

https://www.phoenixcontact.com/us/products/2203902



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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/..L5,0, 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 left 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	2203902
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AC09
Product key	ACHAFB
GTIN	4055626466071
Weight per piece (including packing)	5.302 g
Weight per piece (excluding packing)	3.9 g
Customs tariff number	85366930
Country of origin	PL



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Technical data

Product properties

Туре	Header perpendicular to the PCB
Product type	PCB headers
Product family	ICCH/L5,0
Number of positions	4
Pitch	5 mm
Number of connections	4
Number of rows	1
Mounting flange	without
Number of potentials	4
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 µm Sn)
Metal surface terminal point (middle layer)	Nickel (1.3 - 3 μm Ni)
Metal surface contact area (top layer)	Tin (2 - 4 µm Sn)
Metal surface contact area (middle layer)	Nickel (1.3 - 3 μm Ni)
Metal surface soldering area (top layer)	Tin (2 - 4 µm Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 - 3 μm Ni)

Material data - housing



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Color (Housing)	light grey (7035)
Insulating material	PA
Insulating material group	1
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 instruction:	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	P ₁ h
Pitch	5 mm
Width [w]	25 mm
Height [h]	22.4 mm
Length [I]	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

visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Difficultion differen	
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



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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)
Sweep speed	5g (60.1 Hz 150 Hz)
Test duration per axis	2.5 h



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Durability test

Outer packaging type

pecification	IEC 60512-9-1:2010-03
nsulation resistance, neighboring positions	> 30 GΩ
natic test	
pecification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
hermal stress	105 °C/168 h
ower-frequency withstand voltage	2.21 kV
over-frequency withstand voltage bient conditions ambient temperature (operation)	2.21 kV -40 °C 105 °C (dependent on the derating curve)
pient conditions	
oient conditions ambient temperature (operation)	-40 °C 105 °C (dependent on the derating curve)

Carton



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Classifications

UNSPSC 21.0

ECLASS

	ECLASS-11.0	27460201	
	ECLASS-12.0	27460201	
	ECLASS-13.0	27460201	
ET	ETIM		
	ETIM 9.0	EC002637	
UNSPSC			

39121400



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Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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