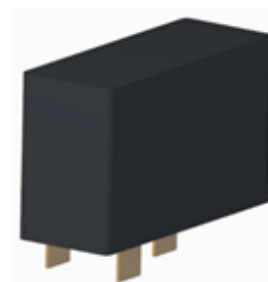


Features

- Size Design $42 \times 16.5 \times 25$ (± 0.5) mm
- High Current Handling Capability 20kA @ 8/20 μ s
- Fast Response and Long Service Life
- Reliable to Protect Surge Voltage
- Distributed fault-tolerant design
- Impulse Test Classification: class II tests

Exterior




Application information

- Single-phase AC Power

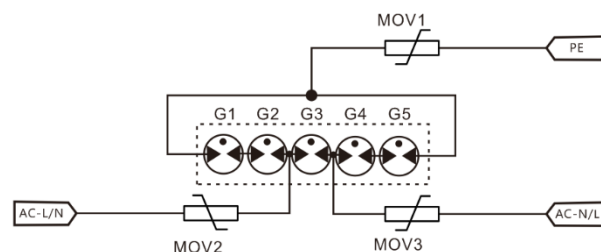
Package (Top View)



Agency Approvals

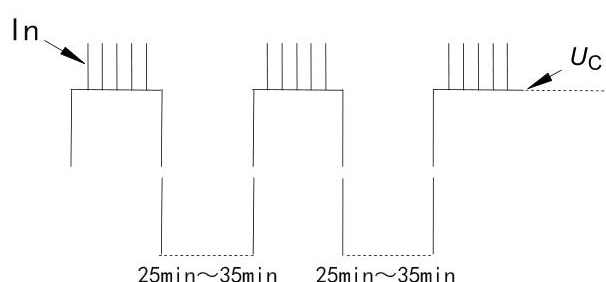
Icon	Description
RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003
	Mean lead free

Schematics



Test Method

1. Test Ability Executive standard: IEC 61643-11: 2011, GB 18802.1-2011.
2. Test Port: L-N, L-PE, N-PE.
3. Three groups of five impulses of 8/20 current impulses with positive polarity shall be applied, Each impulse shall be synchronized to the power frequency. The test samples are connected to U_c , Starting from 0° the synchronization angle shall be increased in steps of 30° with a tolerance of $\pm 5^\circ$ for each synchronization angle, The tests are described in Figure.
4. The interval between the impulses is 50 s – 60 s, the interval between the groups is 25 min – 35 min.



Electrical Parameter

Rated operating voltage U_n	220	V
(L-N)Maximum continuous operating voltage $U_c^{(1)(2)}$	300	V
(L-PE/N-PE)Maximum continuous operating voltage $U_c^{(1)(2)}$	450	V
Nominal discharge current I_n (8/20 μ s) ³⁾	20	kA
(L-N)Voltage protection level U_p (8/20 μ s) ³⁾	1.8	kV
(L-PE/N-PE)Voltage protection level U_p (8/20 μ s) ³⁾	2.5	kV
Operating and storage Temperature	-40 ~ +85	°C
Modes of protection	L-N /L-PE/N-PE	/
IP Code	IP65	/
Housing material ³⁾	UL94 V0	/
Weight	55	g

1) At delivery AQL 0.65 level II GB/T 2828.1-2003

2) In ionized mode

3) Terms and current waveforms in accordance with GB18802.1-2011, IEC 61643-11: 2011.

Part Numbering System

B SPD 220 C 20 P - D
(1) (2) (3) (4) (5) (6) (7)

(1) Bencent

(2) SPD Surge Protective Device

(3) Nominal Voltage: 220VAC

(4) SPD Classification: C

(5) Nominal Discharge Current: 20kA

(6) P Surge Protective Device Installed on PCB

(7)D Distributed fault-tolerant design

Product Characteristics

Lead Material	Copper
Body Material	PC、Ceramics、Epoxy、Metal
Terminal Finish	Copper Tin Plated

Environmental Reliability Characteristics

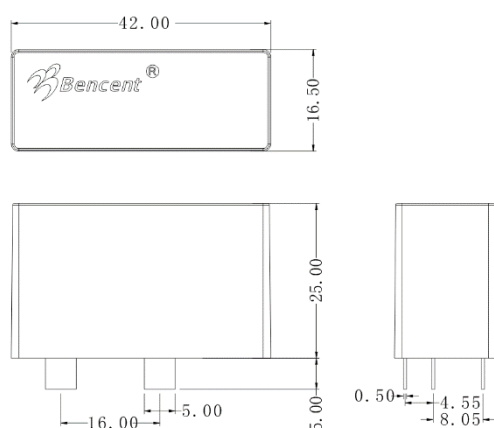
Testing items	Technical standards
High Temperature Storage Test	Temperature: 85°C Time:2H
Low Temperature Storage Test	Temperature: -45°C Time:2H
Thermal Shock	Temperature:-45--85°C Cycle:5
Vibration	Frequency: 10Hz~55Hz Acceleration: 20m/s ² (2g) Direction of vibration: x/y/z Time: 30min
Resistance of soldering heat	Temperature: 260±5°C Time of dip soldering: 10s, 1time

Note: Up-screen program can be specified by customer's request via contacting Bencent service

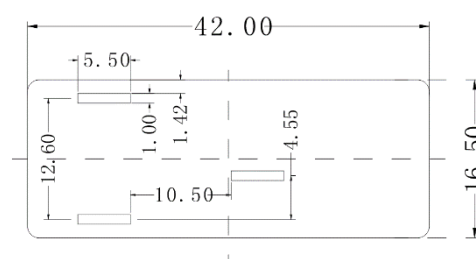
Solderability test

Solderability	Solder Pot Temperature:	245°C±5°C
	Solder Dwell Time:	4-6 seconds

Product Dimensions

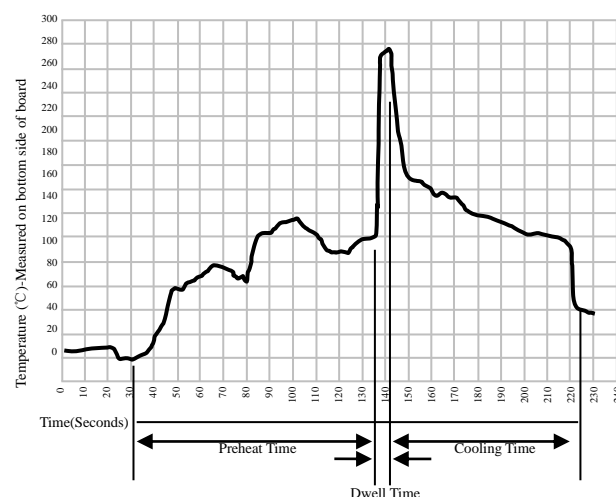


PCB Top Drilling Layer

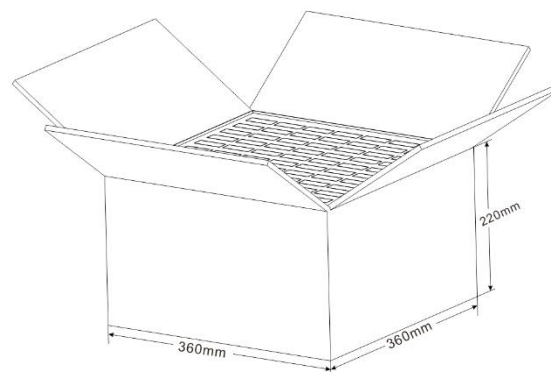
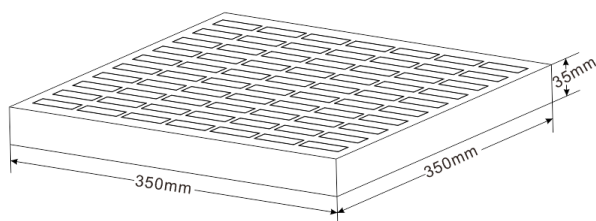


Wave Soldering profile

Wave Soldering Condition		Pb-Free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time (min to max)	60 – 180 secs
Solder Pot Temperature		270°C Max
Solder Dwell Time		2-5 seconds



Package Information



Outline	Per Dish (PCS)	Per Carton (PCS)	Carton Size(mm)		
			L	W	H
Skin packing	70	420	360	360	220