Printed-circuit board connector - MC 1,5/ 2-G-3,81 P26 THR - 1721986

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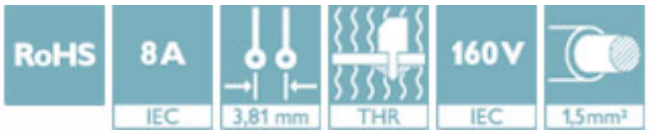
PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 3.81 mm, color: black, contact surface: Tin, mounting: THR soldering

The figure shows a 10-position version of the product

Why buy this product

- Designed for integration into the SMT soldering process
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies



Key Commercial Data

Packing unit	100 STK
GTIN	4 046356 116909
GTIN	4046356116909

Technical data

Item properties

Brief article description	Printed-circuit board connector
Range of articles	MC 1,5/..-G-THR
Pitch	3.81 mm
Type of contact	Male connector
Plug-in system	MINI COMBICON
Number of positions	2
Mounting type	THR soldering
Pin layout	Linear pinning
Locking	without
Number of levels	1

Electrical parameters

Rated current	8 A

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Electrical parameters

Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

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 contact area (top layer)	Tin (3 - 5 µm Sn)
Metal surface contact area (middle layer)	Nickel (1 - 3 µm Ni)

Material data - housing

Housing color	black (9005)
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

Dimensions for the product

Caption	Schematic representation – for additional information, see product range drawing in the Download Center
Length [l]	9.2 mm
Width [w]	8.01 mm
Height [h]	9.5 mm
Pitch	3.81 mm
Height (without solder pin)	6.9 mm
Solder pin [P]	2.6 mm
Pin dimensions	0.8 x 0.8 mm
Dimension a	3.81 mm

Dimensions for PCB design

Hole diameter	1.4 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	100
Denomination packing units	Pcs.
Outer packaging type	Carton

Processing notes

Process	Reflow/wave soldering
Specification	Following IPC/JEDEC J-STD-020D.1:2008-03
	Following IEC 61760-1:2006-04
	Following IEC 60068-2-58:2005-02
Moisture Sensitive Level	MSL 1

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Processing notes

Classification temperature T_c	260 °C
Solder cycles in the reflow	3

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C

Air clearances and creepage distances

Insulating material group	IIIa
Comparative tracking index (IEC 60112:2003-01)	CTI 175
Voltage	160 V
Rated insulation voltage (III/3)	160 V
Rated insulation voltage (III/2)	160 V
Rated insulation voltage (II/2)	250 V
Rated surge voltage (III/3)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 kV
Minimum clearance - inhomogeneous field (III/3)	1.5 mm
Minimum clearance - inhomogeneous field (III/2)	1.5 mm
Minimum clearance - inhomogeneous field (II/2)	1.5 mm
Minimum creepage distance value (III/3)	2.5 mm
Minimum creepage distance value (III/2)	1.6 mm
Minimum creepage distance value (II/2)	3.2 mm

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R_1	1.4 mΩ
Insertion/withdrawal cycles	25
Contact resistance R_2	1.5 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV
Insulation resistance, neighboring positions	> 5 TΩ

Climatic tests (D)

Specification	ISO 6988:1985-02

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Climatic tests (D)

Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm^3 SO_2 on 300 dm^3/40 °C/1 cycle
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV

Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

Standards and Regulations

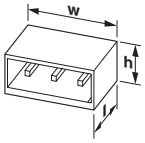
Connection in acc. with standard	EN-VDE
	CUL
Flammability rating according to UL 94	V0

Environmental Product Compliance

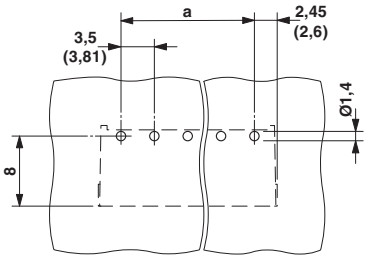
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

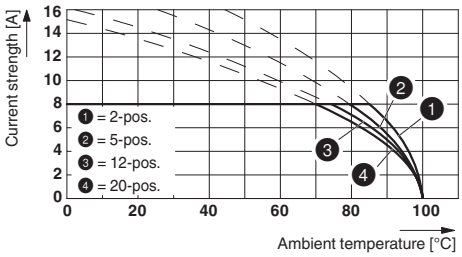
Dimensional drawing



Drilling diagram



Diagram



Type: FK-MCP 1,5/...-ST(F)-3,81 with MC 1,5/...-G(F)-3,81 P.. THR(R...)

Approvals

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Approvals

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VDE Gutachten mit Fertigungsüberwachung / cULus Recognized / IECEE CB Scheme / EAC / VDE report with production monitoring

Ex Approvals

Approval details

VDE Gutachten mit Fertigungsüberwachung	VDE	http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40011723

Nominal voltage UN	160 V
Nominal current IN	8 A

cULus Recognized	cULus	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20110128

	D	B
Nominal voltage UN	300 V	300 V
Nominal current IN	8 A	8 A

IECEE CB Scheme	CB scheme	http://www.iecee.org/	DE1-60604-B1B2

Nominal voltage UN	160 V
Nominal current IN	8 A

EAC	EAC	B.01742

VDE report with production monitoring	VDE	http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40011723

Nominal voltage UN	160 V
Nominal current IN	8 A

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