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PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 2.54 mm, connection method: Crimp connection, color: black

#### Your advantages

- Gold-plated contacts ensure transfer quality remains stable over the long term
- Tools for manual and automatic crimping available as an option















# **Key Commercial Data**

| Packing unit                         | 250 pc          |
|--------------------------------------|-----------------|
| Minimum order quantity               | 250 pc          |
| GTIN                                 | 4 055626 487977 |
| GTIN                                 | 4055626487977   |
| Weight per Piece (excluding packing) | 0.290 g         |
| Custom tariff number                 | 85366990        |
| Country of origin                    | Germany         |

#### Technical data

#### Item properties

| Brief article description | Printed-circuit board connector |
|---------------------------|---------------------------------|
| Plug-in system            | MICRO COMBICON - FMC 0,5        |
| Type of contact           | Female connector                |
| Range of articles         | MCC 0,5/ST                      |
| Pitch                     | 2.54 mm                         |
| Number of positions       | 2                               |
| Connection method         | Crimp connection                |
| Number of levels          | 1                               |



### Technical data

### Electrical parameters

| Rated current                    | 6 A    |
|----------------------------------|--------|
| Rated insulation voltage (III/2) | 160 V  |
| Rated surge voltage (III/2)      | 2.5 kV |

## Connection capacity

| Conductor cross section flexible    | 0.14 mm² 0.75 mm² (Maximum external diameter of the insulation 1.9 mm) |
|-------------------------------------|--|
| Conductor cross section AWG / kcmil | 26 18 (Maximum external diameter of the insulation 1.9 mm)             |
| Stripping length                    | 4.1 mm 4.5 mm  |

#### Material data - housing

| Insulating material   | PA     |
|---|--------|
| Insulating material group   | I      |
| CTI according to IEC 60112  | 600    |
| Flammability rating according to UL 94                            | V0     |
| Glow wire flammability index GWFI according to EN 60695-2-12      | 850    |
| Glow wire ignition temperature GWIT according to EN 60695-2-13    | 775    |
| Temperature for the ball pressure test according to EN 60695-10-2 | 125 °C |

### Dimensions for the product

| Length [1]                  | 16 mm   |
|-----------------------------|---------|
| Width [w]                   | 5.58 mm |
| Height [ h ]                | 3.95 mm |
| Pitch                       | 2.54 mm |
| Height (without solder pin) | 3.95 mm |
| Dimension a                 | 2.54 mm |

### Packaging information

| Type of packaging          | packed in cardboard |
|----------------------------|---------------------|
| Pieces per package         | 250                 |
| Denomination packing units | Pcs.                |

#### Ambient conditions

| Ambient temperature (storage/transport) | -40 °C 70 °C |
|---|--------------|
| Ambient temperature (assembly)          | -5 °C 100 °C |
| Ambient temperature (operation)         | -40 °C       |

#### Termination and connection method

### Mechanical tests according to standard

| Test specification    | IEC 61984                          |
|-----------------------|------------------------------------|
| Visual examination    | Test passed IEC 60512-1-1:2002-02  |
| Dimensional test      | Test passed IEC 60512-1-2:2002-02  |
| Resistance of marking | Test passed IEC 60068-2-70:1995-12 |
| Result                | Test passed                        |



# Technical data

### Mechanical tests according to standard

| Specification                       | IEC 60512-13-2:2006-02             |
|-------------------------------------|------------------------------------|
| No. of cycles                       | 100                                |
| Insertion strength per pos. approx. | 2 N                                |
| Withdraw strength per pos. approx.  | 3 N                                |
| Polarization and coding             | Test passed IEC 60512-13-5:2006-02 |
| Result                              | Test passed                        |
| Specification                       | IEC 60512-15-1:2008-05             |
| Test force per pos.                 | 20 N                               |

### Air clearances and creepage distances

| Specification                    | IEC 60664-1:2007-04 |
|----------------------------------|---------------------|
| Insulating material group        | I                   |
| Voltage                          | 160 V               |
| Rated insulation voltage (III/3) | 160 V               |
| Rated insulation voltage (III/2) | 160 V               |
| Rated insulation voltage (II/2)  | 320 V               |
| Rated surge voltage (III/3)      | 2.5 kV              |
| Rated surge voltage (III/2)      | 2.5 kV              |
| Rated surge voltage (II/2)       | 2.5 kV              |

## Current carrying capacity / derating curves

| Specification IEC 61984 |
|-------------------------|
|-------------------------|

## Mechanical tests (A)

| Test specification                           | IEC 61984   |
|--|-------------|
| Insertion strength per pos. approx.          | 2 N         |
| Withdraw strength per pos. approx.           | 3 N         |
| Polarization when inserted requirement >20 N | Test passed |
| Contact holder in insert requirements >20 N  | Test passed |

### Durability tests (B)

| Specification                                | IEC 60512-9-1:2010-03 |  |
|--|-----------------------|--|
| Contact resistance R <sub>1</sub>            | 2.1 mΩ                |  |
| Insertion/withdrawal cycles                  | 100                   |  |
| Contact resistance R <sub>2</sub>            | 2.1 mΩ                |  |
| Impulse withstand voltage at sea level       | 2.95 kV               |  |
| Power-frequency withstand voltage            | 1.39 kV               |  |
| Insulation resistance, neighboring positions | > 12 TΩ               |  |

## Climatic tests (D)

| Specification  | DIN 50018:2013-05 |
|----------------|-------------------|
| Cold stress    | -55 °C/2 h        |
| Thermal stress | 105 °C/168 h      |



### Technical data

### Climatic tests (D)

| Corrosive stress                       | 1.0 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle |  |
|--|---|--|
| Impulse withstand voltage at sea level | 2.95 kV   |  |
| Power-frequency withstand voltage      | 1.39 kV   |  |

### Environmental and durability tests (E)

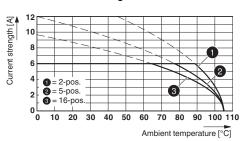
| Specification                         | IEC 61984:2008-10                          |  |
|---------------------------------------|--|--|
| Result, degree of protection, IP code | Back of hand safety with IP10 access probe |  |

### **Environmental Product Compliance**

| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |  |
|------------|---|--|
|            | No hazardous substances above threshold values          |  |

# Drawings





Type: MCC 0,5/...-ST-2,54 with MC 0,5/...-G-2,54 P20 THR R...

# Classifications

### eCl@ss

| eCl@ss 5.1 | 27260700 |
|------------|----------|
| eCl@ss 6.0 | 27260700 |
| eCl@ss 7.0 | 27440309 |
| eCl@ss 8.0 | 27440309 |
| eCl@ss 9.0 | 27440309 |

#### **ETIM**

| ETIM 5.0 | EC002638 |
|----------|----------|
| ETIM 6.0 | EC002638 |

# Approvals

## Approvals



### Approvals

Approvals

cULus Recognized

Ex Approvals

### Approval details

| cULus Recognized c US | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-20110128 |       |
|-----------------------|---|-------|
|                       | D   | В     |
| Nominal voltage UN    | 150 V   | 150 V |
| Nominal current IN    | 6 A   | 6 A   |
| mm²/AWG/kcmil         | 26-18   | 26-18 |

#### Accessories

Accessories

Crimp contact

Accessories - MCC 0,5-MP AU 0,14-0,5 - 1013425



Crimp contact, type of contact: Female connector, connection method: Crimp connection, contact surface: Gold, Conductor cross section flexible: 0.14 ...0.5 mm², type of packaging: packed in cardboard

Accessories - MCC 0,5-MP AU 0,14-0,5 R - 1013420



Crimp contact, type of contact: Female connector, connection method: Crimp connection, contact surface: Gold, Conductor cross section flexible:  $0.14 \dots 0.5 \text{ mm}^2$ , type of packaging: Taped on roll

Accessories - MCC 0,5-MP AU 0,34-0,75 - 1013419



Crimp contact, type of contact: Female connector, connection method: Crimp connection, contact surface: Gold, Conductor cross section flexible:  $0.34 \dots 0.75 \text{ mm}^2$ , type of packaging: packed in cardboard



#### Accessories

Accessories - MCC 0,5-MP AU 0,34-0,75 R - 1013418



Crimp contact, type of contact: Female connector, connection method: Crimp connection, contact surface: Gold, Conductor cross section flexible: 0.34 ...0.75 mm², type of packaging: Taped on roll

#### Crimping tool

Crimping pliers - CRIMPFOX-P CC 0.75 L - 1064998



Crimping pliers, for COMBICON crimp connectors with cross section: 0.14 ... 0.75 mm². Unlockable pressure lock, precise parallel crimping, front entry, B crimp, incl. 2 positioning aids

#### Additional products

Printed-circuit board connector - MC 0,5/ 2-G-2,54 P20 THR R24 - 1821245



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: THR soldering, Sample values available under SAMPLE MC...

Printed-circuit board connector - MCV 0,5/2-G-2,54 P20 THR R24 - 1821397



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: THR soldering, Sample values available under SAMPLE MC...

Printed-circuit board connector - MCV 0,5/ 2-G-2,54 SMD R24 - 1821546



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: SMD soldering, Sample values available under SAMPLE MC...



### Accessories

Printed-circuit board connector - MC 0,5/ 2-G-2,54 SMD R24 - 1821698

PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: SMD soldering, Sample values available under SAMPLE MC...



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