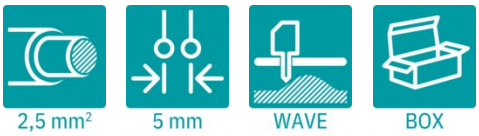
MSTBO 2,5/ 4-G1PL BUGY - PCB header

2200551

https://www.phoenixcontact.com/us/products/2200551

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PCB headers, nominal cross section: 2.5 mm², color: blue gray, nominal current: 16 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: MSTBO 2,5/..-G1PL, pitch: 5 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3. 5 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5 advanced, Pin connector pattern alignment: Orthogonal, locking: without, mounting method: without, type of packaging: packed in cardboard, Product with pin output on left side

Your advantages

- Plug-in direction orthogonal to the PCB

Commercial data

Item number	2200551
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AC08
Product key	ACHADB
GTIN	4055626247953
Weight per piece (including packing)	2.93 g
Weight per piece (excluding packing)	2.93 g
Customs tariff number	85366930
Country of origin	PL

Technical data

Product properties

Product type	PCB headers
Product family	MSTBO 2,5/..-G1PL
Number of positions	4
Pitch	5 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Mounting type	without
Pin layout	Linear pinning
Solder pins per potential	1

Fitting of components

Partial assembly	No

Electrical properties

Properties

Nominal current I_N	16 A
Nominal voltage U_N	320 V
Contact resistance	1.44 mΩ
Rated voltage (III/3)	320 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)	630 V
Rated surge voltage (II/2)	4 kV

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

Material specifications

Material data - contact

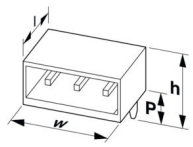
Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	tin-plated
Metal surface contact area (top layer)	Tin (Sn)

Material data - housing

Color (Housing)	blue gray (7031)
Insulating material	PA

Insulating material group	I
CTI according to IEC 60112	600
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

Dimensions

Dimensional drawing	
Pitch	5 mm
Width [w]	19.95 mm
Height [h]	16.5 mm
Length [l]	15.35 mm
Solder pin length [P]	3.5 mm
Pin dimensions	1 x 1 mm

PCB design

Pin spacing	5.00 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

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

Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	4

Insulation resistance

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

Air clearances and creepage distances |

Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	320 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)	1.6 mm
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

Environmental and real-life conditions

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	4.8 kV
Contact resistance R_1	1.44 mΩ
Contact resistance R_2	1.49 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 1 TΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm^3 SO_2 on 300 dm^3/40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	2.21 kV

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Ambient conditions

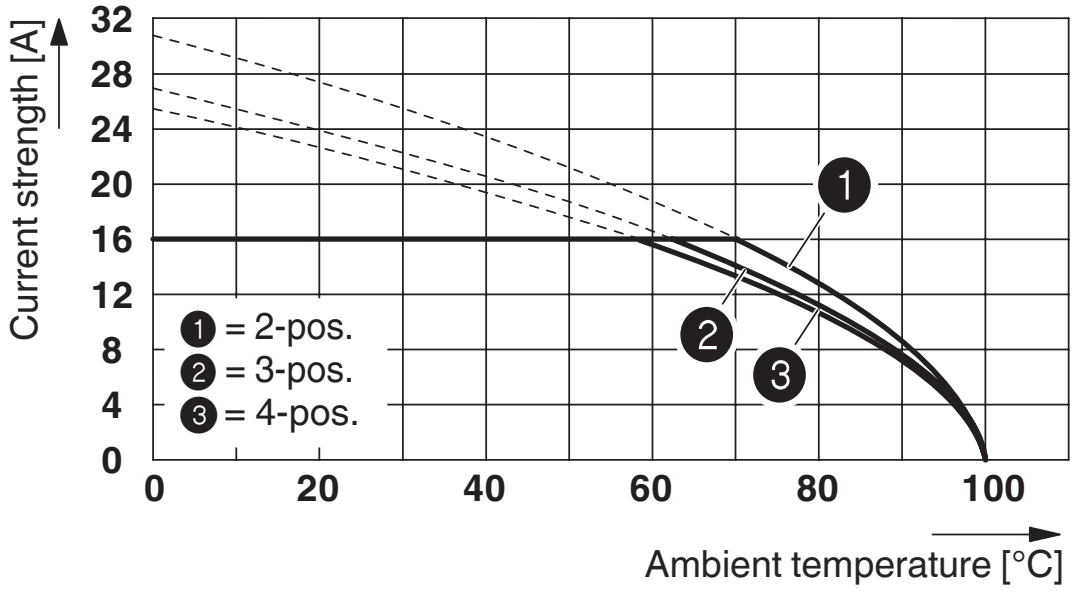
Ambient temperature (storage/transport)	-40 °C ... 55 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 105 °C (dependent on the derating curve)

Packaging specifications

Type of packaging	packed in cardboard
Outer packaging type	Carton

Drawings

Diagram



Derating curve for: MSTBT 2,5 HC/...-STP GY7035 with MSTBO 2,5/...-G1PL(R) GY7035

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2200551

cULus Recognized
Approval ID: E60425-19931011

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	300 V	15 A	-	-

VDE Gutachten mit Fertigungsüberwachung
Approval ID: 40044868

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	320 V	16 A	-	-

Classifications

ECLASS

ECLASS-13.0	27460201
ECLASS-15.0	27460201

ETIM

ETIM 10.0	EC002637

UNSPSC

UNSPSC 21.0	39121400

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%

EF3.1 Climate Change

CO2e kg	0.019 kg CO2e

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