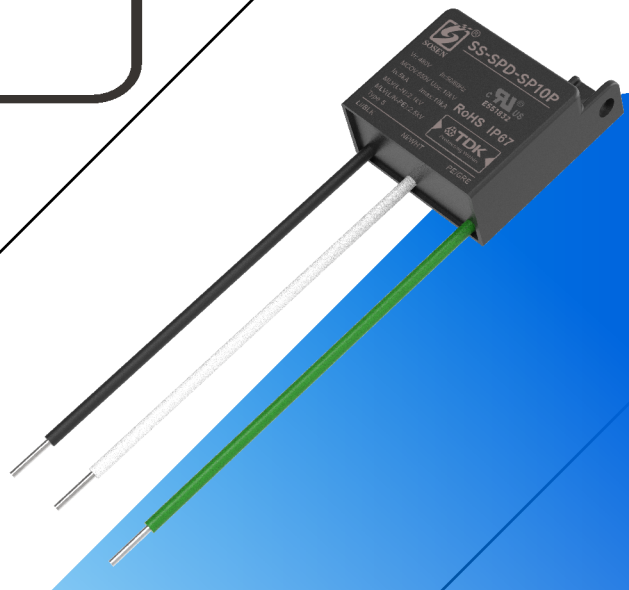
SPECIFICATIONS
SS-SPD-SP10
Surge Protection Device

Model: SS-SPD-SP10P

Description: Surge Protection Device

Rev.: V00

Release Date: 2026-10-19



SS-SPD-SP10

Features

- Wiring method: Parallel connection: SS-SPD-SP10P
- Operating voltage: 108-528Vac
- Excellent surge resistance with low residual voltage
- Test category: UL1449 Type5
- Waterproofing IP rating: IP67
- Reference standard: UL1449
- Surge protection: L-N、L-PE、N-PE

TDK MOV+GDT inside

c US E551832 RoHS IP67

Description

The SS-SPD-SP10 is a specially designed surge protection device, specifically used to provide a higher level of surge protection and transient overvoltage protection for LED drivers in applications such as street lighting, industrial lighting, sports lighting, and commercial lighting. The product is characterized by high quality, high stability, convenient installation, good safety, long service life, and low maintenance costs. It can deliver a higher level of surge protection for LED drivers, ensuring stable operation without damage, thereby effectively preventing equipment failure.

Applications: street lights, tunnel lights,sports, industrial and commercial lighting systems.

Technical Parameters

Parameters	Numerical value
Rated Input Voltage Range	120-480Vac
Maximum Input Voltage Range	108-528Vac
Maximum continuous Operating Voltage	550Vac
Input frequency	47-63Hz Typ:50/60Hz
Open circuit voltage Uoc	10kV @ 1.2/50us
Measured limiting voltage MLV	<2100V Typ:1900V L-N
Measured limiting voltage MLV	<2500V Typ:2300V L/N-PE
Nominal discharge current In	≤ 5kA @ 8/20μs electric current wave
Maximum discharge current Imax	≤10kA @ 8/20μs electric current wave
Operating Ta	-40~+85°C
Storage Ta	-40~+85°C
Weight	45g

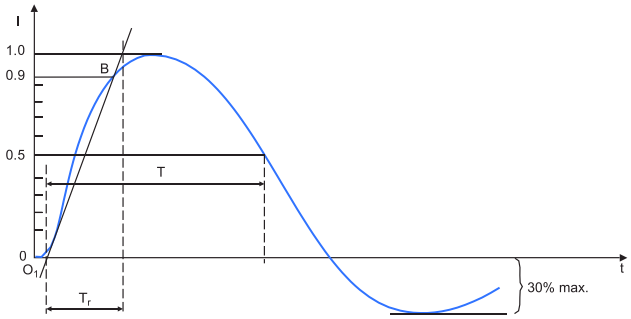
SHENZHEN SOSEN ELECTRONICS CO.,LTD.

10F, Pengzhanhui No 1 Building, Zhongxin Road No 233, Xinqiao Street, Baoan District, Shenzhen, China

0755-29358800 www.sosen.com sosen@sosen.com

Test Waveform:

Number of lightning strikes

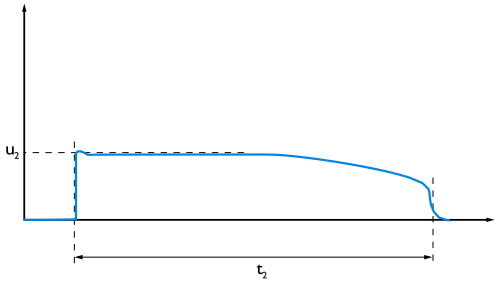


Front time: T_r = 8 μs ± 20%
Time to half-value: T = 20 μs ± 20%

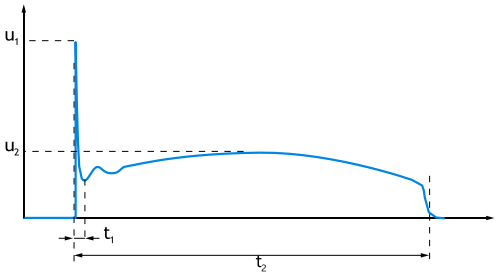
Short circuit current waveform

Lightning Surge Test 8/20μs	
Surge magnitude	Number of impacts
10000A	2
7000A	4
5000A	30

Measured limiting Voltage MLV



Differential mode L-N

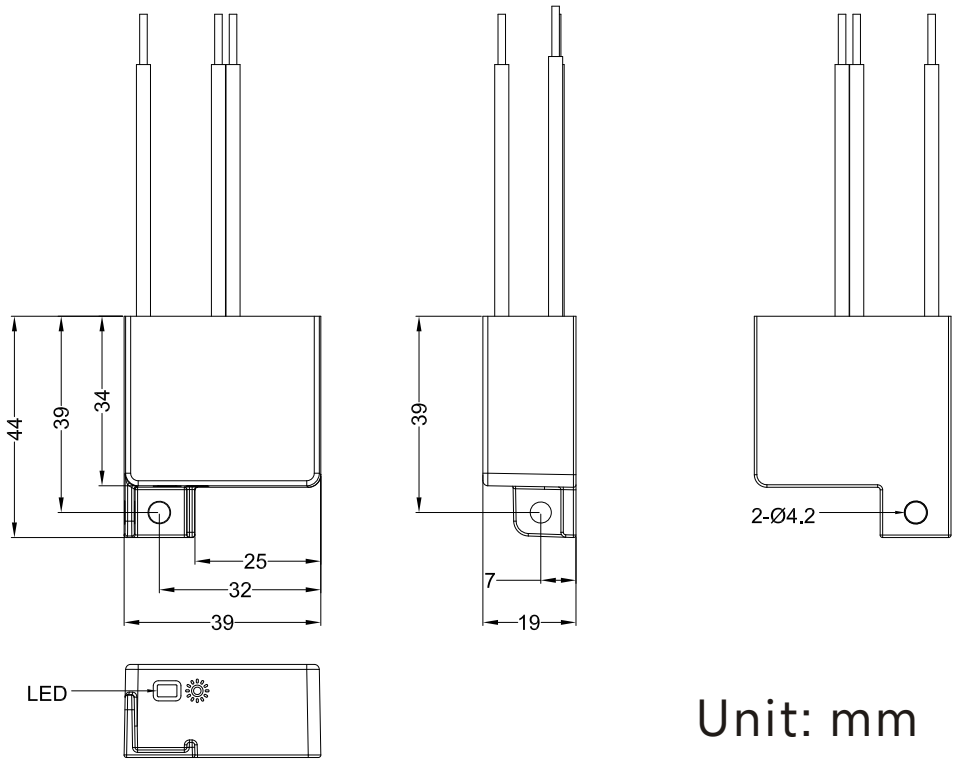


Common mode (L/N -PE)

I_c 8/20μs	Differential mode U_2	Common mode U_2/U_1
1kA	≤1600V	≤1600/2000V
3kA	≤1900V	≤1900/2200V
5kA	≤2100V	≤2100/2500V

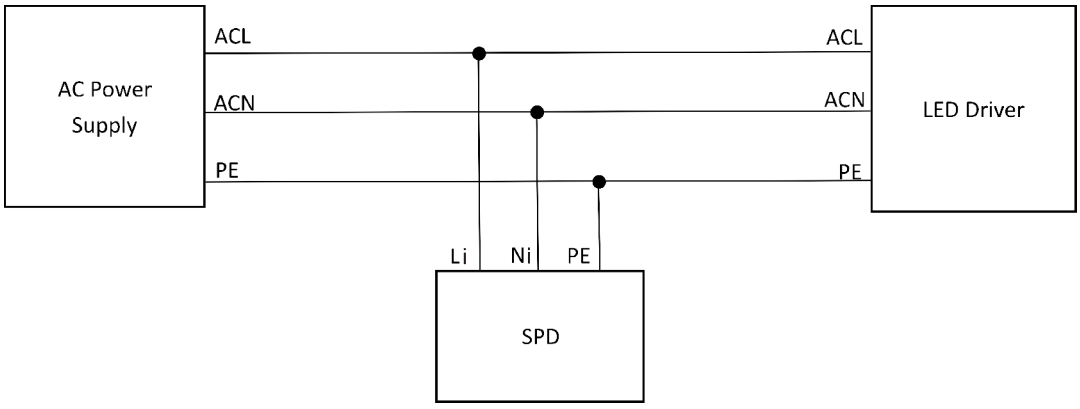
SHENZHEN SOSEN ELECTRONICS CO.,LTD.
10F, Pengzhanhui No 1 Building, Zhongxin Road No 233, Xinqiao Street, Baoan District, Shenzhen, China
0755-29358800 www.sosen.com sosen@sosen.com

Enclosure Dimensions:



Unit: mm

Wiring Method:



Notes:
1. Black: Li, White: Ni, Green: PE;
2. Wire gauge: UL 1015, 18AWG ,105°C,600V ,Exposed Length 150±10mm ,Tinned length of wire:10±2mm
3. Shell color: Black
4. Shell material: PC(UL94-V0).

SHENZHEN SOSEN ELECTRONICS CO.,LTD.
10F, Pengzhanhui No 1 Building, Zhongxin Road No 233,
Xinqiao Street, Baoan District, Shenzhen, China
0755-29358800 www.sosen.com sosen@sosen.com

Package

- Outside carton dimension: L×W×H =495mm×385mm×162mm;
- 112PCS/Carton;
- Net weight/Piece0.045kg;Gross weight/Carton: 6.25kg;

Transportation

Packaging is designed suitable for transportation by trucks, vessels and flights. The products should be avoided direct sunlight and rain, loaded/unloaded with caution.

Storage

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

Products should be rechecked if stored for over 1 year before assembly.

RoHS

Products comply with RoHS Directive (2011/65/EU) and amendment 2015/863/EU.

Revision History

Version	Description of Update	Updated Date	Remark
V00	Original Release	2026/10/19	

SHENZHEN SOSEN ELECTRONICS CO.,LTD.

10F, Pengzhanhui No 1 Building, Zhongxin Road No 233,
Xinqiao Street, Baoan District, Shenzhen, China
0755-29358800 www.sosen.com sosen@sosen.com