

Superior Protection for Solar Power Applications

New Cooper Bussmann® PV Fuse Protects Photovoltaic Panels up to 1000Vdc

The demand for alternative energy has led to another innovation from Cooper Bussmann, the industry leader in circuit protection. Developing sophisticated solar panel systems have accelerated the demand for high performance fuses. The short-circuit conditions associated with solar panels do not allow for sufficient current to open a standard fuse in a way that effectively isolates faulted photovoltaic (PV) strings. The new Cooper Bussmann® PV Fuse line provides a full range of protection that traditional fuses cannot.

Low Level Fault Protection

- PV Fuses can clear faults as low as $1.3 \times I(\text{fuse rating})$ @ 1000Vdc. They are designed specifically for 4", 5" and 6" solar cell based panels.

Superior Cycling Withstand

- PV Fuses are tested in coordination with cycling conditions associated with solar panel system operation and environmental influences.

1000Vdc Capacity

- PV Fuses are designed with a maximum 1000Vdc operating voltage based on typical solar panel systems with L/R of 1ms and below.

Globally Accepted 10x38mm Dimension

- All PV Fuse amp ratings are available with standard ferrule, bolt and versatile PCB mount options.



Specifications

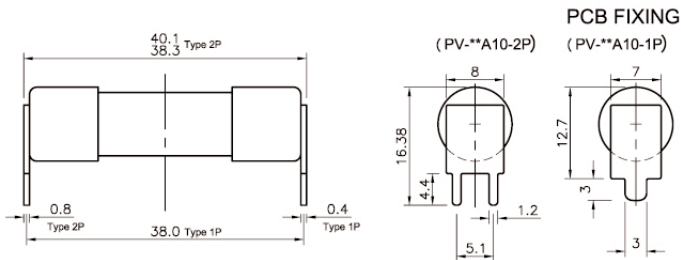
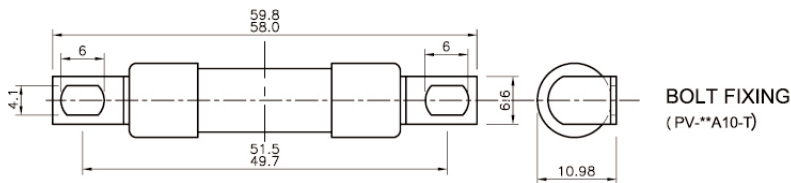
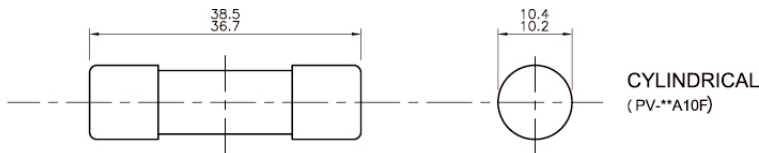
Ratings

Volts:	1000Vdc
Amps:	8 - 15A
Breaking Capacity:	33kA dc
Min Interrupting:	$1.3 \times I_n$
PV Fuse Coordination with:	4", 5", & 6" solar cells
Time Constant (L/R):	Under 1ms

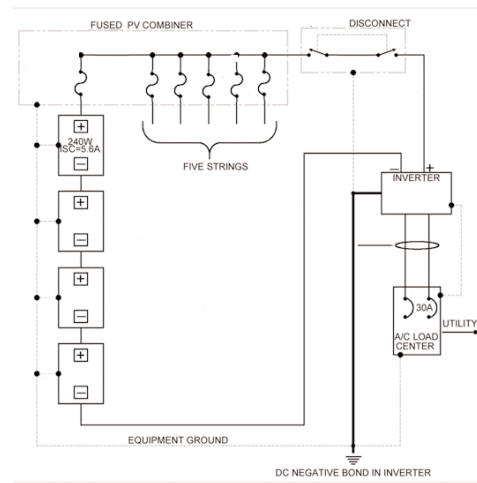
Technical Ratings

Part Number	Current Rating (Amps)	Energy Integrals (A ² s/I ² t)		Power Loss (Watts)	
		Pre-Arcing	Total @ 1000Vdc	$0.8I_n$	I_n
PV-8A10F	8	3	32	0.5	2.0
PV-10A10F	10	7	50	0.6	2.1
PV-12A10F	12	10	100	1.3	2.6
PV-15A10F	15	20	200	1.8	3.0

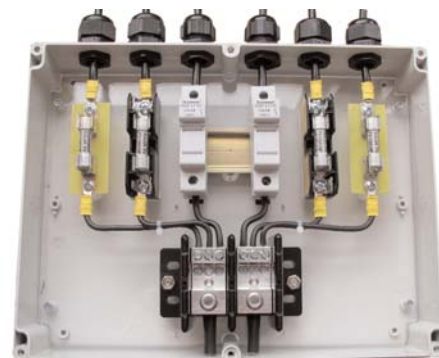
Dimensions - mm



PV Fuses are specifically designed to work in solar panel systems using 4", 5" and 6" cells.



Typical solar panel wiring diagram.



Ferrule versions of the PV Fuse easily mount in conventional BM6031 fuse blocks.