

# Printed-circuit board connector - DMCC 0,5/10-ST-2,54 - 1027612

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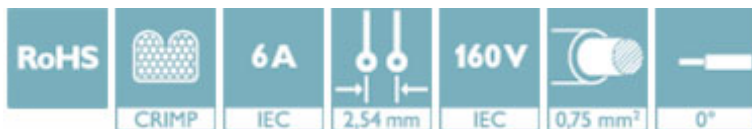
PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, Nominal cross section: 0.75 mm<sup>2</sup>, number of positions: 10, pitch: 2.54 mm, connection method: Crimp connection, color: black



The figure shows a 10-pos. version with 20 contacts

## Your advantages

- Cost-effective connection of crimped conductors in large quantities
- Gold-plated contacts ensure transfer quality remains stable over the long term
- Contacts arranged in a double row enable high packing density in a compact area
- Tools for manual and automatic crimping available as an option



## Key Commercial Data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	
GTIN	4055626522739
Weight per Piece (excluding packing)	1.650 g
Custom tariff number	85366990
Country of origin	China

## Technical data

### Item properties

Brief article description	PCB connector
Plug-in system	MICRO COMBICON - DFMC 0,5
Type of contact	Female connector
Range of articles	DMCC 0,5/...-ST
Pitch	2.54 mm
Number of positions	10
Connection method	Crimp connection

# Printed-circuit board connector - DMCC 0,5/10-ST-2,54 - 1027612

## Technical data

### Item properties

Number of levels	2
Number of connections	20
Number of potentials	20

### Electrical parameters

Nom. voltage	160 V
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### Connection capacity

Connection method	Crimp connection
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> (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 - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Selective coating
Metal surface terminal point (top layer)	Tin (4 - 8 µm Sn)
Metal surface contact area (top layer)	Gold (0.25
Metal surface contact area (middle layer)	Nickel (2 - 4 µm Ni),

### 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 [ l ]	16 mm
Width [ w ]	25.9 mm
Height [ h ]	6.49 mm
Pitch	2.54 mm
Dimension a	22.86 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

### Ambient conditions

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## Technical data

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-55 °C ... 100 °C (dependent on the derating curve)

### Termination and connection method

### Mechanical tests according to standard

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
Specification	IEC 60512-13-2:2006-02
No. of cycles	100
Insertion strength per pos. approx.	2 N
Withdraw strength per pos. approx.	2 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

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
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
Minimum clearance - inhomogeneous field (III/3)	1.5 mm
Minimum clearance - inhomogeneous field (III/2)	1.5 mm
Minimum clearance - inhomogeneous field (II/2)	1.5 mm
Minimum creepage distance value (III/3)	2 mm
Minimum creepage distance value (III/2)	1.5 mm
Minimum creepage distance value (II/2)	1.6 mm

### Mechanical tests (A)

Insertion strength per pos. approx.	2 N
Withdraw strength per pos. approx.	2 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

### Durability tests (B)

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## Technical data

### Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Insertion/withdrawal cycles	100
Contact resistance R <sub>2</sub> 1st level	2.2 mΩ
Contact resistance R <sub>2</sub> 2nd level	2.4 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV

### Climatic tests (D)

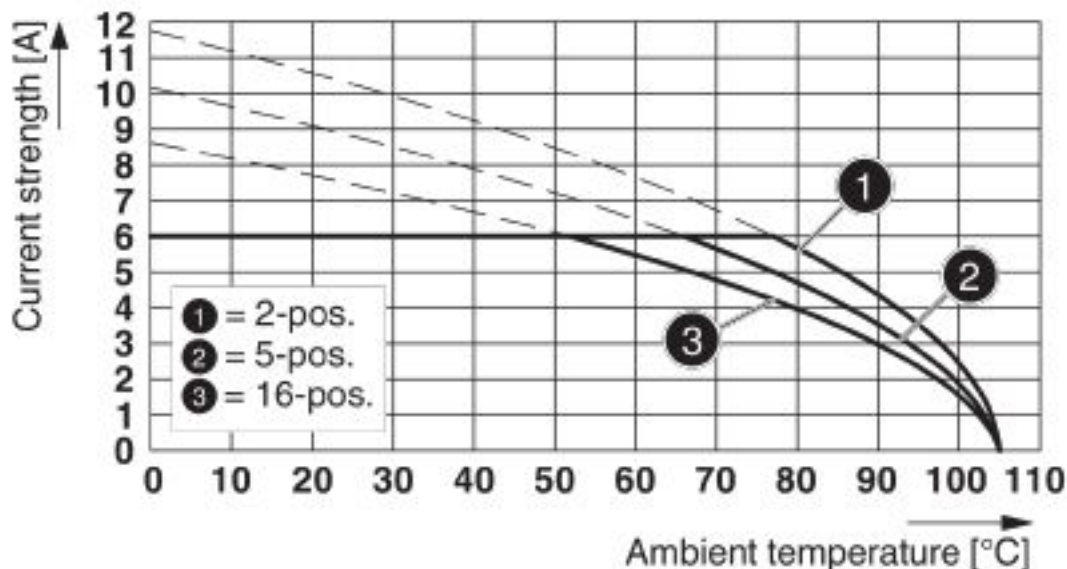
Specification	DIN 50018:2013-05
Cold stress	-55 °C/2 h
Thermal stress	105 °C/168 h
Corrosive stress	1.0 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV

### Environmental and durability tests (E)

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

## Drawings

Diagram



Type: DMCC 0.5/...-ST-2.54 with DMC 0.5/...-G1-2.54 P...THR R...

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## Classifications

### eCl@ss

eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
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 6.0	EC002638
ETIM 7.0	EC002638

## Approvals


### Approvals

#### Approvals

cULus Recognized

#### Ex Approvals

## Approval details

cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-19920306
	B	D	
Nominal voltage UN	150 V	150 V	
Nominal current IN	6 A	6 A	
mm <sup>2</sup> /AWG/kcmil	26-18	26-18	

## Accessories

### Accessories

Crimp contact

## Printed-circuit board connector - DMCC 0,5/10-ST-2,54 - 1027612

### Accessories

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 mm<sup>2</sup>, 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 ...0.5 mm<sup>2</sup>, 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 ...0.75 mm<sup>2</sup>, type of packaging: packed in cardboard

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 mm<sup>2</sup>, 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 mm<sup>2</sup>. Unlockable pressure lock, precise parallel crimping, front entry, B crimp, incl. 2 positioning aids

### Additional products

## Printed-circuit board connector - DMCC 0,5/10-ST-2,54 - 1027612

### Accessories

Printed-circuit board connector - DMC 0,5/10-G1-2,54 P20THR R44 - 1844808



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, Nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 10, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: THR soldering, solder pin [P]: 2 mm, Sample values available under SAMPLE DMC...

Printed-circuit board connector - DMC 0,5/10-G1-2,54 SMD R44 - 1845108



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, Nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 10, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: SMD soldering, Pin layout: Linear pad geometry, solder pin [P]: 2 mm, Sample values available under SAMPLE DMC...

Printed-circuit board connector - DMCV 0,5/10-G1-2,54 P20THR R44 - 1844950



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, Nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 10, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: THR soldering, solder pin [P]: 2 mm, Sample values available under SAMPLE DMC...

Printed-circuit board connector - DMCV 0,5/10-G1-2,54 SMD R44 - 1845250



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, Nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 10, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: SMD soldering, Pin layout: Linear pad geometry, Sample values available under SAMPLE DMC...