

# HP10M

1000V DC Midget (10x38mm) Photovoltaic Fuses

## SPECIAL PURPOSE

## FOR STRING PROTECTION



Mersen's HP10M photovoltaic (PV) fuse series was developed specifically for the protection of PV string wiring for 1000VDC industrial rooftop and utility scale photovoltaic systems. Its robust construction makes it ideal for continuous temperature and current cycling withstand adding to system longevity. The 1000VDC rated HP10M, designed for low minimum breaking capacity capabilities of 1.35 times the fuse rated current value, allows for safe circuit interruption under typical low fault current conditions produced by PV arrays. In addition to the standard ferrule terminal, parts are available with Crimp Cap terminals for in-line fuse applications. The unique wire crimp terminal (CC option) permits solderless wire-to-fuse connection for overmold encapsulation of fuse and wiring. Protect your off-grid or grid tied PV system from unexpected ground faults and string faults using Mersen's HeliProtection® fuse line.

## CATALOG NUMBERS - FUSE HOLDER

	UltraSafe™ Non-Indicating	UltraSafe™ Indicating
Screw Type	USM1HEL	USM1IHEL
Spring Type	USGM1HEL	USGM1IHEL

For additional information, view catalog page for USCC & USM UltraSafe™ Fuse holders.

## RATINGS:

- **Volts:** 1000VDC
- **Amps:** 1 to 32A
- **IR:** 50kA I.R. DC
- **MBC:** 1.35 x In
- Photovoltaic Fuse, gPV

## FEATURES/BENEFITS:

- Low fault current interrupting capability
- Durable construction for enhanced system longevity
- Temperature cycle withstand capability
- Guaranteed operation at temperature extremes
- Industry's first UL Listed Solution
- Globally accepted

## APPLICATIONS:

- All photovoltaic applications
- PV string/array level protection
- Combiner box applications
- In-line PV module protection
- Inverters
- Battery charge controllers

## APPROVALS:

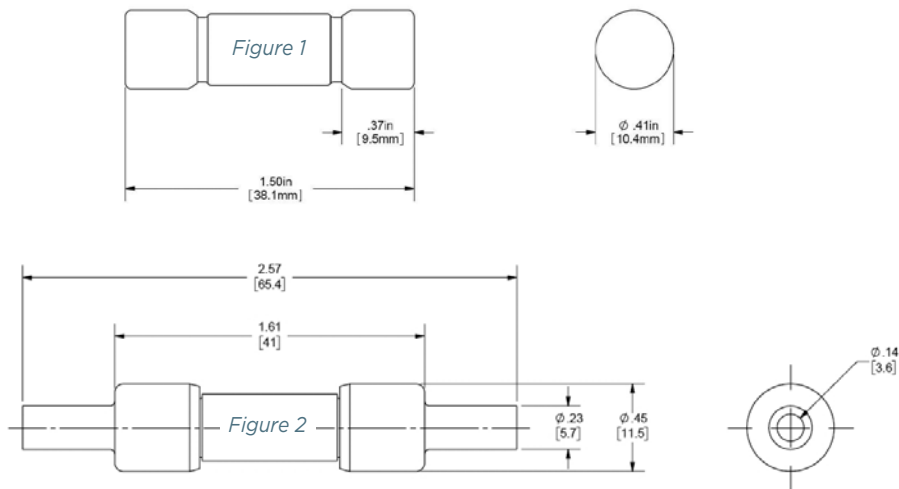
- UL Listed to Standard UL2579 File E333668
- CSA Component Certified C22.2
- IEC 60269-6 Approved



CATALOG NUMBERS AND ELECTRICAL CHARACTERISTICS

Voltage [VDC]	Amperage [A]	Catalog Number	Reference Number	Watts Loss @ 70% $\times I_n$ [W]	Watts Loss @ 80% $\times I_n$ [W]	Watts Loss @ 100% $\times I_n$ [W]	Interrupting Rating [kA]	Size [mm]
1000	1	HP10M1	B1018579	0.13	0.18	0.25	50	10x38 (Figure 1)
	2	HP10M2	C1018580	0.16	0.25	0.32		
	3	HP10M3	D1018581	0.66	0.87	1.36		
	3.5	HP10M3-1/2	H1043977	0.67	0.84	1.31		
	4	HP10M4	E1018582	0.69	0.80	1.25		
	5	HP10M5	F1018583	0.59	0.73	1.12		
	6	HP10M6	G1018584	0.42	0.67	1.05		
	7	HP10M7	H1018585	0.40	0.64	1.00		
	8	HP10M8	J1018586	0.77	0.88	1.48		
	10	HP10M10	L1018588	0.67	0.9	1.5		
	12	HP10M12	M1018589	0.72	1.0	1.8		
	15	HP10M15	N1018590	0.9	1.3	2.2		
	20	HP10M20	P1018591	1.1	1.5	2.8		
	25	HP10M25	D1023825	1.3	1.8	3.0		
	30	HP10M30	E1023826	1.5	1.9	3.7		
	32	HP10M32	H1062170	1.6	1.9	3.8		
	1	HP10M1CC	F1061616	0.14	0.19	0.27	50	10 x 65 (Figure 2)
	2	HP10M2CC	G1061617	0.17	0.27	0.35		
	3	HP10M3CC	H1061618	0.72	0.95	1.49		
	3.5	HP10M3-1/2CC	J1061619	0.74	0.92	1.43		
	4	HP10M4CC	K1061620	0.76	0.88	1.38		
	5	HP10M5CC	L1061621	0.65	0.80	1.23		
	6	HP10M6CC	J1061527	0.46	0.74	1.15		
	7	HP10M7CC	K1061528	0.44	0.70	1.1		
	8	HP10M8CC	L1061529	0.85	0.97	1.63		
	10	HP10M10CC	M1061530	0.74	0.99	1.65		
	12	HP10M12CC	N1061531	0.79	1.1	1.98		
	15	HP10M15CC	P1061532	0.99	1.43	2.42		
	20	HP10M20CC	Q1061533	1.21	1.65	3.08		
	25	HP10M25CC	R1061534	1.43	1.98	3.3		
	30	HP10M30CC	S1061535	1.65	2.09	4.07		
	32	HP10M32CC	T1061536	1.70	2.30	4.20		

DIMENSIONS



CC terminal (Fig. 2): Recommended crimping tool: T & B Sta-Kon ERG4002 #10 -12 AWG (6-4 mm<sup>2</sup>)