



## Modules for DC PV SPD

Prosurge's SPM series are surge protection modules which are heavy MOV based devices and are constructed with Prosurge thermal protection and arc extinguishing technology, can be easily integrated in or mounted on PCBs. They are the best choice for global customers to develop PV SPD at minimum cost.

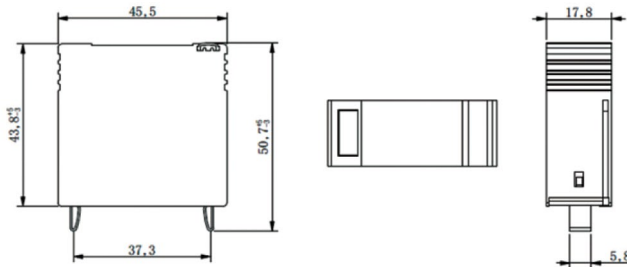
### Technical Features:

- UL recognized Type 1CA SPD (ANSI/UL1449 4th), Type 2CA SPD (CSA-C22.2 ) for PV/ Photovoltaic system. (UL File No. E319871).
- Rating :  
Max. permitted DC voltage(Vpdc): 85V~825 Vdc  
Surge capacity (8/20 us ): 50 kA  
SCCR: 100 kArms – tested without external CB or fuse
- Completely meet IEC61643-11:2011&EN50539-11:2013.
- Quick thermal response and perfect circuit cutoff function due to special thermal disconnecter design with arc extinguishing device (Patent pending)
- Wide operating temperature range and high reliability
- High surge current capacity and low leakage current
- Provide a number of ways to use on PCB, such as permanent soldering or pluggable
- Floating remote signaling contact for fault indication while additional uses of PVD\_Base

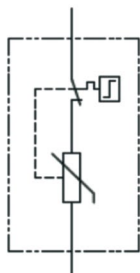


Part No.	Nominal voltage (Vdc) V	Max. permitted DC voltage Vpdc V	Nominal discharge current In (8/20) kA	Max. discharge current Imax (8/20) kA	Voltage protection rating VPR kV	Leakage (Quiescent) $\mu$ A	SCCR kArms
SP85D	48	85	20	50	<0.4kV	<2.5 $\mu$ A	30kA
SP350D	300	350	20	50	<0.9kV	<2.5 $\mu$ A	100kA
SP460D	400	460	20	50	<1.2kV	<2.5 $\mu$ A	100kA
SP560D	500	560	20	50	<1.5kV	<2.5 $\mu$ A	100kA
SP670D	600	670	20	50	<1.5kV	<2.5 $\mu$ A	50kA
SP825D	750	825	20	50	<1.9kV	<2.5 $\mu$ A	50kA

- Dimension drawing



- Basic circuit diagram





## PCB mounting method and illustration

PVD\_Base Type A / B are designed for SPM module to be mounted on the PCB and be replaced easily, and with Floating remote signaling contact for fault indication

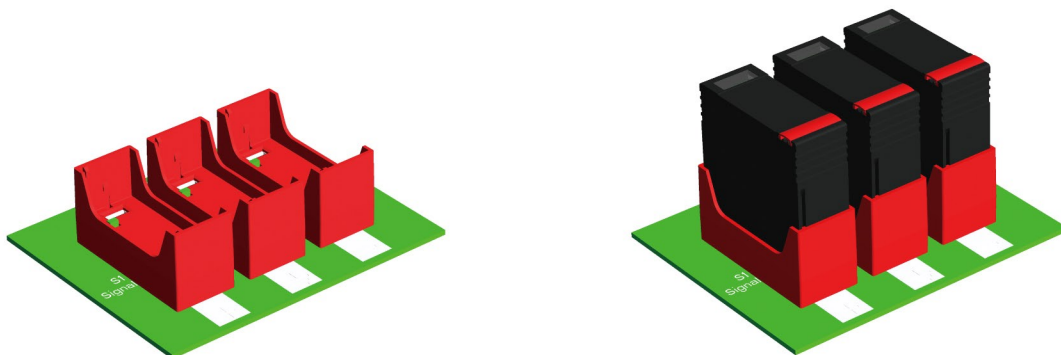


Fig: PVD\_Base type A to be mounted on PCB for pluggable Prosurge PVD modules

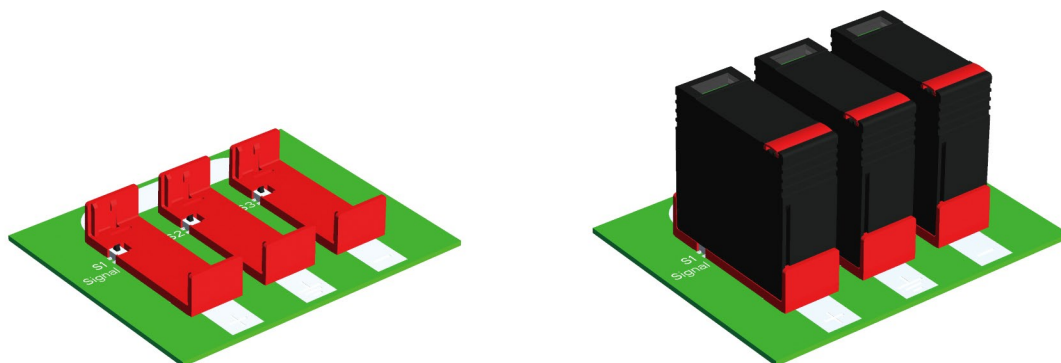


Fig: PVD\_Base type B to be mounted on PCB for permanent connection of Prosurge PVD modules