

ICC25-H/4R5,0-7035 - PCB header



2203903

<https://www.phoenixcontact.com/us/products/2203903>

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PCB headers, nominal cross section: 2.5 mm², color: light gray, nominal current: 16 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: ICC...-H/.. R5,0, pitch: 5 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: ICC 2,5, Pin connector pattern alignment: Standard, locking: Snap-in locking, mounting method: without, type of packaging: Box packaging, Product with pin output on right side

Your advantages

- Variable coding, for reliable protection against incorrect connection
- Designed for integration into the wave soldering process
- Easy and fast push-in mounting of assembled printed-circuit boards, thanks to stable guide rails
- Quick and easily coded when initially connecting the connector and header

Commercial data

Item number	2203903
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AC09
Product key	ACHAFB
GTIN	4055626466088
Weight per piece (including packing)	5.277 g
Weight per piece (excluding packing)	5.24 g
Customs tariff number	85366930
Country of origin	PL

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Technical data

Product properties

Product type	PCB headers
Product family	ICC...-H/..R5,0
Type	Header perpendicular to the PCB
Number of positions	4
Pitch	5 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Mounting type	without
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Properties

Nominal current I_N	16 A
Nominal voltage U_N	320 V
Contact resistance	1.5 mΩ
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

Material specifications

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	Tin-plated
Metal surface terminal point (top layer)	Tin (2 μm - 4 μm Sn)
Metal surface terminal point (middle layer)	Nickel (1.3 μm - 3 μm Ni)
Metal surface contact area (top layer)	Tin (2 μm - 4 μm Sn)
Metal surface contact area (middle layer)	Nickel (1.3 μm - 3 μm Ni)
Metal surface soldering area (top layer)	Tin (2 μm - 4 μm Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 μm - 3 μm Ni)

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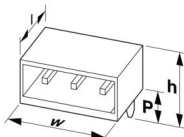
Material data - housing

Color (Housing)	light gray (7035)
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

Notes

Assembly note	Please observe the application note in the download area.
General	Further information and detailed dimensions are available in the download area.

Dimensions

Dimensional drawing	
Pitch	5 mm
Width [w]	25 mm
Height [h]	22.4 mm
Length [l]	20.35 mm
Solder pin length [P]	3.5 mm
Pin dimensions	1 x 1 mm

PCB design

Hole diameter	1.4 mm
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Mechanical tests

Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

Resistance of inscriptions

Specification	IEC 60068-2-70:1995-12
Result	Test passed

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Polarization and coding

Specification	IEC 60512-13-5:2006-02
Result	Test passed

Contact holder in insert

Specification	IEC 60512-15-1:2008-05
Contact holder in insert Requirements >20 N	Test passed

Insertion and withdrawal forces

Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	13 N
Withdraw strength per pos. approx.	8 N

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	4

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 30 GΩ

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 mm
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	1.6 mm
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

Environmental and real-life conditions

Durability test

Specification	IEC 60512-9-1:2010-03
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Impulse withstand voltage at sea level	4.8 kV
Contact resistance R ₁	1.5 mΩ
Contact resistance R ₂	1.6 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 30 GΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	2.21 kV

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Ambient conditions

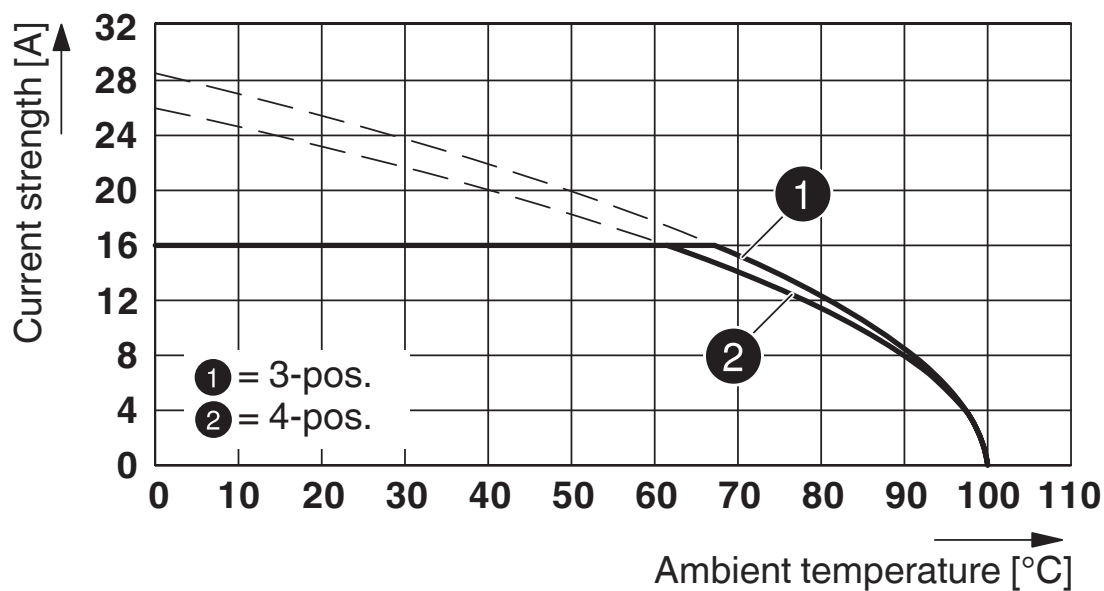
Ambient temperature (storage/transport)	-40 °C ... 55 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 105 °C (dependent on the derating curve)

Packaging specifications

Type of packaging	Box packaging
Outer packaging type	Carton

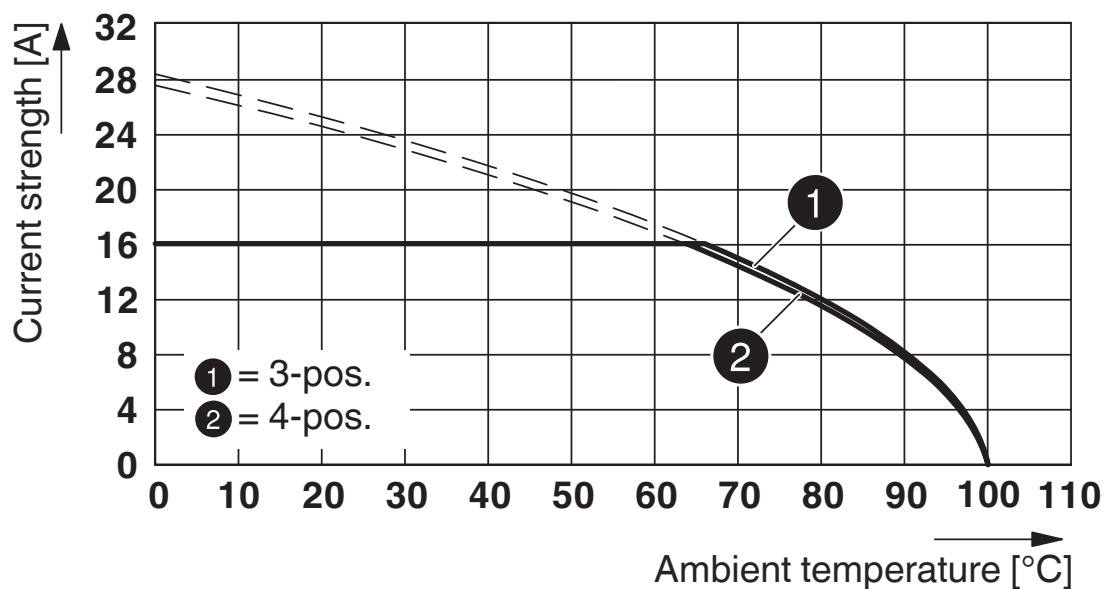
Drawings

Diagram

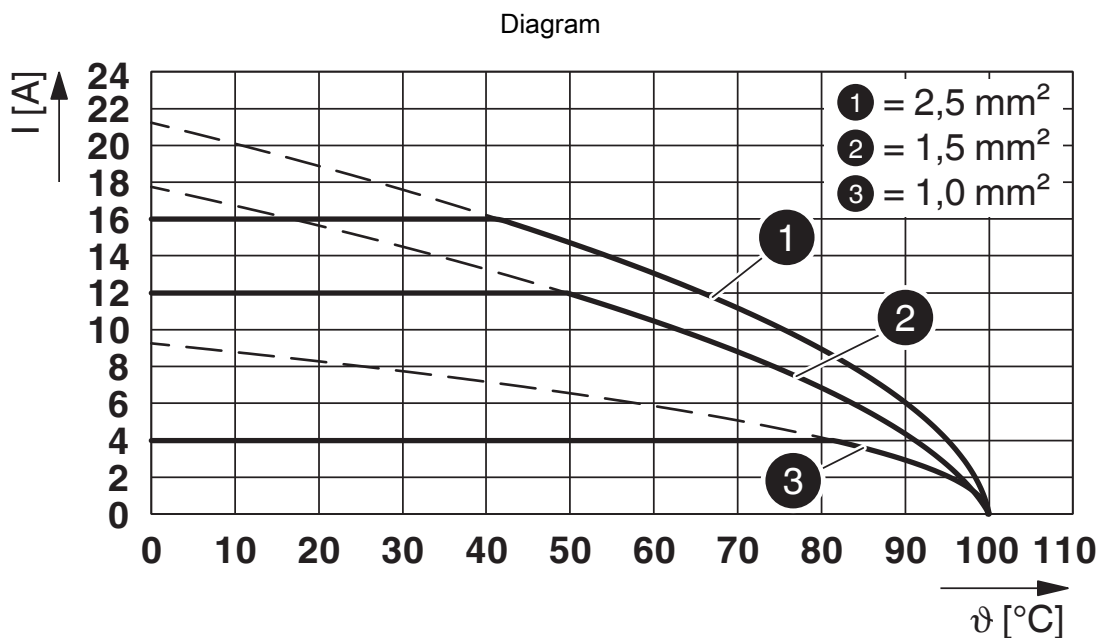


Type: PSPT 2,5/...-ST ... with ICC20(25)-H/...L(R)5,0-...

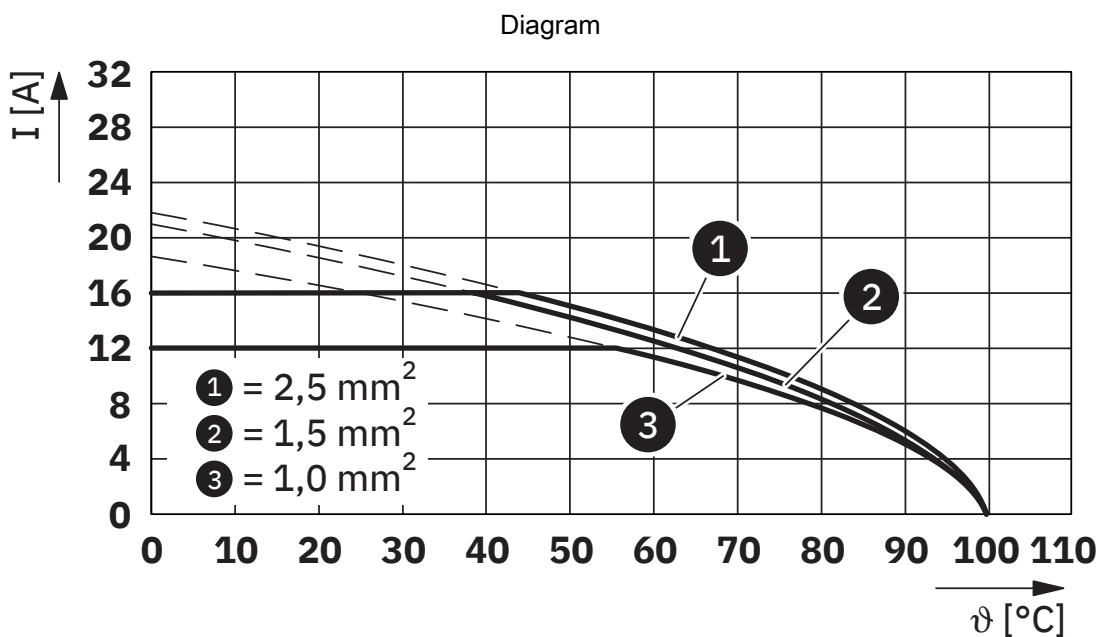
Diagram



Type: MSTBT 2,5 HC/...-STF with ICC20(25)-H/...L(R)5,0-...



Type: ICC20(25)-PPC2,5/...-5,0-... with ICC20(25)-H/...L(R)5,0-...



Type: ICC25-PSC 2,5/...-5,0-AA with ICC20(25)-H/...L(R) 5,0

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2203903>

 cULus Recognized Approval ID: E60425-20181123				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	300 V	16 A	-	-

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Classifications

ECLASS

ECLASS-13.0	27460201
ECLASS-15.0	27460201

ETIM

ETIM 10.0	EC002637
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%
EF3.1 Climate Change	
CO2e kg	0.053 kg CO2e

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Mandatory accessories

PSPT 2,5/ 4-ST KMGY - PCB connector

2202344

<https://www.phoenixcontact.com/us/products/2202344>



PCB connector, nominal cross section: 2.5 mm², color: light gray, nominal current: 16 A, rated voltage (III/2): 300 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PSPT 2,5/...-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5 advanced, locking: without, mounting method: without, type of packaging: packed in cardboard, Color of the spring lever: orange

PSPT 2,5/ 4-ST BK - PCB connector

2202757

<https://www.phoenixcontact.com/us/products/2202757>



PCB connector, nominal cross section: 2.5 mm², color: black, nominal current: 16 A, rated voltage (III/2): 300 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PSPT 2,5/...-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5 advanced, locking: without, mounting method: without, type of packaging: packed in cardboard, Color of the spring lever: orange

ICC25-H/4R5,0-7035 - PCB header

2203903

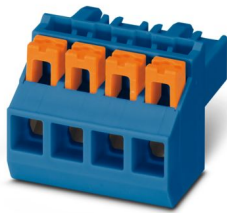
<https://www.phoenixcontact.com/us/products/2203903>



PSPT 2,5/ 4-ST BU - PCB connector

1036975

<https://www.phoenixcontact.com/us/products/1036975>



PCB connector, color: blue, number of potentials: 4, number of positions: 4, number of connections: 4, product range: PSPT 2,5/...-ST, pitch: 5 mm, type of packaging: packed in cardboard, Color of the spring lever: orange

PSPT 2,5/ 4-ST GY - PCB connector

1036976

<https://www.phoenixcontact.com/us/products/1036976>



PCB connector, nominal cross section: 2.5 mm², color: gray, nominal current: 16 A, rated voltage (III/2): 300 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PSPT 2,5/...-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5 advanced, locking: without, mounting method: without, type of packaging: packed in cardboard, Color of the spring lever: orange

ICC25-H/4R5,0-7035 - PCB header

2203903

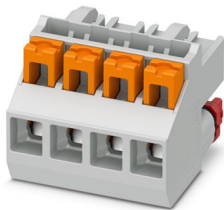
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ICC25-PPC2,5/4-5,0-AA-7035 - PCB connector

1084034

<https://www.phoenixcontact.com/us/products/1084034>

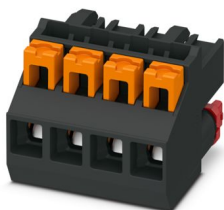


PCB connector, nominal cross section: 2.5 mm², color: light gray, nominal current: 16 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: ICC...-PPC2,5/...-5,0, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: ICC 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard, Color of the spring lever: orange

ICC25-PPC2,5/4-5,0-AA-9005 - PCB connector

1227025

<https://www.phoenixcontact.com/us/products/1227025>



PCB connector, nominal cross section: 2.5 mm², color: black, nominal current: 16 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: ICC...-PPC2,5/...-5,0, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: ICC 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard, Color of the spring lever: orange

ICC25-H/4R5,0-7035 - PCB header

2203903

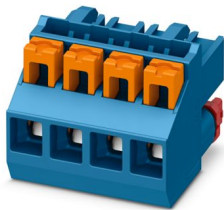
<https://www.phoenixcontact.com/us/products/2203903>



ICC25-PPC2,5/4-5,0-AA-5015 - PCB connector

1272011

<https://www.phoenixcontact.com/us/products/1272011>

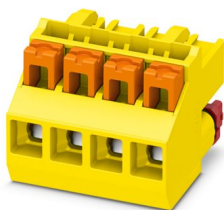


PCB connector, nominal cross section: 2.5 mm², color: blue, nominal current: 16 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: ICC...-PPC2,5/...-5,0, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: ICC 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard, Color of the spring lever: orange

ICC25-PPC2,5/4-5,0-AA-1018 - PCB connector

1360576

<https://www.phoenixcontact.com/us/products/1360576>



PCB connector, nominal cross section: 2.5 mm², color: yellow, nominal current: 16 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: ICC...-PPC2,5/...-5,0, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: ICC 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard, Color of the spring lever: orange

ICC25-H/4R5,0-7035 - PCB header

2203903

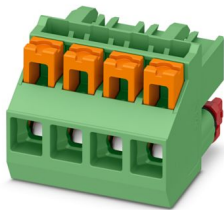
<https://www.phoenixcontact.com/us/products/2203903>



ICC25-PPC2,5/4-5,0-AA-6021 - PCB connector

1475114

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PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 16 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: ICC...-PPC2,5/...-5,0, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: ICC 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard, Color of the spring lever: orange

MSTBT 2,5 HC/ 4-STP GY7035 - PCB connector

2200332

<https://www.phoenixcontact.com/us/products/2200332>



PCB connector, nominal cross section: 2.5 mm², color: light gray, nominal current: 16 A (see derating curve), rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: MSTBT 2,5 HC/...-STP, pitch: 5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5 advanced, locking: without, mounting method: without, type of packaging: packed in cardboard

ICC25-H/4R5,0-7035 - PCB header

2203903

<https://www.phoenixcontact.com/us/products/2203903>



MSTBT 2,5 HC/ 4-STP BK - PCB connector

2200482

<https://www.phoenixcontact.com/us/products/2200482>



PCB connector, nominal cross section: 2.5 mm², color: black, nominal current: 16 A (see derating curve), rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: MSTBT 2,5 HC/...-STP, pitch: 5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5 advanced, locking: without, mounting method: without, type of packaging: packed in cardboard

MSTBT 2,5 HC/ 4-STP BU - PCB connector

1009166

<https://www.phoenixcontact.com/us/products/1009166>



PCB connector, nominal cross section: 2.5 mm², color: blue, nominal current: 16 A (see derating curve), rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: MSTBT 2,5 HC/...-STP, pitch: 5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5 advanced, locking: without, mounting method: without, type of packaging: packed in cardboard

ICC25-H/4R5,0-7035 - PCB header

2203903

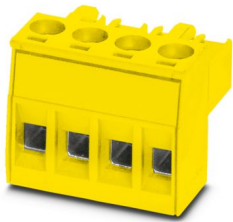
<https://www.phoenixcontact.com/us/products/2203903>



MSTBT 2,5 HC/ 4-STP YE - PCB connector

1511787

<https://www.phoenixcontact.com/us/products/1511787>



PCB connector, nominal cross section: 2.5 mm², color: yellow, nominal current: 16 A (see derating curve), rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: MSTBT 2,5 HC/...-STP, pitch: 5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5 advanced, locking: without, mounting method: without, type of packaging: packed in cardboard

MSTBT 2,5 HC/ 4-STP 7042 - PCB connector

1546540

<https://www.phoenixcontact.com/us/products/1546540>



PCB connector, nominal cross section: 2.5 mm², color: gray, nominal current: 16 A (see derating curve), rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: MSTBT 2,5 HC/...-STP, pitch: 5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5 advanced, locking: without, mounting method: without, type of packaging: packed in cardboard

ICC25-H/4R5,0-7035 - PCB header

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MSTBT 2,5 HC/ 4-STP BUGY - PCB connector

2201085

<https://www.phoenixcontact.com/us/products/2201085>



PCB connector, nominal cross section: 2.5 mm², color: blue, nominal current: 16 A (see derating curve), rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: MSTBT 2,5 HC/...-STP, pitch: 5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5 advanced, locking: without, mounting method: without, type of packaging: packed in cardboard

ICC25-PSC2,5/4-5,0-AA-7035 - PCB connector

1084027

<https://www.phoenixcontact.com/us/products/1084027>



PCB connector, nominal cross section: 2.5 mm², color: light gray, nominal current: 16 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: ICC...-PSC2,5/...-5,0, pitch: 5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: ICC 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard

ICC25-H/4R5,0-7035 - PCB header

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ICC25-PSC2,5/4-5,0-AA-9005 - PCB connector

1428287

<https://www.phoenixcontact.com/us/products/1428287>



PCB connector, nominal cross section: 2.5 mm², color: black, nominal current: 16 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: ICC...-PSC2,5/...-5,0, pitch: 5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: ICC 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard

ICC25-PSC2,5/4-5,0-AA-1018 - PCB connector

1367873

<https://www.phoenixcontact.com/us/products/1367873>



PCB connector, nominal cross section: 2.5 mm², color: yellow, nominal current: 16 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: ICC...-PSC2,5/...-5,0, pitch: 5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: ICC 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard

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