

1874331

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PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, contact connection type: Pin, number of potentials: 14, number of rows: 2, number of positions: 7, number of connections: 14, product range: DMC 1,5/..-G1-THR, pitch: 3.5 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 DFMC 1,5, 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
- · Conductor connection on several levels enables higher contact density
- · Small component size for applications where space is at a premium

#### Commercial data

Item number	1874331
Packing unit	50 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	AABTJB
GTIN	4055626338668
Weight per piece (including packing)	3.798 g
Weight per piece (excluding packing)	4.02 g
Country of origin	CN



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## Technical data

### Product properties

Туре	Headers
Product line	COMBICON Connectors S
Product type	PCB headers
Product family	DMC 1,5/G1-THR
Number of positions	7
Pitch	3.5 mm
Number of connections	14
Number of rows	2
Mounting flange	without
Number of potentials	14
Pin layout	Linear pinning
Solder pins per potential	1

## Electrical properties

Nominal current I <sub>N</sub>	8 A
Nominal voltage U <sub>N</sub>	160 V
Degree of pollution	3
Contact resistance	2 mΩ
Rated voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	250 V
Rated surge voltage (II/2)	2.5 kV

### Mounting

Mounting type	THR soldering
Pin layout	Linear pinning
Processing notes	
Process	Reflow/wave soldering

Process	Reflow/wave soldering
Moisture Sensitive Level	MSL 1
Classification temperature T <sub>c</sub>	260 °C
Solder cycles in the reflow	3

### 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



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Metal surface contact area (top layer)	Tin (3 - 5 µm Sn)
Metal surface contact area (middle layer)	Nickel (1.3 - 3 μm Ni)
Metal surface soldering area (top layer)	Tin (3 - 5 µm Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 - 3 μm Ni)
Material data - housing	
Color (Housing)	black (9005)
Insulating material	LCP
Insulating material group	Illa
CTI according to IEC 60112	175
Flammability rating according to UL 94	VO
Dimensions	
Dimensional drawing	
	P
Pitch	3.5 mm
Width [w]	25.3 mm
Height [h]	13.4 mm
Length [I]	11.6 mm
Installed height	10.8 mm
Solder pin length [P]	2.6 mm
Pin dimensions	0.8 x 0.8 mm
PCB design	
Pin spacing	2.50 mm
Hole diameter	1.4 mm
Mechanical tests  Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
	,
Dimension check	UEO 00540 4 0 0000 00
Specification	IEC 60512-1-2:2002-02
Result	Test passed
Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Result	Test passed
Polarization and coding	
Specification	IEC 60512-13-5:2006-02



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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.	3 N
Withdraw strength per pos. approx.	2 N

#### Electrical tests

#### Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	20

#### Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

#### 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)	160 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	2.5 mm
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	1.6 mm
Rated insulation voltage (II/2)	250 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	2.5 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)



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Sweep speed	5g (60.1 Hz 150 Hz)
Test duration per axis	2.5 h
urability test	
Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R <sub>1</sub>	2 mΩ
Contact resistance R <sub>2</sub>	2.3 mΩ
Insertion/withdrawal cycles	25
imatic test	
Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	1.39 kV
nbient 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 %
	-5 °C 100 °C



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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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