

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 string faults using Mersen's HelioProtection® 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

SP

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 (CB Tested)

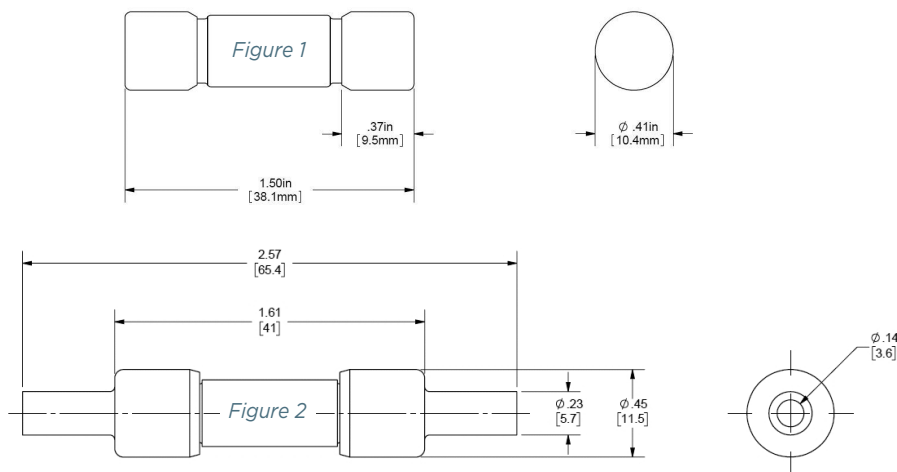


CATALOG NUMBERS AND ELECTRICAL CHARACTERISTICS

| 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 | 1.63 | 2.12 | 3.93 | | |
| | 32 | HP10M32* | H1062170 | 1.7 | 2.3 | 4.0 | | |
| | 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 | 1.63 | 2.12 | 3.93 | | |
| | 32 | HP10M32CC | T1061536 | 1.7 | 2.3 | 4.0 | | |

* Available in 176-piece bulk pack (add -B suffix to Catalog Number). Order quantity of one (1) -B suffix Catalog Number yields 176 fuses.

DIMENSIONS



CC terminal (Fig. 2): Recommended crimping tool: T & B Sta-Kon ERG4002 #10 -12 AWG (6-4 mm²)