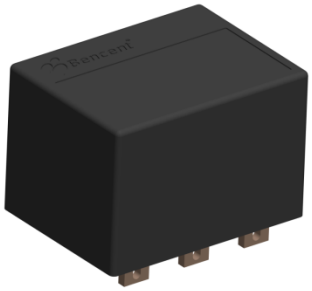
Features

- Size Design41×30.5×27.2 (±0.5) mm
- High Current Handling Capability20kA @ 8/20μ s
- Fast Response and Long Service Life
- Reliable to Protect Surge Voltage
- Possess SPD Disconnection
- Impulse Test Classification: class Ⅱ tests or class Ⅲ tests

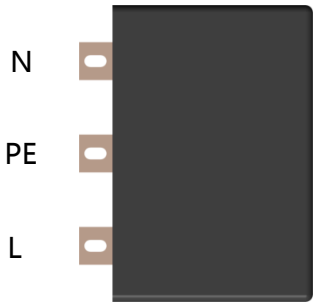
Exterior



Application information

- Single-phase AC Power

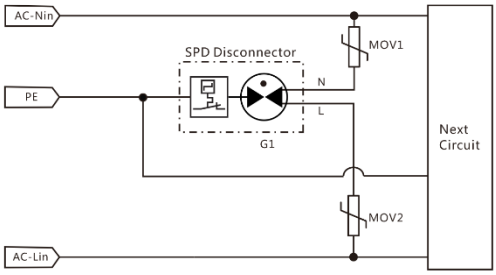
Package (Top View)



Agency Approvals

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

Schematics



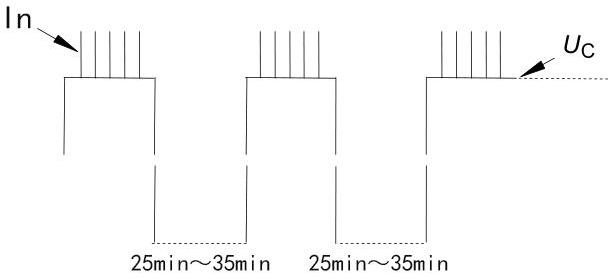
Test Method

1.Test Ability Executivestandard: IEC 61643-11：2011， GB 18802.1-2011.

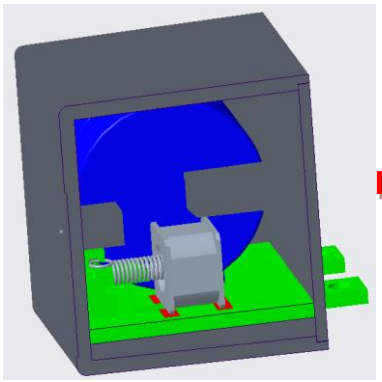
2.Test Port:L-PE,N-PE.

3.Three groups of five impulses of 8/20 current impulses with positive polarity shall be applied, Each impulse shallbe synchronized to the power frequency. The test samples are connected to Uc,Starting from 0° the synchronization angle shall bencreased in steps of 30° with a tolerance of ± 5° for each synchronization angle, The testsare described in Figure.

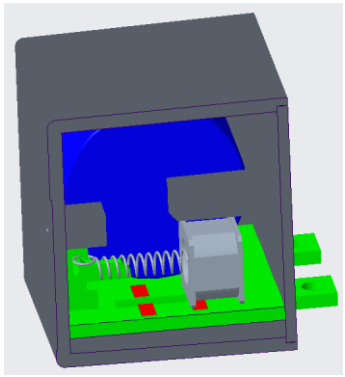
4.The interval between the impulses is 50 s – 60 s, the interval between the groups is 25 min –35 min.



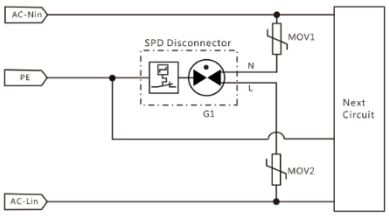
SPD Disconnector



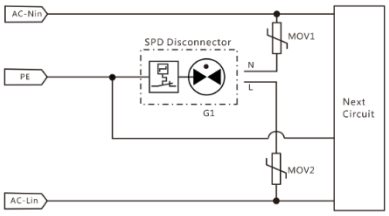
SPD Normal State



SPD Failure State



正常状态时电气原理图



失效状态时电气原理图

Electrical Parameter

Rated operating voltage Un	220	V
Maximum continuous operating voltage Uc[1)2)]	250	V
Nominal discharge current In（8/20μs）[3)]	20	kA
（L-PE/N-PE）Voltage protection level Up（8/20μs）[3)]	1.5	kV
Combination wave Uoc （1.2/50μs@ 8/20μs）[3)]	20@10	kV@kA
Operating and storage Temperature	-40 ~ +85	℃
Modes of protection	L-PE/N-PE	/
IP Code	IP20	/
Housing material[3)]	UL94 V0	/
Weight	45.5	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	-1
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Bencent
(2) SPD Surge Protective Device
(3) Nominal Voltage：220VAC
(4) SPD Classifcation：C
(5) Nominal Discharge Current：20kA
(6) P Surge Protective Device Installed on PCB
(7)"-1" means the special structure of this type

Product Characteristics

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

Environmental ReliabilityCharacteristics

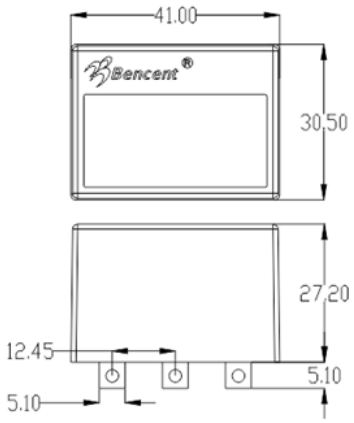
Testing items	Technical standards
High Temperature Storage Test	Temperature: 85℃ Time:2H
Low Temperature Storage Test	Temperature: -45℃ Time:2H
Thermal Shock	Temperature:-45--85℃ Cycle:5
Vibration	Frequency：10Hz～55Hz Acceleration：20m/s^2（2g） Direction of vibration：x/y/z Time：30min
Resistance of soldering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

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

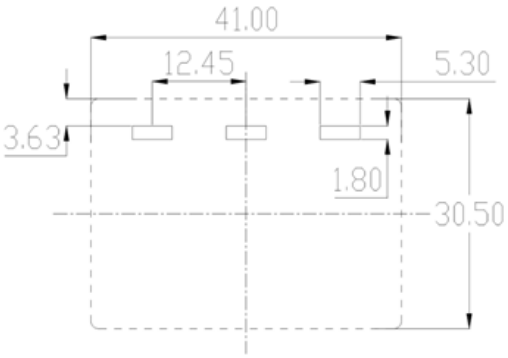
Solderability test

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

Product Dimensions

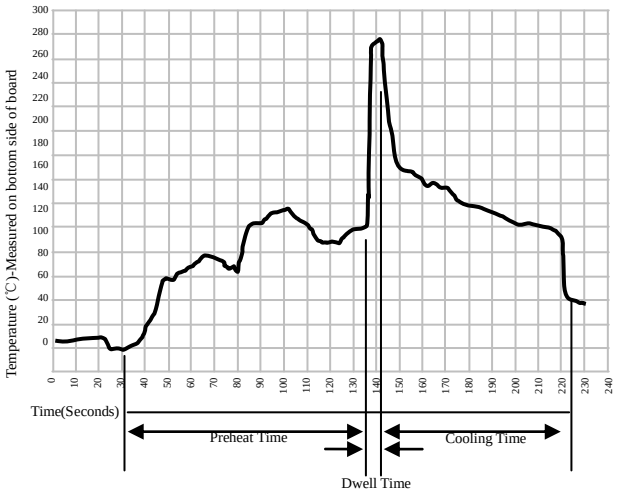


PCB Top Drilling Layer

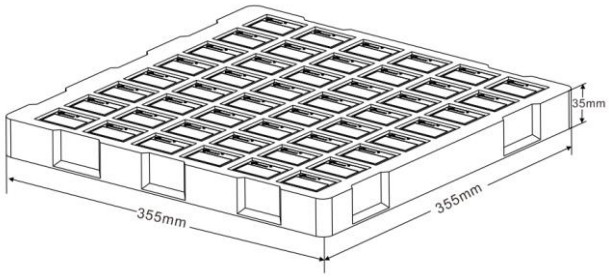


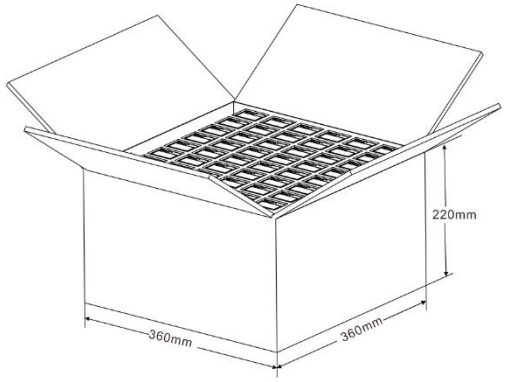
Wave Solderingprofile

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℃ Max
Solder Dwell Time		2-5 seconds



Package Information





Outline	Per Dish (PCS)	Per Carton (PCS)	Carton Size(mm)		
			L	W	H
Skin packing	48	288	360	360	220