

1827896

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PCB headers, nominal cross section: 2.5 mm², color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 14, number of rows: 1, number of positions: 14, number of connections: 14, product range: CCVA 2,5/..-G, pitch: 5.08 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

Your advantages

- · Designed for integration into the SMT soldering process
- · Vertical connection enables multi-row arrangement on the PCB
- · Maximum flexibility when it comes to device design one header for connectors with different connection technologies
- Closed contour for optimum stability of the plug-in connection

Commercial data

Item number	1827896
Packing unit	52 pc
Minimum order quantity	52 pc
Note	Made to order (non-returnable)
Sales key	AA03
Product key	AACTBI
GTIN	4046356953016
Weight per piece (including packing)	7.19 g
Weight per piece (excluding packing)	5.2 g
Customs tariff number	85366930
Country of origin	DE



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Technical data

Product properties

Туре	Component suitable for through hole reflow
Product line	COMBICON Connectors M
Product type	PCB headers
Product family	CCVA 2,5/G
Number of positions	14
Pitch	5.08 mm
Number of connections	14
Number of rows	1
Mounting flange	without
Number of potentials	14
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Nominal current I _N	12 A
Nominal voltage U _N	320 V
Degree of pollution	3
Contact resistance	1.3 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)	400 V
Rated surge voltage (II/2)	4 kV

Mounting

Mounting type	THR soldering
Pin layout	Linear pinning
Processing notes	
Process	Reflow/wave soldering
Moisture Sensitive Level	MSI 1

260 °C

3

Material specifications

Classification temperature T_c Solder cycles in the reflow

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



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Result

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Tin (3 - 5 μm Sn) Nickel (1.3 - 3 μm Ni) Tin (3 - 5 μm Sn) Nickel (1.3 - 3 μm Ni)
Tin (3 - 5 μm Sn)
black (9005)
LCP
Illa
175
V0
Processing using reflow processes in compliance with IEC 60068-2-58 or DIN EN 61760-1 (latest version) Moisture Sensitive Level (MSL) = 1 according to IPC/JEDEC STD-020-C
In accordance with IEC 61984, COMBICON connectors have switching power (COC). During designated use, they must not plugged in or disconnected when carrying voltage or under load
h h
5.08 mm
73.92 mm
14.6 mm
8.6 mm
12 mm
2.6 mm
1 x 1 mm
1.6 mm
IEC 60512-1-1:2002-02
Test passed

Test passed



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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
Contact holder in insert	
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.	8 N
Withdraw strength per pos. approx.	6 N
ectrical tests	
ection tests	
Thermal test Test group C	
Specification	IEC 60512-5-1:2002-02

Tested number of positions	24
Insulation resistance	
Specification	IEC 60512-3-1:2002-02

> 5 MΩ

Insulation resistance, neighboring positions

Air clearances and creepage distances	
Specification	IEC 60664-1:2007-04
Insulating material group	Illa
Comparative tracking index (IEC 60112)	CTI 175
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)	4 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)	3.2 mm
Rated insulation voltage (II/2)	400 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	4 mm

Environmental and real-life conditions



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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

y	
Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	4.8 kV
Contact resistance R ₁	1.3 mΩ
Contact resistance R ₂	1.4 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ

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

Packaging specifications

Тур	pe of packaging	packed in cardboard



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Classifications

ECLASS

	ECLASS-11.0	27460201		
	ECLASS-12.0	27460201		
	ECLASS-13.0	27460201		
ETIM				
	ETIM 9.0	EC002637		
UNSPSC				
	UNSPSC 21.0	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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