Printed-circuit board connector - DMCC 0,5/ 9-ST-2,54 - 1027611

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

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

PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.75 mm², number of positions: 9, pitch: 2.54 mm, connection method: Crimp connection, color: black

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
GTIN	4 055626 522722
GTIN	4055626522722

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	9
Connection method	Crimp connection
Number of levels	2
Number of connections	18
Number of potentials	18

Electrical parameters

Printed-circuit board connector - DMCC 0,5/ 9-ST-2,54 - 1027611

Technical data

Electrical parameters

Nominal current	6 A
Nom. voltage	160 V
Rated voltage	160 V
Rated voltage (III/2)	160 V
Rated 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

Connection capacity

Connection method	Crimp connection
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 - 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 (3 - 6 µm Sn)
Metal surface contact area (top layer)	Gold (0.25 Au)
Metal surface contact area (middle layer)	Nickel (2 - 4 µm Ni),

Material data - housing

Housing color	black (9005)
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]	23.36 mm
Height [h]	6.49 mm
Pitch	2.54 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50

Printed-circuit board connector - DMCC 0,5/ 9-ST-2,54 - 1027611

Technical data

Packaging information

Denomination packing units	Pcs.

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

Test specification	IEC 61984
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Resistance of inscriptions	IEC 60068-2-70:1995-12
Insertion and withdrawal force	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	IEC 60512-13-5:2006-02
Contact holder in insert	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
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

Current carrying capacity / derating curves

Caption	Type: DMCC 0.5/...-ST-2.54 with DMC 0.5/...-G1-2.54 P...THR R...
Specification	IEC 61984:2008-10
Reduction factor	0.8
Note	Representation based on IEC 60512-5-2:2002-02
	For number of positions, see diagram

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	2 N
Withdraw strength per pos. approx.	2 N
Polarization when inserted requirement >20 N	Test passed

Printed-circuit board connector - DMCC 0,5/ 9-ST-2,54 - 1027611

Technical data

Mechanical tests (A)

Contact holder in insert requirements >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Insertion/withdrawal cycles	100
Contact resistance R_2 1st level	2.2 mΩ
Contact resistance R_2 2nd level	2.4 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	16
Conductor cross section	0.75 mm²
Test current	6 A
Upper limiting temperature requirements <100 °C	Test passed

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^3 SO_2 on 300 dm^3/40 °C/1 cycle
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV

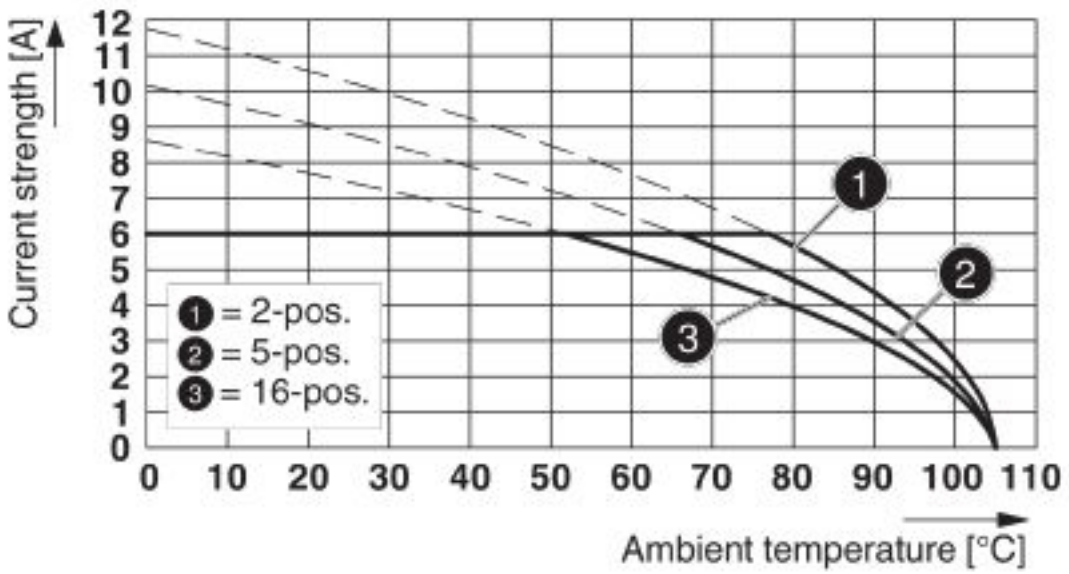
Environmental and durability tests (E)

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

Drawings

Printed-circuit board connector - DMCC 0,5/ 9-ST-2,54 - 1027611

Diagram



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

Classifications

eCl@ss

eCl@ss 10.0.1	27440309
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 / EAC / IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung

Printed-circuit board connector - DMCC 0,5/ 9-ST-2,54 - 1027611

Approvals

Ex Approvals

Approval details

cULus Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19920306

	B	D
Nominal voltage UN	150 V	150 V
Nominal current IN	6 A	6 A
mm²/AWG/kcmil	26-18	26-18

EAC		B.01687

IECEE CB Scheme	http://www.iecee.org/	DE1-59151-M1

Nominal voltage UN	160 V
Nominal current IN	6 A
mm²/AWG/kcmil	0.14-.75

VDE Gutachten mit Fertigungsüberwachung	http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40042389

Nominal voltage UN	160 V
Nominal current IN	6 A
mm²/AWG/kcmil	0.14-.75

Accessories

Accessories

Crimp contact

Printed-circuit board connector - DMCC 0,5/ 9-ST-2,54 - 1027611

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 mm²

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 mm²

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 mm²

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

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 - DMCC 0,5/ 9-ST-2,54 - 1027611

Accessories

Printed-circuit board connector - DMC 0,5/ 9-G1-2,54 P20THR R44 - 1844798

PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 9, 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/ 9-G1-2,54 SMD R44 - 1845098

PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 9, 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/ 9-G1-2,54 P20THR R44 - 1844947

PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 9, 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/ 9-G1-2,54 SMD R44 - 1845247

PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 9, 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...

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
http://www.phoenixcontact.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Phoenix Contact:

1027611