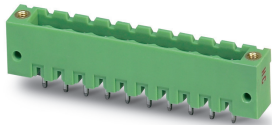


PCB header - MSTBV 2,5 HC/12-GF-5,08 - 1924622

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)

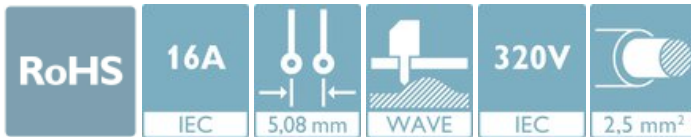


The figure shows a 10-position version of the product


PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 16 A (see derating curve), rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, number of potentials: 12, Number of rows: 1, Number of positions per row: 12, number of connections: 12, product range: MSTBV 2,5 HC/..-GF, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, plug-in system: POWER COMBICON 2,5, Pin connector pattern alignment: Standard, Locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

Your advantages

- ✓ Well-known mounting principle allows worldwide use
- ✓ Screwable flange for superior mechanical stability
- ✓ Maximum flexibility when it comes to device design – one header for connectors with different connection technologies



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 017918 610890
GTIN	4017918610890
Weight per Piece (excluding packing)	5.510 g
Custom tariff number	85366930
Country of origin	Germany

Technical data

Item properties

Brief article description	PCB header
Connector system	POWER COMBICON 2,5
Type of contact	Male connector
Range of articles	MSTBV 2,5 HC/..-GF

PCB header - MSTBV 2,5 HC/12-GF-5,08 - 1924622

Technical data

Item properties

Pitch	5.08 mm
Number of positions	12
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	Threaded flange
Number of rows	1
Number of connections	12
Number of potentials	12
Pin connector pattern alignment	Standard

Electrical parameters

Nominal current	16 A
Nom. voltage	320 V
Rated voltage (III/3)	320 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 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 - 3 µm Ni)
Metal surface soldering area (top layer)	Tin (3 - 5 µm Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 - 3 µm Ni)

Material data - housing

Housing color	green (6021)
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

PCB header - MSTBV 2,5 HC/12-GF-5,08 - 1924622

Technical data

Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	8.6 mm
Width [w]	71.12 mm
Height [h]	12 mm
Pitch	5.08 mm
Height (without solder pin)	12 mm
Solder pin [P]	3.9 mm
Pin spacing	5.00 mm
Pin dimensions	1 x 1 mm

Dimensions for PCB design

Hole diameter	1.4 mm
Pin spacing	5.00 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

General product information

Type of note	Notes on operation
Note	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.

Ambient conditions

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

Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	4 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm

PCB header - MSTBV 2,5 HC/12-GF-5,08 - 1924622

Technical data

Current carrying capacity / derating curves

Caption	Type: MSTB 2,5 HC/...-STF-5,08 with MSTBV 2,5/...-GF-5,08
---------	---

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	4 N
Withdraw strength per pos. approx.	3 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	0.6 mΩ
Insertion/withdrawal cycles	25
Contact resistance R ₂	0.8 mΩ
Impulse withstand voltage at sea level	4.8 kV

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	12
Upper limiting temperature requirements <100 °C	Test passed

Climatic tests (D)

Specification	ISO 6988:1985-02
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	4.8 kV
Power-frequency withstand voltage	2.21 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

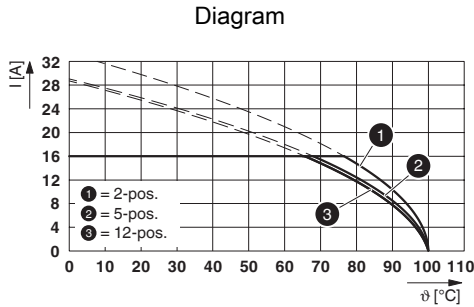
Connection in acc. with standard	EN-VDE
	CUL

Environmental Product Compliance

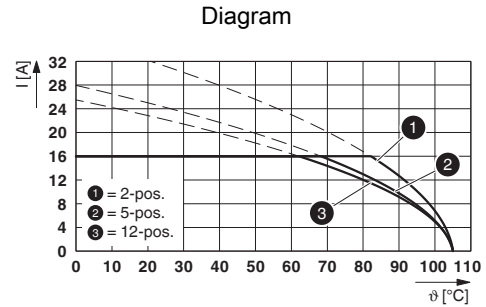
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

PCB header - MSTBV 2,5 HC/12-GF-5,08 - 1924622

Drawings



Type: MSTB 2,5 HC/...-STF-5,08 with MSTBV 2,5/...-GF-5,08



Type: FK2 2,5 HC/...-STF-5,08 with MSTBV 2,5 HC/...-GF-5,08

Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 11.0	27460201
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440402
eCl@ss 9.0	27440402

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002637
ETIM 6.0	EC002637
ETIM 7.0	EC002637

UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409

PCB header - MSTBV 2,5 HC/12-GF-5,08 - 1924622

Classifications

UNSPSC

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

Approvals


Approvals


Approvals

VDE Zeichengenehmigung / IECCEB Scheme / EAC / cULus Recognized


Ex Approvals

Approval details

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40050079
Nominal voltage UN	250 V		
Nominal current IN	16 A		

IECEE CB Scheme		http://www.iecee.org/	DE1-60988-B1B2
Nominal voltage UN	250 V		
Nominal current IN	16 A		

EAC			B.01687
-----	---	--	---------

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19931011
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	16 A	10 A	

PCB header - MSTBV 2,5 HC/12-GF-5,08 - 1924622

Accessories

Accessories

Coding element

Coding section - CR-MSTB - 1734401



Coding section, inserted into the recess in the header or the inverted plug, red insulating material

Filler plug

Accessories - MSTB-BL - 1755477



Keying cap, for forming sections, plugs onto header pin, green insulating material

Labeled terminal marker

Marker card - SK 5,08/3,8:FORTL.ZAHLEN - 0804293



Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm

Additional products

Printed-circuit board connector - MSTB 2,5 HC/12-STF-5,08 - 1912281



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 16 A (see derating curve), rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 12, Number of rows: 1, Number of positions per row: 12, number of connections: 12, product range: MSTB 2,5 HC/..-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, plug-in system: POWER COMBICON 2,5, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

PCB header - MSTBV 2,5 HC/12-GF-5,08 - 1924622

Accessories

Printed-circuit board connector - MVSTBR 2,5 HC/12-STF-5,08 - 1912728



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 16 A (see derating curve), rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 12, Number of rows: 1, Number of positions per row: 12, number of connections: 12, product range: MVSTBR 2,5 HC/..-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 90 °, Locking clip: - Locking clip, plug-in system: POWER COMBICON 2,5, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Printed-circuit board connector - MVSTBW 2,5 HC/12-STF-5,08 - 1913167



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 16 A (see derating curve), rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 12, Number of rows: 1, Number of positions per row: 12, number of connections: 12, product range: MVSTBW 2,5 HC/..-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -90 °, Locking clip: - Locking clip, plug-in system: POWER COMBICON 2,5, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Printed-circuit board connector - FKC 2,5 HC/12-STF-5,08 - 1942581



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 16 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 12, Number of rows: 1, Number of positions per row: 12, number of connections: 12, product range: FKC 2,5 HC/..-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: POWER COMBICON 2,5, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard