

Feed-through header - MSTBV 2,5/ 3-G - 1753453

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>)

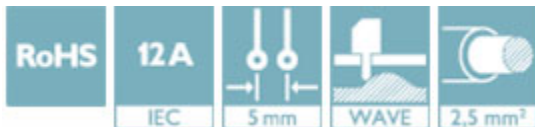
PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm




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	1 pc
Minimum order quantity	250 pc
GTIN	 4 017918 028381
GTIN	4017918028381
Weight per Piece (excluding packing)	1.040 g
Custom tariff number	85366930
Country of origin	Germany

Technical data

Item properties

Brief article description	Feed-through header
Plug-in system	CLASSIC COMBICON
Type of contact	Male connector

Feed-through header - MSTBV 2,5/ 3-G - 1753453

Technical data

Item properties

Range of articles	MSTBV 2,5/...-G
Pitch	5 mm
Number of positions	3
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without
Number of levels	1
Number of connections	3
Number of potentials	3

Electrical parameters

Nom. voltage	320 V
--------------	-------

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

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]	15 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

Feed-through header - MSTBV 2,5/ 3-G - 1753453

Technical data

Dimensions for the product

Dimension a	10 mm
-------------	-------

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.
Outer packaging type	Carton

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
Rated insulation voltage (III/3)	320 V
Rated insulation voltage (III/2)	320 V
Rated insulation 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
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)

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 ₁	2.1 mΩ

Feed-through header - MSTBV 2,5/ 3-G - 1753453

Technical data

Durability tests (B)

Insertion/withdrawal cycles	25
Contact resistance R_2	2.3 m Ω
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 0,4 T Ω

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
	CSA
Flammability rating according to UL 94	V0

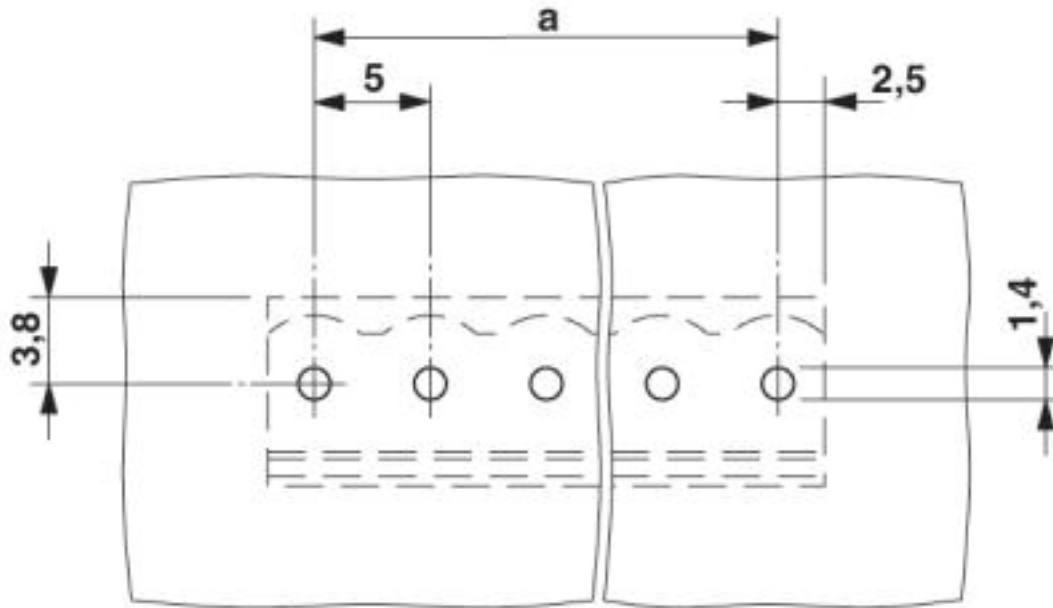
Environmental Product Compliance

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

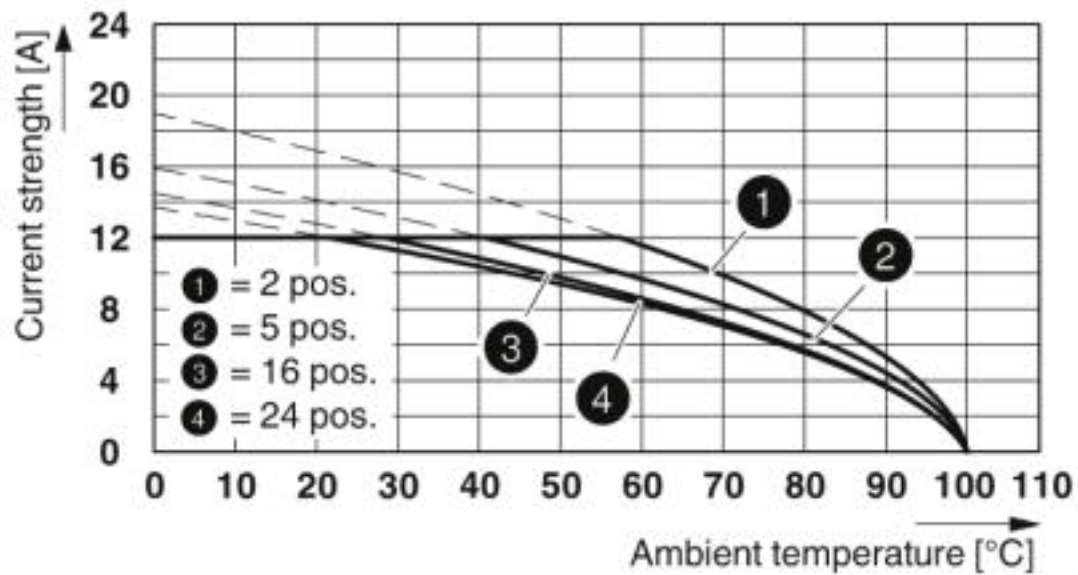
Drawings

Feed-through header - MSTBV 2,5/ 3-G - 1753453

Drilling diagram



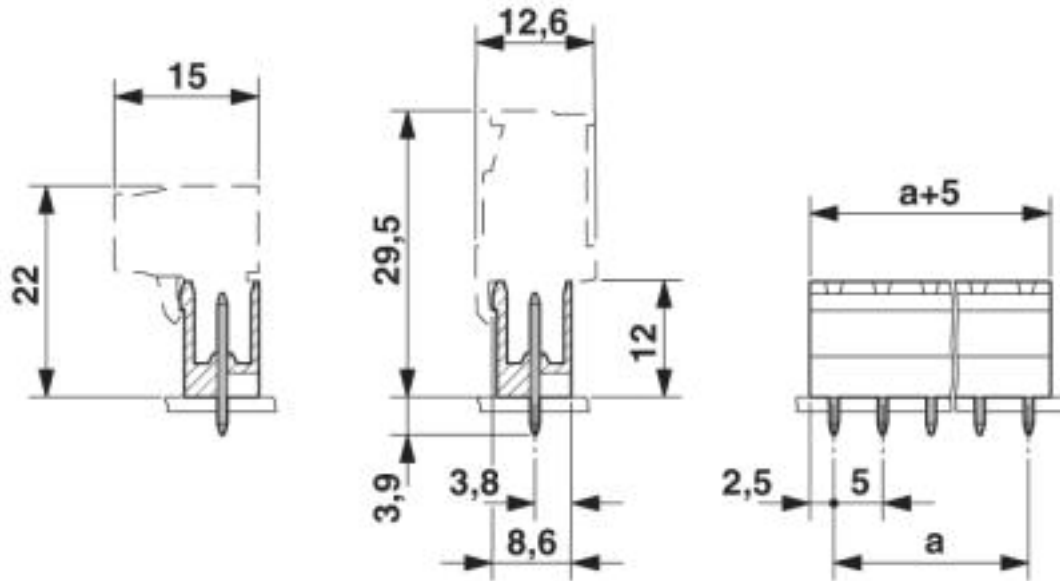
Diagram



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

Feed-through header - MSTBV 2,5/ 3-G - 1753453

Dimensional drawing



Classifications

eCl@ss

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 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

Feed-through header - MSTBV 2,5/ 3-G - 1753453

Classifications

UNSPSC

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 / IECCEB Scheme / EAC / cULus Recognized / VDE Zeichengenehmigung

Ex Approvals

Approval details


CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	12 A	10 A	


IECEE CB Scheme		http://www.iecee.org/	DE1-60988-B1B2
Nominal voltage UN	250 V		
Nominal current IN	12 A		

EAC		B.01742
-----	---	---------

Feed-through header - MSTBV 2,5/ 3-G - 1753453

Approvals

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	12 A	10 A	

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	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

Accessories - MSTB-BL - 1755477



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

Labeled terminal marker

Feed-through header - MSTBV 2,5/ 3-G - 1753453

Accessories

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/ 3-ST - 1713842



PCB connector, nominal current: 10 A, rated voltage (III/2): 320 V, nominal cross section: 1.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Feed-through header - MSTBV 2,5/ 3-G - 1753453

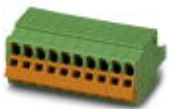
Accessories

Printed-circuit board connector - TVFKCL 1,5/ 3-ST - 1715934



PCB connector, nominal current: 10 A, rated voltage (III/2): 320 V, nominal cross section: 1.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Plug - QC 1,5/ 3-ST - 1717974



PCB connector, nominal current: 12 A, rated voltage (III/2): 630 V, nominal cross section: 1.5 mm², number of positions: 3, pitch: 5 mm, connection method: Displacement connection, color: green, contact surface: Tin

Printed-circuit board connector - FKCN 2,5/ 3-ST - 1732755



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - MSTB 2,5/ 3-ST - 1754465



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Printed-circuit board connector - MSTBP 2,5/ 3-ST - 1765784



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Feed-through header - MSTBV 2,5/ 3-G - 1753453

Accessories

Printed-circuit board connector - SMSTB 2,5/ 3-ST - 1768778



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Printed-circuit board connector - FRONT-MSTB 2,5/ 3-ST - 1779424



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Front screw connection, color: green, contact surface: Tin

Printed-circuit board connector - MSTBT 2,5/ 3-ST - 1779848



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Printed-circuit board connector - MVSTBR 2,5/ 3-ST - 1792029



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Printed-circuit board connector - MVSTBW 2,5/ 3-ST - 1792537



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Feed-through header - MSTBV 2,5/ 3-G - 1753453

Accessories

Printed-circuit board connector - FKCT 2,5/ 3-ST - 1909223



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - FKCVR 2,5/ 3-ST - 1909728



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - FKCVW 2,5/ 3-ST - 1910047



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - FKC 2,5/ 3-ST - 1910364



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - QC 1/ 3-ST-BUS - 1921683



PCB connector, nominal current: 10 A, rated voltage (III/2): 630 V, nominal cross section: 1 mm², number of positions: 3, 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/ 3-G - 1753453

Accessories

Printed-circuit board connector - FKCS 2,5/ 3-ST - 1974740



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin