

1227025

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PCB connector, nominal cross section: 2.5 mm², color: black, nominal current: 16 A, rated voltage (III/2): 320 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: ICC..-PPC2,5/..-5,0, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, locking: without, mounting: without, Color of the spring lever: orange

Your advantages

- · Time saving push-in connection, tools not required
- · Variable coding, for reliable protection against incorrect connection
- · Push-in technology for quick and easy wiring
- · Quick and easily coded when initially connecting the connector and header
- · Intuitive operation due to color-coded actuating push button

Commercial data

Item number	1227025
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AC09
Product key	ACHAFC
GTIN	4063151320546
Weight per piece (including packing)	5.2 g
Weight per piece (excluding packing)	4.45 g
Customs tariff number	85366990
Country of origin	CN



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Technical data

Product properties

Product type	PCB connector
Product family	ICCPPC2,5/5,0
Number of positions	4
Pitch	5 mm
Number of connections	4
Number of rows	1
Number of potentials	4

Electrical properties

Nominal current I _N	16 A
Nominal voltage U _N	320 V
Degree of pollution	3
Contact resistance	1.56 mΩ
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

Connection data

Connection technology

Nominal cross section

Contact connection type	Socket
Interlock	

2.5 mm²

menock		
Lockin	g type	without
Mounti	ng flange	without

Conductor connection

Connection method	Push-in spring connection
Conductor/PCB connection direction	0°
Conductor cross section rigid	0.2 mm ² 2.5 mm ²
Conductor cross section flexible	0.2 mm ² 2.5 mm ²
Conductor cross section AWG	24 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.2 mm² 2.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.2 mm² 2.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm ² 0.34 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 1.5 mm²
Stripping length	10 mm



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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 (4 - 8 µm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 μm Sn)

Material data - housing

Color (Housing)	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

Material data – actuating element

Insulating material	PBT
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions

Dimensional drawing	h
Pitch	5 mm
Width [w]	19.95 mm
Height [h]	15 mm
Length [I]	22 mm

Notes

Coding	For details, refer to the product drawing in the "Downloads" tab.
Safety note	
Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.



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	 WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	 WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	 The item is intended to be an unencapsulated plug for installation in a housing.
	Operate the connector only when it is fully plugged in.
echanical tests	
Test for conductor damage and slackening	
Specification	IEC 60999-1:1999-11
Result	Test passed
Repeated connection and disconnection	
Specification	IEC 60999-1:1999-11
Result	Test passed
Pull-out test	
Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force	0.2 mm² / solid / > 10 N
setpoint/actual value	0.2 mm² / flexible / > 10 N
	2.5 mm² / solid / > 50 N
	2.5 mm² / flexible / > 50 N
Insertion and withdrawal forces	
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	12 N
Withdraw strength per pos. approx.	11 N
Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Result	Test passed
Polarization and coding	
Specification	IEC 60512-13-5:2006-02
Result	Test passed
Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed



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

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	4.8 kV
Contact resistance R ₁	1.56 mΩ
Contact resistance R ₂	1.59 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 1 TΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	$0.2~\mathrm{dm^3SO_2}$ on 300 dm 3 /40 °C/1 cycle
Thermal stress	100 °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

Electrical tests

Thermal test | Test group C

Insulating material group

Comparative tracking index (IEC 60112)

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	> 1 ΤΩ
Air clearances and creepage distances	
Specification	IEC 60664-1:2007-04

CTI 600



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Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV



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Classifications

UNSPSC 21.0

ECLASS

ECLASS-11.0	27460202	
ECLASS-12.0	27460202	
ECLASS-13.0	27460202	
ETIM		
ETIM 9.0	EC002638	
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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