

1105679

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PCB headers, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Gold, contact connection type: Pin, number of potentials: 4, number of rows: 2, number of positions: 9, number of connections: 4, 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	1105679
Packing unit	50 pc
Minimum order quantity	1,000 pc
Product key	AABTJA
GTIN	4055626989808
Weight per piece (including packing)	5.34 g
Weight per piece (excluding packing)	5.307 g
Country of origin	DE



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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	9
Pitch	3.5 mm
Number of connections	4
Number of rows	2
Number of potentials	4
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Nominal current I _N	8 A
Nominal voltage U _N	160 V
Degree of pollution	3
Contact resistance	$2\text{m}\Omega$
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
Flagge	
Flange	
Tightening torque	0.2 Nm
Processing notes	
Process	Reflow/wave soldering
Moisture Sensitive Level	MSL 1
Classification temperature T _c	260 °C

Material specifications

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



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Surface characteristics Metal surface contact area (top layer) Metal surface contact area (middle layer) Metal surface soldering area (top layer) Metal surface soldering area (middle layer) Material data - housing Color (Housing) Insulating material Insulating material group CTI according to IEC 60112 Flammability rating according to UL 94 Dimensions Dimensional drawing	partially gold-plated Gold (0.8 - 1.4 µm Au) Nickel (2 - 4 µm Ni) Gold (0.1 - 0.8 µm Au) Nickel (2 - 4 µm Ni) black (9005) LCP Illa 175 V0
Metal surface contact area (middle layer) Metal surface soldering area (top layer) Metal surface soldering area (middle layer) Material data - housing Color (Housing) Insulating material Insulating material group CTI according to IEC 60112 Flammability rating according to UL 94	Nickel (2 - 4 μm Ni) Gold (0.1 - 0.8 μm Au) Nickel (2 - 4 μm Ni) black (9005) LCP Illa 175
Metal surface soldering area (top layer) Metal surface soldering area (middle layer) Material data - housing Color (Housing) Insulating material Insulating material group CTI according to IEC 60112 Flammability rating according to UL 94	Gold (0.1 - 0.8 μm Au) Nickel (2 - 4 μm Ni) black (9005) LCP Illa 175
Metal surface soldering area (middle layer) Material data - housing Color (Housing) Insulating material Insulating material group CTI according to IEC 60112 Flammability rating according to UL 94	Nickel (2 - 4 μm Ni) black (9005) LCP Illa 175
Material data - housing Color (Housing) Insulating material Insulating material group CTI according to IEC 60112 Flammability rating according to UL 94 Dimensions	black (9005) LCP Illa 175
Color (Housing) Insulating material Insulating material group CTI according to IEC 60112 Flammability rating according to UL 94 Dimensions	LCP Illa 175
Insulating material Insulating material group CTI according to IEC 60112 Flammability rating according to UL 94 Dimensions	LCP Illa 175
Insulating material group CTI according to IEC 60112 Flammability rating according to UL 94 Dimensions	Illa 175
CTI according to IEC 60112 Flammability rating according to UL 94 Dimensions	175
Flammability rating according to UL 94 Dimensions	
Dimensions	VO
	y/
Dimensional drawing	<i>y</i> -
	P
Pitch	3.5 mm
Width [w]	38.5 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
Result	Test passed
Polarization and coding	·



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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
nsertion and withdrawal forces	
nsertion and withdrawal forces Result	Test passed
	Test passed 100
Result	

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	9

Insulation resistance

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

Air clearances and creepage distances |

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Specification	IEC 60664-1:2007-04
Insulating material group	IIIa
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 - 500 - 10 Hz
Sweep speed	1 octave/min



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Amplitude	0.35 mm (10 Hz 60.1 Hz)
Sweep speed	5g (60.1 Hz 500 Hz)
Test duration per axis	2 h
urability test	
Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R ₁	2 mΩ
Contact resistance R ₂	1.8 mΩ
Contact resistance R ₂ 2nd level	1.9 mΩ
Insertion/withdrawal cycles	100
Insulation resistance, neighboring positions	> 5 MΩ
imatic test	
Specification	ISO 6988:1985-02
Corrosive stress	1.0 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	1.39 kV
mbient conditions	
Ambient temperature (operation)	-40 °C 105 °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
kaging specifications	
Type 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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