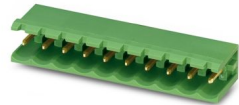


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PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: agate grey, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Gold, contact connection type: Pin, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: MSTB 2,5/...-G-THT, pitch: 5.08 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

Your advantages

- Gold-plated contacts ensure transfer quality remains stable over the long term
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Easy PCB replacement thanks to plug-in modules
- Well-known mounting principle allows worldwide use
- Plug-in direction parallel to the PCB
- Items that can be aligned in various pitches support flexible and space-saving PCB assembly

Commercial data

Item number	1706312
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Product key	AAC1D6
GTIN	4046356033077
Weight per piece (including packing)	3.61 g
Weight per piece (excluding packing)	2.374 g
Customs tariff number	85366930
Country of origin	DE

# MSTB 2,5/ 5-G-5,08THTABGYAUCD2 - PCB header



1706312

<https://www.phoenixcontact.com/pc/products/1706312>

## Technical data

### Product properties

Product type	PCB headers
Product family	MSTB 2,5/..-G-THT
Product line	COMBICON Connectors M
Number of positions	5
Pitch	5.08 mm
Number of connections	5
Number of rows	1
Number of potentials	5
Mounting flange	without
Pin layout	Linear pinning
Solder pins per potential	1

### Electrical properties

Nominal current $I_N$	12 A
Nominal voltage $U_N$	320 V
Degree of pollution	3
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	400 V
Rated surge voltage (II/2)	4 kV

### Mounting

Mounting type	THR 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	partially gold-plated
Metal surface contact area (top layer)	Gold (0.8 - 1.4 $\mu\text{m}$ Au)
Metal surface contact area (middle layer)	Nickel (2 - 3 $\mu\text{m}$ Ni)
Metal surface soldering area (top layer)	Tin (3 - 5 $\mu\text{m}$ Sn)
Metal surface soldering area (middle layer)	Nickel (1 - 3 $\mu\text{m}$ Ni)

#### Material data - housing

Color ()	()
Insulating material	PA GF

# MSTB 2,5/ 5-G-5,08THTABGYAUCD2 - PCB header



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Insulating material group	IIIa
CTI according to IEC 60112	250
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

## Notes

Notes on operation	In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load.
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## Dimensions

Dimensional drawing	
Pitch	5.08 mm
Width [w]	25.4 mm
Height [h]	11.8 mm
Length [l]	12 mm
Installed height	8.6 mm
Solder pin length [P]	3.2 mm
Pin dimensions	1 x 1 mm

## PCB design

Hole diameter	1.4 mm
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## Electrical tests

### Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	IIIa
Rated insulation voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	4 mm
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3.2 mm
Rated insulation voltage (II/2)	400 V
Rated surge voltage (II/2)	4 kV

# MSTB 2,5/ 5-G-5,08THTABGYAUCD2 - PCB header



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minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	4 mm

## Environmental and real-life conditions

### Ambient 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 %
Ambient temperature (assembly)	-5 °C ... 100 °C

## Packaging specifications

Type of packaging	packed in cardboard
Outer packaging type	Dry bag

# MSTB 2,5/ 5-G-5,08THTABGYAUCD2 - PCB header



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## Classifications

### ECLASS

ECLASS-11.0	27460201
ECLASS-13.0	27460201

### UNSPSC

UNSPSC 21.0	39121409
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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%