



## Data Sheet – MC4CH Solar Connector

**Product description** - Single-contact electrical connectors commonly used for connecting solar panels.

### Features:

- Cable range supported - 4mm & 6mm
- Flame retardant, UV stabilised
- IP65/IP68 (1m, 1h)
- Third party approval under TUV SUD



SWA's MC4CH solar connectors have been tested to the internationally recognised standard, IEC 62852:2014, IEC 62858:2014/AMD1:2020 & EN 62858:2015/A1:2020

Performance test parameters and results are detailed on page two, and installation guidance is on page 3 of this datasheet.

Please see below for ordering information.

| PART NUMBER | DESCRIPTION                                    | PACK QTY | EAN           | TSI CODE  |
|-------------|--|----------|---------------|-----------|
| MC4CH       | MC4 Solar Connector - Male and Female Complete | 20       | 5050291298834 | 433919674 |
| MC4-MC      | MC4 Male Pin and Housing Only                  | 1        | 5050291012713 | 394593870 |
| MC4-FC      | MC4 Female Pin and Housing Only                | 1        | 5050291012690 | 394593896 |
| MC4M        | MC4 Male Pin Only                              | 1        | 5050291012706 | 394593922 |
| MC4F        | MC4 Female Pin Only                            | 1        | 5050291012683 | 394593935 |
| MC4P        | MC4 Male and Female Panel Connector            | 1        | 5050291012720 | 394593948 |
| MC4T1F2M    | MC4 Branch Connector 1 X Female 2 X Male       | 1        | 5050291012737 | 394593964 |
| MC4T1M2F    | MC4 Branch Connector 1 X Male 2 X Female       | 1        | 5050291012744 | 394593951 |
| RTMC4       | Solar Connector Crimping Tool                  | 1        | 5050291017428 | 394419064 |
| S-MC4       | Open-End Spanner & Quick Disconnect tool       | 2        | 5050291074674 | 394594167 |



## Technical Data:

Please note that the below testing values are maximums and should only be used for guidance. The safety factors appropriate to your application should be used:

| IEC 62852 TEST PARAMETRES            | REQUIRMENT/TEST           | RESULT |
|--------------------------------------|---------------------------|--------|
| Rated Voltage                        | 1500 V DC                 | PASS   |
| Max. Current                         | 30 amps                   | PASS   |
| Ingress Protection                   | IP65/IP68 (1m, 1h)        | PASS   |
| Operating Temperature                | - 40C to +85C             | PASS   |
| Flame Retardant Grade / UV Resistant | UL94-V0                   | PASS   |
| Application Class                    | A                         | PASS   |
| COMPOSITION                          | MATERIAL                  |        |
| Body                                 | PPO                       |        |
| Insulation                           | M-PPE                     |        |
| Contacts                             | Copper Alloy + Tin plated |        |
| Additional Technical Information     |                           |        |
| Safety Class                         | II                        |        |
| Rated impulse voltage                | 16000V                    |        |
| Rated insulation voltage             | 8000V                     |        |
| Static resistance                    | 5mΩ                       |        |
| Thrusting force                      | 35N < F < 80N             |        |
| Drawing force (auto locking status)  | 300N                      |        |
| Contact resistance                   | 0.35mΩ                    |        |



Product testing carried out by TUV SUD



For safe installation of SWA's MC4CH connectors use only our open-End Spanner & Quick Disconnect tool – p/n S-MC4



For consistent and safe crimping results use only our solar crimping tool – p/n RTMC4.

## MC4CH Installation instructions



Fig. 3

2

《Pic18C2》

Fig. 3

(Fig. 3)

### Pull Out

(PIC 48.5)



**Plc.4**



Fig. 5

The technical drawing shows three views of the SMA-Stop 1000 cable assembly:

- Top View:** Shows the full length of the cable with dimensions  $134 \pm 0.5$  mm and  $73.5 \pm 0.5$  mm. It includes labels for "STOP" and "SMA".
- Side View:** Shows the profile of the cable with a diameter dimension of  $\varnothing 18.8 \pm 0.1$  mm.
- Cross-section View:** Shows the internal components with a diameter dimension of  $\varnothing 19.4 \pm 0.1$  mm. A warning label states: "Do not disconnect under heat!".