

Printed-circuit board connector - DMCC 0,5/ 5-ST-2,54 - 1027607

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>)

PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, Nominal cross section: 0.75 mm², number of positions: 5, 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	1 pc
Minimum order quantity	100 pc
GTIN	 4 055626 521589
GTIN	4055626521589
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

Printed-circuit board connector - DMCC 0,5/ 5-ST-2,54 - 1027607

Technical data

Item properties

Number of positions	5
Connection method	Crimp connection
Number of levels	2
Number of connections	10
Number of potentials	10

Electrical parameters

Nom. voltage	160 V
--------------	-------

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 (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]	13.2 mm
Height [h]	6.49 mm
Pitch	2.54 mm
Dimension a	10.16 mm

Printed-circuit board connector - DMCC 0,5/ 5-ST-2,54 - 1027607

Technical data

Packaging information

Type of packaging	packed in cardboard
Pieces per package	100
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

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

Printed-circuit board connector - DMCC 0,5/ 5-ST-2,54 - 1027607

Technical data

Air clearances and creepage distances

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)

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

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

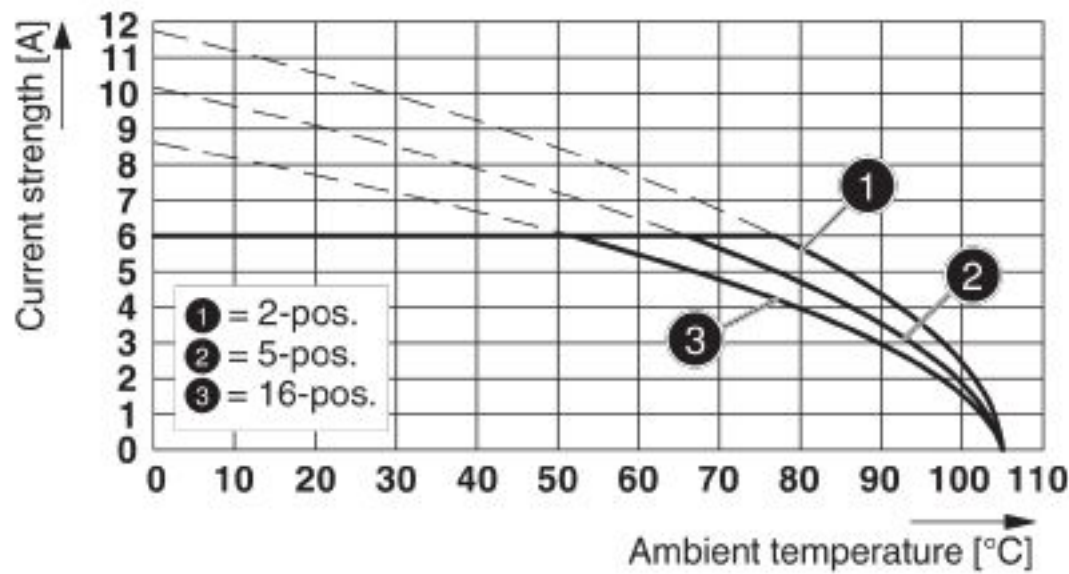
Environmental and durability tests (E)

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/ 5-ST-2,54 - 1027607

Diagram



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

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

Printed-circuit board connector - DMCC 0,5/ 5-ST-2,54 - 1027607

Approvals

Approvals

cULus Recognized

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	

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 ...0.5 mm², type of packaging: Taped on roll

Printed-circuit board connector - DMCC 0,5/ 5-ST-2,54 - 1027607

Accessories

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, 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 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 - DMC 0,5/ 5-G1-2,54 P20THR R44 - 1844756



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, Nominal cross section: 0.5 mm², number of positions: 5, 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/ 5-G1-2,54 SMD R44 - 1845056



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, Nominal cross section: 0.5 mm², number of positions: 5, 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 - DMCC 0,5/ 5-ST-2,54 - 1027607

Accessories

Printed-circuit board connector - DMCV 0,5/ 5-G1-2,54 P20THR R44 - 1844905



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, Nominal cross section: 0.5 mm², number of positions: 5, 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/ 5-G1-2,54 SMD R44 - 1845205



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, Nominal cross section: 0.5 mm², number of positions: 5, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: SMD soldering, Pin layout: Linear pad geometry, Sample values available under SAMPLE DMC...