# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

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# SPD-20 series



- Features :
- Type 2 component assemblies
- Line to Ground&Line to Line protected
- Parallel(3 wires) connection style
- LED status indicator
- · Suitable for LED driver surge protection
- IP67 design for indoor or outdoor installations



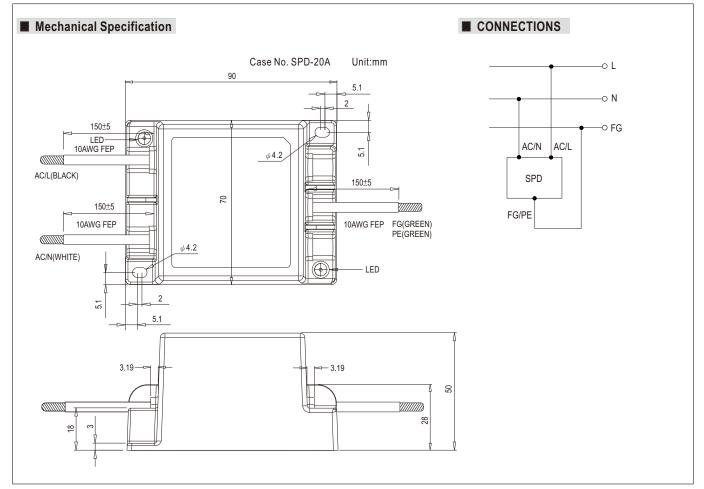
#### **SPECIFICATION**

SFECIFICATION		
MODEL	SPD-20-240P	SPD-20-277P
OPERATING VOLTAGE	240VAC 50/60Hz	277VAC 50/60Hz
MCOV(MAX. CONTINUOUS OPERATING VOLTAGE)	300VAC	320VAC
UC(MAX. CONTINUOUS OPERATING VOLTAGE)Note.4	300VAC	
VPR (VOLTAGE PROTECTION RATING)	1500V(L-FG,N-FG,L-N)	
UP (VOLTAGE PROTECTION LEVEL)Note.5	1500V(L-PE,N-PE,L-N)	
IN (NOMINAL DISCHARGE CURRENT)	5kA	
MAX. SURGE CURRENT(8/20us)	20kA	
Imax. (MAX. DISCHARGE CURRENT) Note.6	20kA	
SCCR (SHORT CIRCUIT CURRENT RATING)Note.3	5kA	
SHORT-CIRCUIT WITHSTAND Note.7	1.5kA	
RESPONSE TIME	<25ns	
WITHSTAND Note.1	1600VAC 1minutes	
OPERATING TEMPERATURE	-40 ~ +70°C	
SAFETY STANDARDS	UL1449(Third Edition),CS22.2 NO.8,EN61643-11(only SPD-20-240P) approved	
DIMENSION	90*70*50mm (L*W*H)	
PACKING	0.39Kg; 18pcs/8Kg/0.84CUFT	
NOTE		

1. Varistors are to be removed during this test

2. Note.4, Note.5, Note.6, Note.7 are for EN61643-11(SPD-20-240P)

3. These devices have been subjected to Surge Testing and Current Test-short Circuit Current Rating by employing a class J Fuse Rated 30A and minimum 600VAC.



### Circuit Diagram AC/NO D2 LED2 R2 ZNR1 AC/LO-ZNR2 ZNR3 LED1 D1 P1 FG/PEO ■ INSTALLATION 1. This document provides detailed information on how to install and operate the SPD-20 of Surge Protective Devices(SPDS). 2. The SPD-20 of Surge Protective Devices are installed/connected in parallel with the line of TN System

- Incorrect installation may significantly impair the performance of the SPD. It is particularly important that all installation procedures and guidelines be followed exactly.
- 4. Before starting any installation procedures, verify service voltage(AC or DC)with a volt meter to ensure that the correct model has been selected for the supply voltage.
- 5. DO NOT INSTALL THE SPD IF MEASURED VOLTAGE EXCEEDS UNIT RATINGS.
- 6. REMOVE POWER FROM ELECTRICAL SYSTEM PRIOR TO INSTALLATION.
- 7. ENSURE THAT ALL CONNECTIONS ARE CORRECT BEFORE ENERGIZING.
- 8. Apply power(energize), LED indicator should illuminate. If LED is out, the SPD requires service.
- 9. Never install on an ungrounded system.

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#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Thoroughly read and comprehend all instructions before commencing installation.

This equipment must be installed by qualified electrical personnel in accordance with all applicable codes which supersede these instructions.

Improper installation or misapplication of these devices may result in death or serious injury.

Failure to follow these instructions could result in damage to the electrical system(s) or related equipment.

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#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Never install this unit if it has fallen, has been dropped or looks damaged in any way. Return device to factory for diagnostic testing.