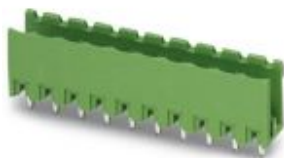


## Feed-through header - MSTBV 2,5/ 2-G - 1753437

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>)

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm




The figure shows a 10-position version of the product

### Your advantages

- ✓ Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- ✓ Well-known mounting principle allows worldwide use
- ✓ Vertical connection enables multi-row arrangement on the PCB
- ✓ Items that can be aligned in various pitches support flexible and space-saving PCB assembly
- ✓ Easy PCB replacement thanks to plug-in modules



### Key Commercial Data

Packing unit	250 pc
Minimum order quantity	250 pc
GTIN	 4 017918 028374
GTIN	4017918028374

### Technical data

#### Item properties

Brief article description	Feed-through header
Plug-in system	CLASSIC COMBICON
Type of contact	Male connector
Range of articles	MSTBV 2,5/..-G
Pitch	5 mm
Number of positions	2
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without

## Feed-through header - MSTBV 2,5/ 2-G - 1753437

### Technical data

#### Item properties

Number of levels	1
Number of connections	2
Number of potentials	2

#### Electrical parameters

Nominal current	12 A
Nom. voltage	320 V
Rated voltage	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

#### Dimensions for the product

Length [ l ]	8.6 mm
Width [ w ]	10 mm
Height [ h ]	15.9 mm
Pitch	5 mm
Height (without solder pin)	12 mm
Solder pin [P]	3.9 mm
Pin dimensions	1 x 1 mm

#### Dimensions for PCB design

# Feed-through header - MSTBV 2,5/ 2-G - 1753437

## Technical data

### Dimensions for PCB design

Hole diameter	1.4 mm
---------------	--------

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	250
Denomination packing units	Pcs.

### Ambient conditions

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

### 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 <sub>1</sub>	2.1 mΩ
Insertion/withdrawal cycles	25
Contact resistance R <sub>2</sub>	2.3 mΩ
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 0,4 TΩ

### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	18
Conductor cross section	2.5 mm <sup>2</sup>
Upper limiting temperature requirements <100 °C	Test passed

### Climatic tests (D)

# Feed-through header - MSTBV 2,5/ 2-G - 1753437

## Technical data

### 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 <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /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

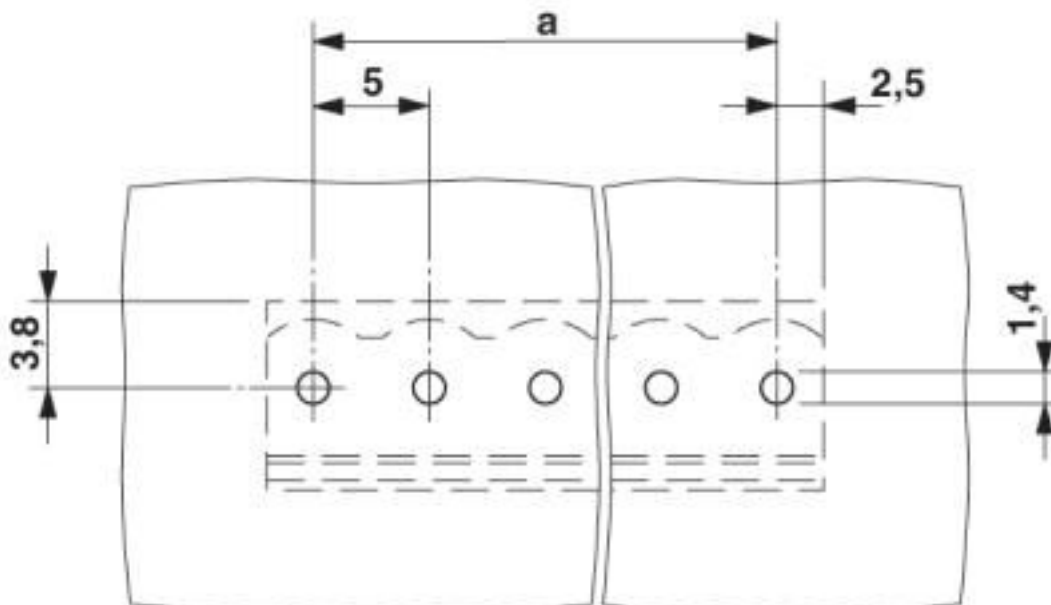
Connection in acc. with standard	EN-VDE
	CSA
Flammability rating according to UL 94	V0

### Environmental Product Compliance

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

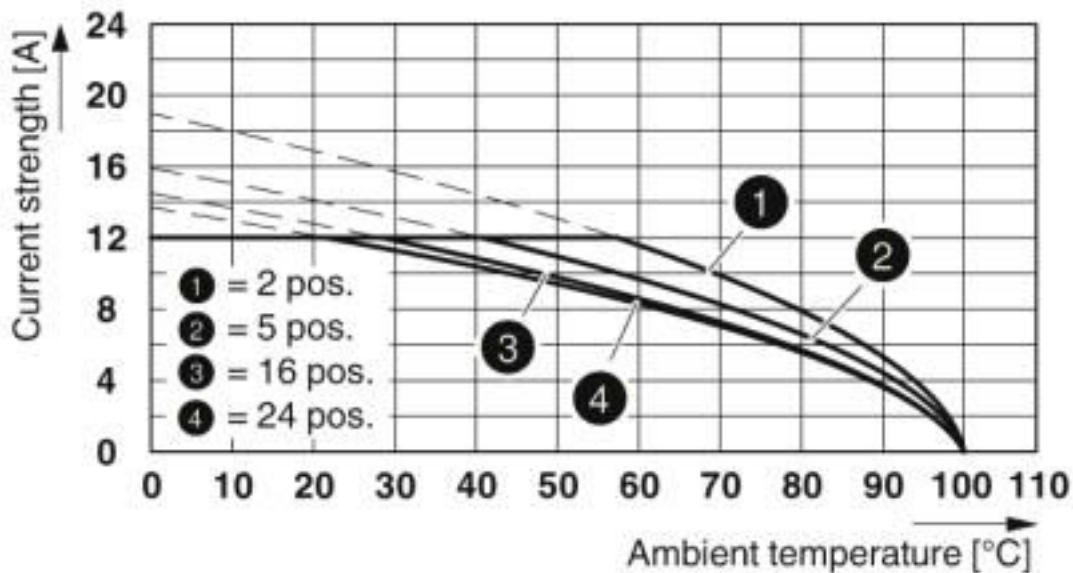
## Drawings

Drilling diagram



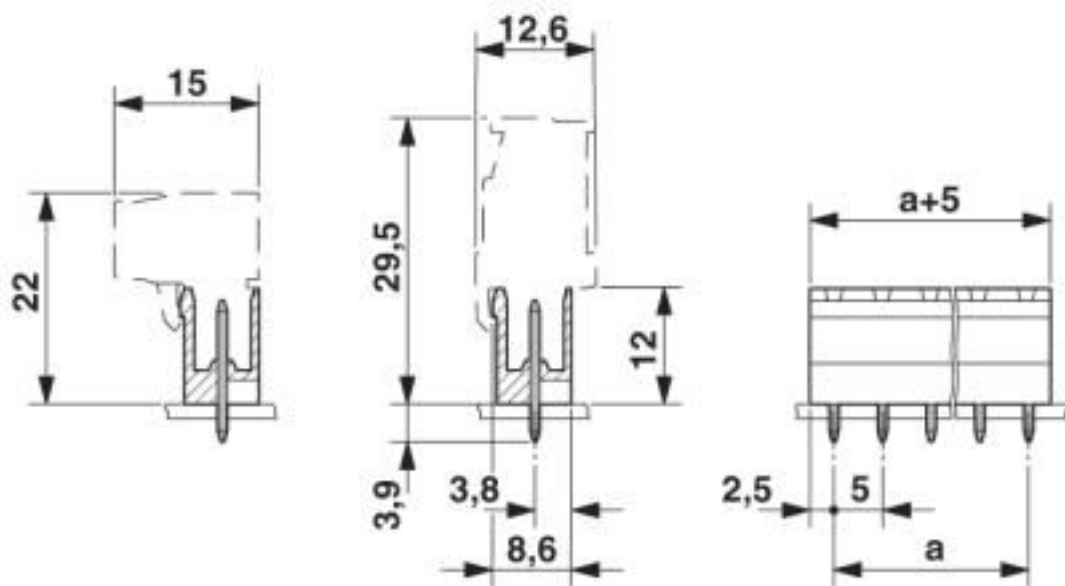
# Feed-through header - MSTBV 2,5/ 2-G - 1753437

Diagram



Type: MSTB 2,5/...-ST with MSTBV 2,5/...-G

Dimensional drawing



## Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700

# Feed-through header - MSTBV 2,5/ 2-G - 1753437

## Classifications

### eCl@ss

eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440402
eCl@ss 8.0	27440402
eCl@ss 9.0	27440402

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002637
ETIM 5.0	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
UNSPSC 21.0	39121409

## Approvals

### Approvals

#### Approvals

CSA / IEC/CEB Scheme / EAC / cULus Recognized / VDE Zeichengenehmigung

#### Ex Approvals

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	B	D	
Nominal voltage UN	300 V	300 V	

## Feed-through header - MSTBV 2,5/ 2-G - 1753437

### Approvals

	B	D
Nominal current IN	12 A	10 A

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-60988-B1B2
Nominal voltage UN	250 V		
Nominal current IN	12 A		

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

cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-19931011
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	12 A	10 A	

VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40050648
Nominal voltage UN	250 V		
Nominal current IN	12 A		

### 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

## Feed-through header - MSTBV 2,5/ 2-G - 1753437

### Accessories

Accessories - MSTB-BL - 1755477



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

---

### Labeled terminal marker

Marker card - SK 5/3,8:FORTL.ZAHLEN - 0804183



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 mm, lettering field size: 5 x 3.8 mm

---

### Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

---

### Terminal marking

Marker card - SK 5/3,8:UNBEDRUCKT - 0805409

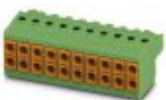


Marker card, Card, white, unlabeled, can be labeled with: Marker pen, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: 5 x 3.8 mm

---

### Additional products

Printed-circuit board connector - TVFKC 1,5/ 2-ST - 1713839



PCB connector, nominal current: 10 A, rated voltage (III/2): 320 V, nominal cross section: 1.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin, pin layout: Linear pinning



## Feed-through header - MSTBV 2,5/ 2-G - 1753437

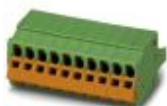
### Accessories

#### Printed-circuit board connector - TVFKCL 1,5/ 2-ST - 1715921



PCB connector, nominal current: 10 A, rated voltage (III/2): 320 V, nominal cross section: 1.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

#### Plug - QC 1,5/ 2-ST - 1717961



PCB connector, nominal current: 12 A, rated voltage (III/2): 630 V, nominal cross section: 1.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Displacement connection, color: green, contact surface: Tin

#### Printed-circuit board connector - FKCN 2,5/ 2-ST - 1732742



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

#### Printed-circuit board connector - MSTB 2,5/ 2-ST - 1754449



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

#### Printed-circuit board connector - MSTBP 2,5/ 2-ST - 1765771



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

## Feed-through header - MSTBV 2,5/ 2-G - 1753437

### Accessories

#### Printed-circuit board connector - SMSTB 2,5/ 2-ST - 1768765

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



#### Printed-circuit board connector - FRONT-MSTB 2,5/ 2-ST - 1779411

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Front screw connection, color: green, contact surface: Tin



#### Printed-circuit board connector - MSTBT 2,5/ 2-ST - 1779835

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



#### Printed-circuit board connector - MVSTBR 2,5/ 2-ST - 1792016

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



#### Printed-circuit board connector - MVSTBW 2,5/ 2-ST - 1792524

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



## Feed-through header - MSTBV 2,5/ 2-G - 1753437

### Accessories

#### Printed-circuit board connector - FKCT 2,5/ 2-ST - 1909210



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

---

#### Printed-circuit board connector - FKCVR 2,5/ 2-ST - 1909715



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

---

#### Printed-circuit board connector - FKCVW 2,5/ 2-ST - 1910034



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

---

#### Printed-circuit board connector - FKC 2,5/ 2-ST - 1910351



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

---

#### Printed-circuit board connector - QC 1/ 2-ST-BUS - 1921670



PCB connector, nominal current: 10 A, rated voltage (III/2): 630 V, nominal cross section: 1 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Displacement connection, color: green, contact surface: Tin, The plug allows conductors to be looped through from module to module, without interruption

## Feed-through header - MSTBV 2,5/ 2-G - 1753437

### Accessories

Printed-circuit board connector - FKCS 2,5/ 2-ST - 1974737

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin



---

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[1753437](#)