

1874043

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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: 6, number of rows: 2, number of positions: 8, number of connections: 6, product range: DMC 1,5/..-G1F-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: Snap-in locking, mounting: Lock & release threaded flange, type of packaging: packed in cardboard

### Your advantages

- · Designed for integration into the SMT soldering process
- · Screwable flange for superior mechanical stability
- · Automatic locking and intuitive release through Lock and Release operating lever in contrasting color
- · Conductor connection on several levels enables higher contact density
- · Small component size for applications where space is at a premium

#### Commercial data

Item number	1874043
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA02
Product key	AABTJA
GTIN	4055626259321
Weight per piece (including packing)	4.94 g
Weight per piece (excluding packing)	4.94 g
Customs tariff number	85366930
Country of origin	DE



1874043

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### Technical data

#### Product properties

Product line	COMBICON Connectors S
Product type	PCB headers
Product family	DMC 1,5/G1F-THR
Number of positions	8
Pitch	3.5 mm
Number of connections	6
Number of rows	2
Mounting flange	Lock & release threaded flange
Number of potentials	6
Pin layout	Linear pinning
Solder pins per potential	1

#### Electrical properties

Nominal current I <sub>N</sub>	8 A
Nominal current I <sub>N</sub>	0.0
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
Flange	

|--|

#### Processing notes

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 .	- con	tact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC
	60068-2-82/JEDEC JESD 201



1874043

Result

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Contact material	Cu alloy
Surface characteristics	Tin-plated
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	V0
Dimensions	
Dimensional drawing	
	PA
Pitch	3.5 mm
Width [w]	35 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	
Specification	IEC 60512-1-2:2002-02
Result	Test passed
Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
oposition in the second	120 00000 2 10.1000 12

Test passed



1874043

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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.	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
Inculation registance	

#### Insulation resistance

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

#### Air clearances and creepage distances |

All cloarances and croopage 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



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Type of packaging

sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz 60.1 Hz)
Sweep speed	50 m/s² (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
Insulation resistance, neighboring positions	> 5 MΩ
matic 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
	105 °C/168 h
Thermal stress	
Thermal stress  Power-frequency withstand voltage	1.39 kV
Power-frequency withstand voltage	1.39 kV
Power-frequency withstand voltage	1.39 kV  -40 °C 100 °C (dependent on the derating curve)
Power-frequency withstand voltage  nbient conditions  Ambient temperature (operation)	
	-40 °C 100 °C (dependent on the derating curve)

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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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