

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

2203903

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



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 documentation. Our general terms of use for downloads are valid.



PCB headers, nominal cross section: 2.5 mm², color: light grey, nominal current: 16 A, rated voltage (III/2): 320 V, 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, Pin connector pattern alignment: Standard, locking: Snap-in locking, mounting: 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

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

2203903

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



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 flange	without
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Nominal current I_N	16 A
Nominal voltage U_N	320 V
Degree of pollution	3
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 - 4 μ m Sn)
Metal surface terminal point (middle layer)	Nickel (1.3 - 3 μ m Ni)
Metal surface contact area (top layer)	Tin (2 - 4 μ m Sn)
Metal surface contact area (middle layer)	Nickel (1.3 - 3 μ m Ni)
Metal surface soldering area (top layer)	Tin (2 - 4 μ m Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 - 3 μ m Ni)

Material data - housing

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

2203903

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

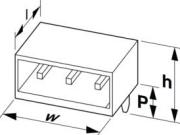


Color (Housing)	light grey (7035)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

Notes

Assembly note	Refer to the data sheet for the range 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

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

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

Contact holder in insert	

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

2203903

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



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

Insertion and withdrawal forces

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

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

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

2203903

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



Durability test

Specification	IEC 60512-9-1:2010-03
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	105 °C/168 h
Power-frequency withstand voltage	2.21 kV

Ambient conditions

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

Packaging specifications

Type of packaging	Box packaging
Outer packaging type	Carton

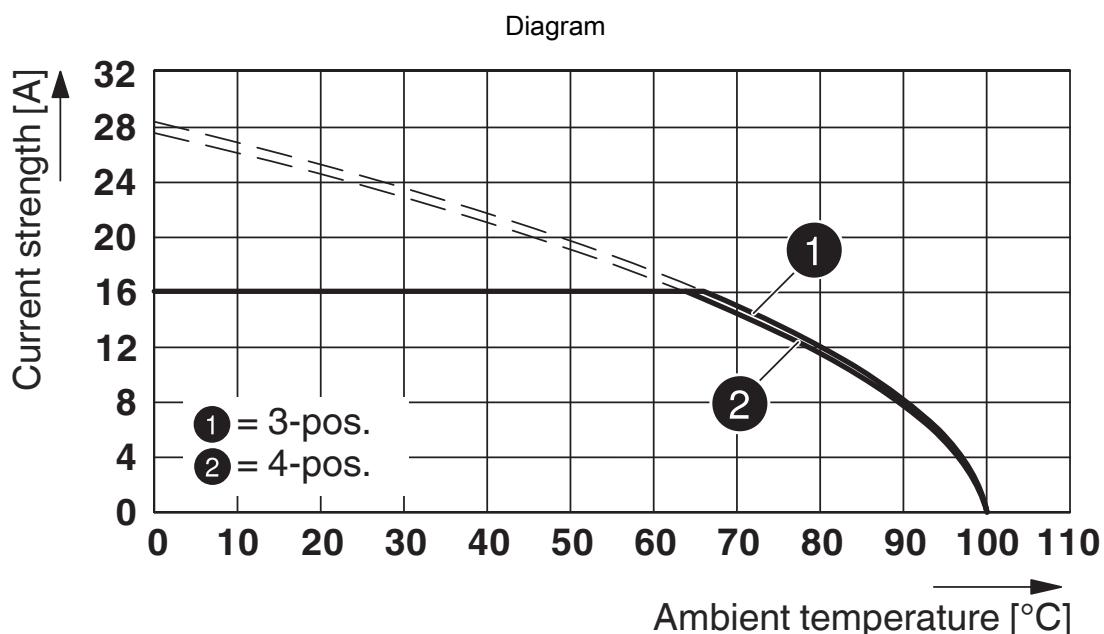
ICC25-H/4R5,0-7035 - PCB header



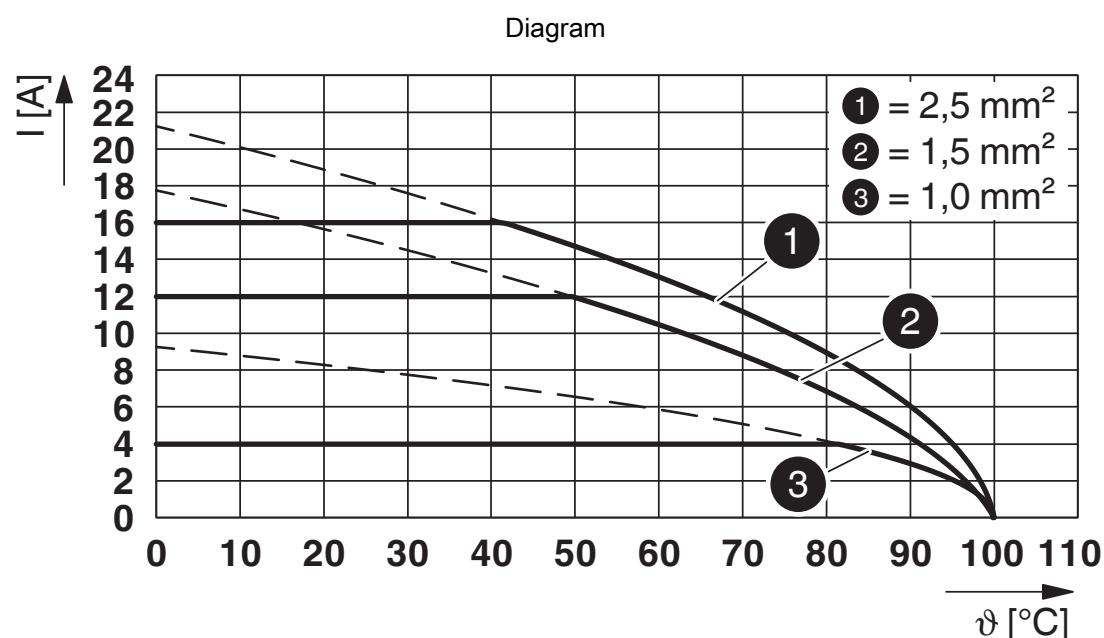
2203903

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

Drawings



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-...

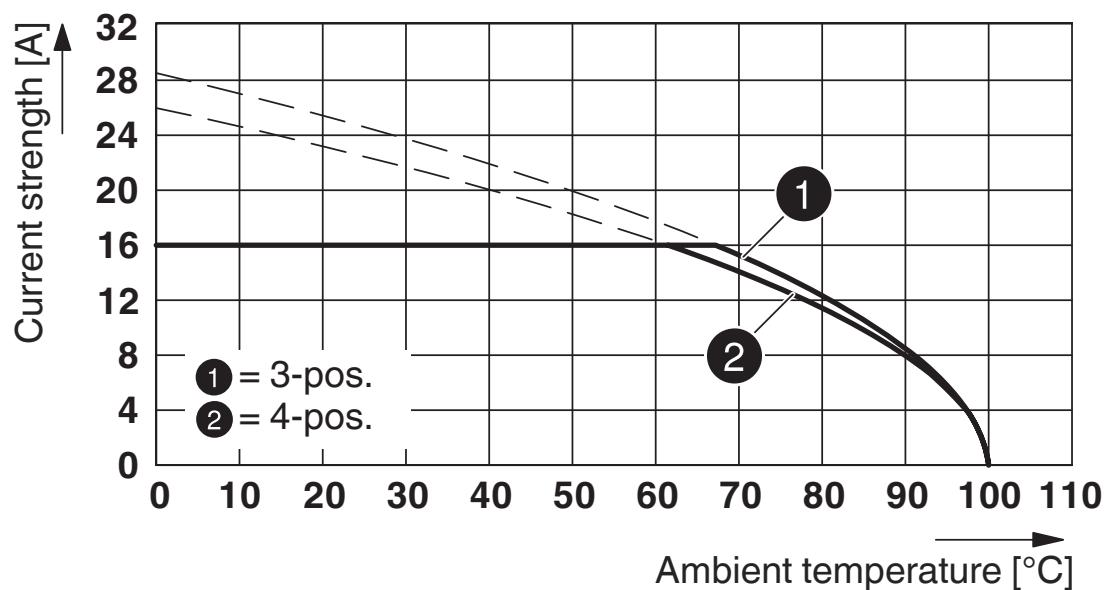
ICC25-H/4R5,0-7035 - PCB header

2203903

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



Diagram



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

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

2203903

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



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
Use group B	300 V	16 A	-	-

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

2203903

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



Classifications

ECLASS

ECLASS-11.0	27460201
ECLASS-12.0	27460201
ECLASS-13.0	27460201

ETIM

ETIM 9.0	EC002637
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

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

2203903

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



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%
-------------------------------------	----------------------------

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



2203903

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

Accessories

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

2202344

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



PCB connector, nominal cross section: 2.5 mm², color: light grey, nominal current: 16 A, rated voltage (III/2): 300 V, contact surface: Tin, 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, locking: without, mounting: without, type of packaging: packed in cardboard, Color of the spring lever: orange

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com