

MCDV 0,5/ 9-G1-2,5 HT BK - PCB header



1961313

<https://www.phoenixcontact.com/us/products/1961313>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



The figure shows a 10-position version of the product

PCB headers, nominal cross section: 0.5 mm^2 , nominal current: 4 A, rated voltage (III/2): 160 V, contact surface: Sn, contact connection type: Pin, number of potentials: 18, number of rows: 2, number of positions: 9, number of connections: 18, product range: MCDV 0,5/...-G1-HT, pitch: 2.5 mm, mounting: THR soldering / wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: COMBICON FK-MC 0,5, Pin connector pattern alignment: Standard, locking: without, mounting method: without, type of packaging: packed in cardboard, Standard component made of highly temperature resistant plastic; suitable for reflow process. User information and design recommendations on Through Hole Reflow Technology can be found at: "Downloads".

Your advantages

- Designed for integration into the SMT soldering process
- Vertical connection enables multi-row arrangement on the PCB

Commercial data

Item number	1961313
Packing unit	50 pc
Note	Made to order (non-returnable)
Sales key	AA01
Product key	AAA1FB
GTIN	4017918912635
Weight per piece (including packing)	9.29 g
Weight per piece (excluding packing)	9.217 g
Customs tariff number	85366930
Country of origin	DE

Technical data

Product properties

Product type	PCB headers
Product family	MCDV 0,5/..-G1-HT
Product line	COMBICON Connectors XS
Type	Component suitable for through hole reflow
Number of positions	9
Pitch	2.5 mm
Number of connections	18
Number of rows	2
Number of potentials	18
Mounting type	without
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Properties

Nominal current I_N	4 A
Nominal voltage U_N	160 V
Rated voltage (III/3)	32 V
Rated surge voltage (III/3)	1.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	160 V
Rated surge voltage (II/2)	2.5 kV

Mounting

Mounting type	THR soldering / wave soldering
Pin layout	Linear pinning

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
Metal surface contact area (top layer)	Tin (5 μm - 7 μm Sn)
Metal surface contact area (middle layer)	Nickel (2 μm - 3 μm Ni)
Metal surface soldering area (top layer)	Tin (5 μm - 7 μm Sn)
Metal surface soldering area (middle layer)	Nickel (2 μm - 3 μm Ni)

Material data - housing

MCDV 0,5/ 9-G1-2,5 HT BK - PCB header



1961313

<https://www.phoenixcontact.com/us/products/1961313>

Insulating material	PA
Insulating material group	IIIa
CTI according to IEC 60112	325
Flammability rating according to UL 94	V0

Dimensions

Dimensional drawing	
Pitch	2.5 mm
Height [h]	17.5 mm
Length [l]	21.9 mm
Installed height	18 mm
Solder pin length [P]	3.5 mm
Pin dimensions	0.8 x 0.8 mm

PCB design

Pin spacing	2.50 mm
Hole diameter	1.4 mm

Electrical tests

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	IIIa
Comparative tracking index (IEC 60112)	CTI 325
Rated insulation voltage (III/3)	32 V
Rated surge voltage (III/3)	1.5 kV
minimum clearance value - non-homogenous field (III/3)	0.8 mm
minimum creepage distance (III/3)	1.3 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)	160 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)	1.6 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
---	------------------

MCDV 0,5/ 9-G1-2,5 HT BK - PCB header



1961313

<https://www.phoenixcontact.com/us/products/1961313>

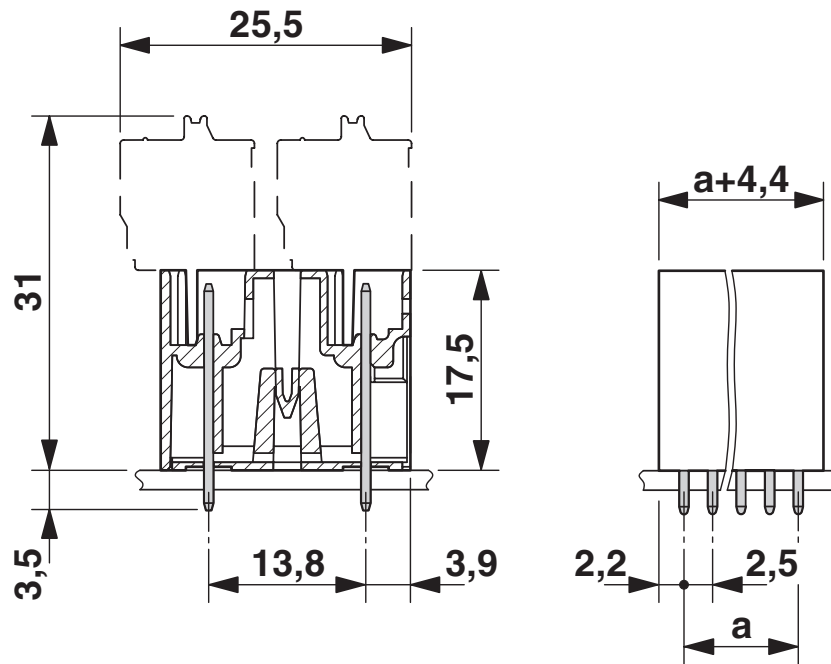
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

Packaging specifications

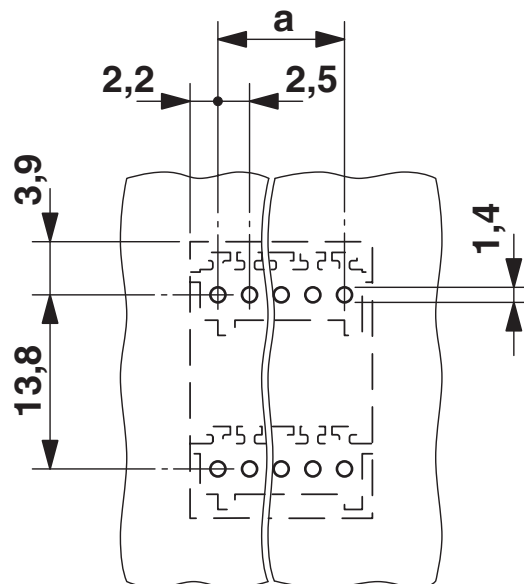
Type of packaging	packed in cardboard
Outer packaging type	Dry bag

Drawings

Dimensional drawing



Drilling plan/solder pad geometry



MCDV 0,5/ 9-G1-2,5 HT BK - PCB header



1961313

<https://www.phoenixcontact.com/us/products/1961313>

Classifications

UNSPSC

UNSPSC 21.0	39121409
-------------	----------

MCDV 0,5/ 9-G1-2,5 HT BK - PCB header



1961313

<https://www.phoenixcontact.com/us/products/1961313>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com