Feed-through header - MDSTB 2,5/12-G - 1846467

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-pos. version with 20 contacts

PCB headers, nominal current: 10 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 12, pitch: 5 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm, Can be aligned! Mounting flange: Order No. 1736771, 1736768. In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

Your advantages

- 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
- Conductor connection on several levels enables higher contact density

Key Commercial Data

Packing unit	50 pc
GTIN	4 017918 183561
GTIN	4017918183561

Technical data

Item properties

Brief article description	Feed-through header
Plug-in system	CLASSIC COMBICON
Type of contact	Male connector
Range of articles	MDSTB 2,5/..-G
Pitch	5 mm
Number of positions	12
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without
Number of levels	2
Number of connections	24

Feed-through header - MDSTB 2,5/12-G - 1846467

Technical data

Item properties

Number of potentials	24

Electrical parameters

Nominal current	10 A
Nom. voltage	320 V
Rated voltage	250 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	400 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 (5 - 7 µm Sn)
Metal surface contact area (middle layer)	Nickel (2 - 3 µm Ni),
Metal surface soldering area (top layer)	Tin (5 - 7 µm Sn)
Metal surface soldering area (middle layer)	Nickel (2 - 3 µm Ni)

Material data - housing

Housing color	green (6021)
Insulating material	PBT
Insulating material group	IIIa
CTI according to IEC 60112	225
Flammability rating according to UL 94	V0

Dimensions for the product

Length [l]	22.1 mm
Width [w]	62.5 mm
Height [h]	26.9 mm
Pitch	5 mm
Height (without solder pin)	23.7 mm
Solder pin [P]	3.2 mm
Pin dimensions	1 x 1 mm

Dimensions for PCB design

Hole diameter	1.4 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50

Feed-through header - MDSTB 2,5/12-G - 1846467

Technical data

Packaging information

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)	4 mm
Minimum creepage distance value (II/2)	4 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_1	1.6 mΩ
Insertion/withdrawal cycles	25
Contact resistance R_2	1.6 mΩ
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 50 GΩ

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	12
Conductor cross section	2.5 mm²
Test current	10 A
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

Feed-through header - MDSTB 2,5/12-G - 1846467

Technical data

Climatic tests (D)

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

Vibration test

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Standards and Regulations

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

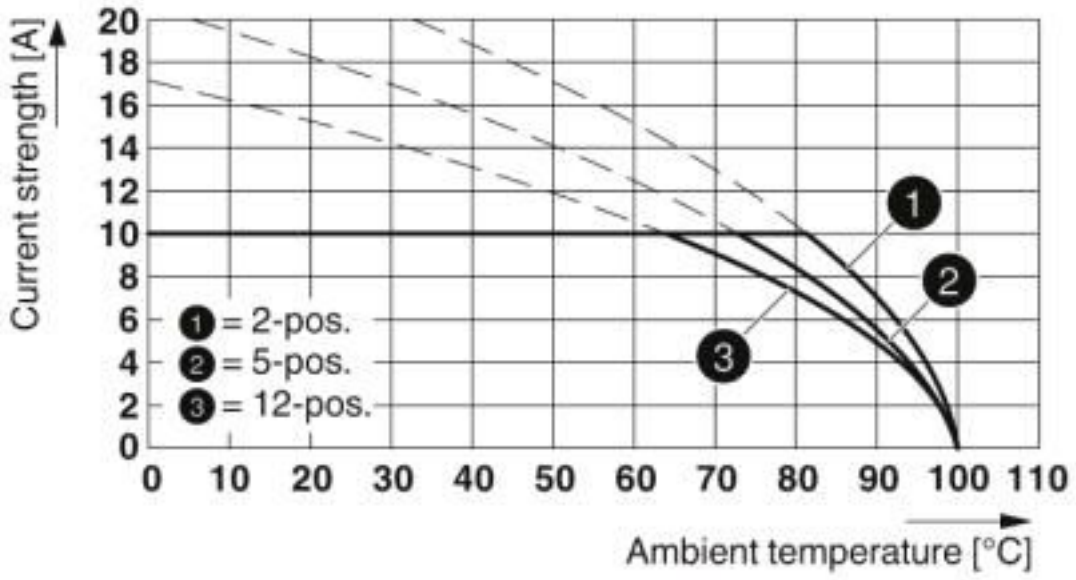
Environmental Product Compliance

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

Drawings

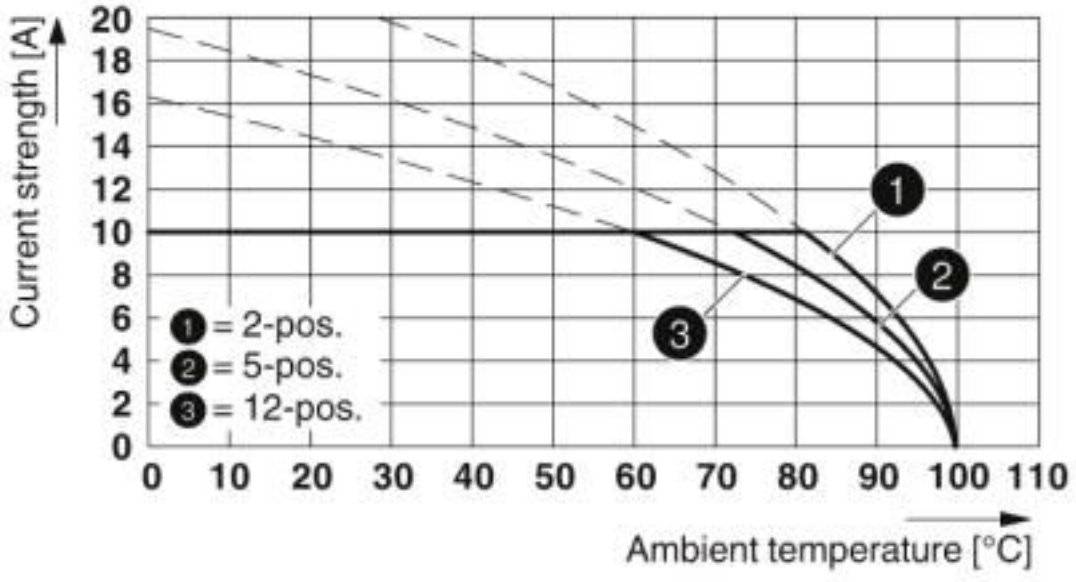
Feed-through header - MDSTB 2,5/12-G - 1846467

Diagram



Type: MSTBT 2,5/...-ST with MDSTB 2,5/...-G

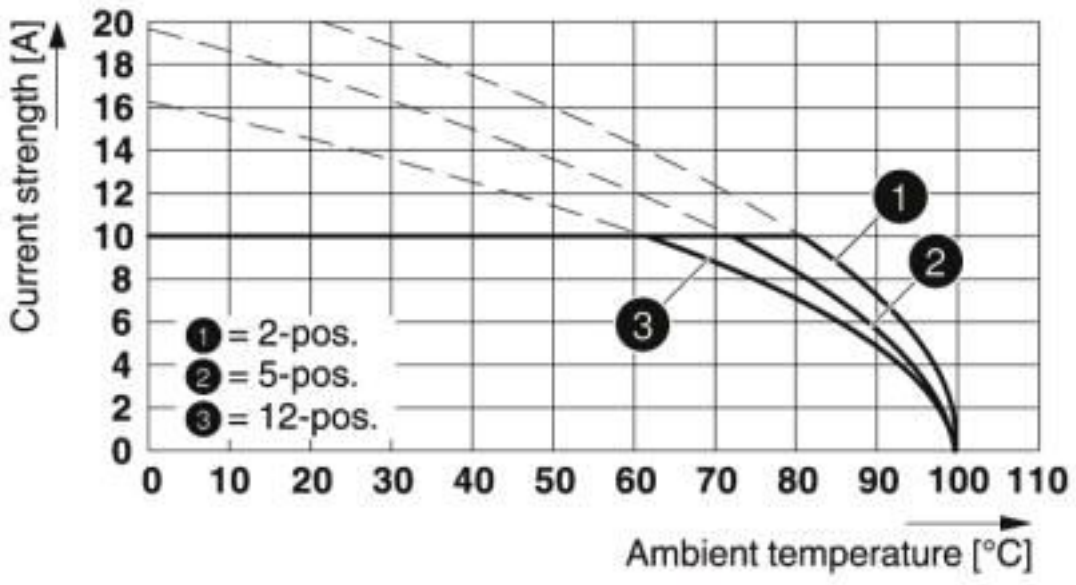
Diagram



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

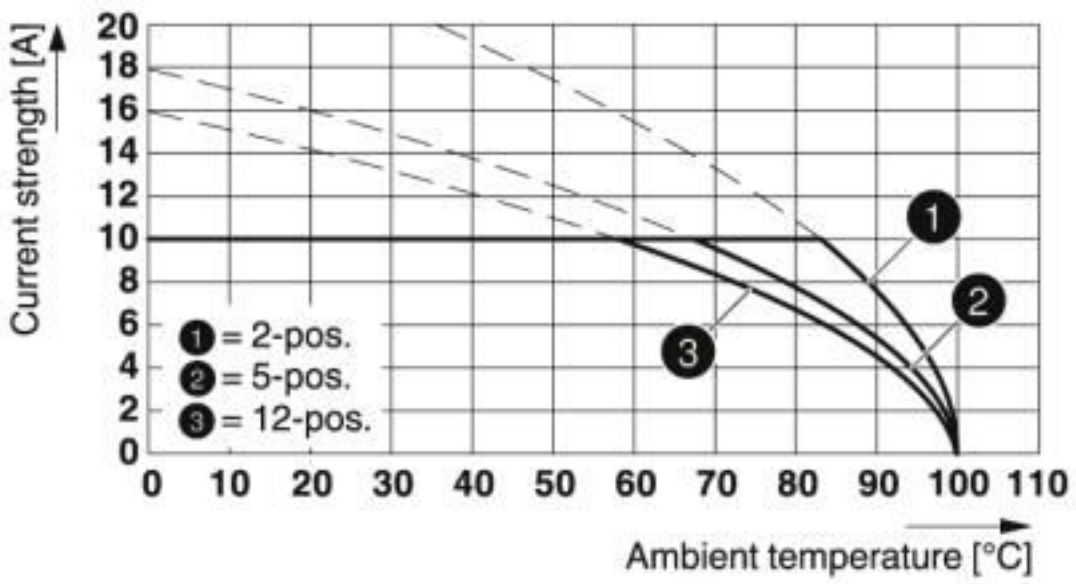
Feed-through header - MDSTB 2,5/12-G - 1846467

Diagram



Type: MSTBP 2,5/...-ST with MDSTB 2,5/...-G

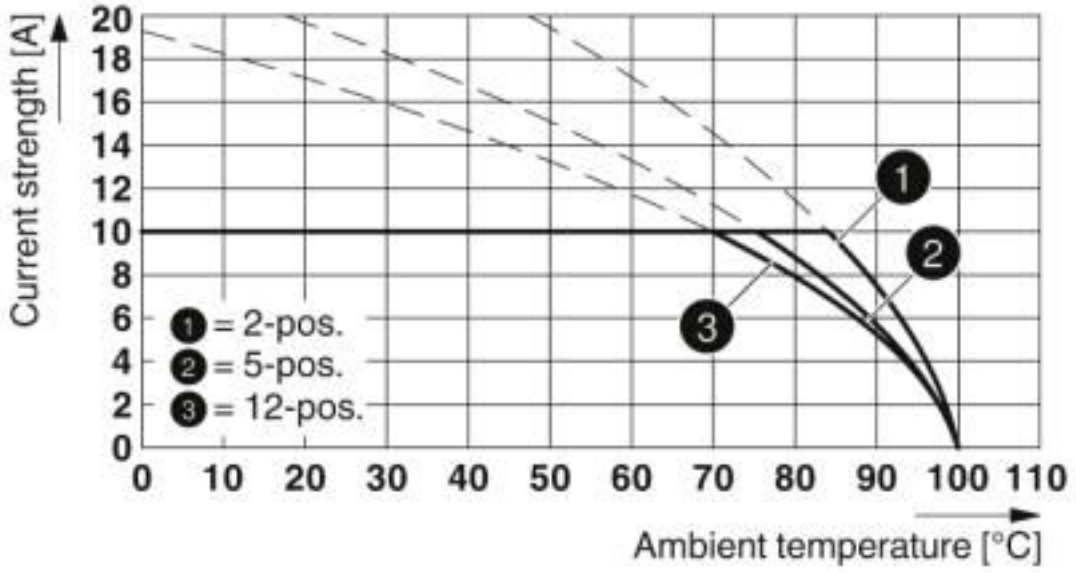
Diagram



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

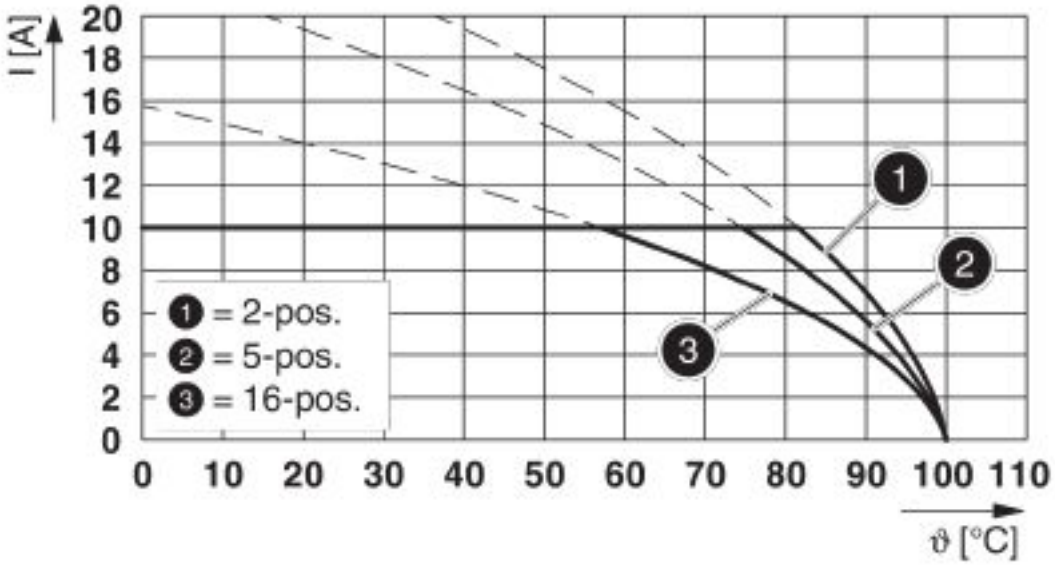
Feed-through header - MDSTB 2,5/12-G - 1846467

Diagram



Type: FKCS 2,5/...-ST with MDSTB 2,5/...-G

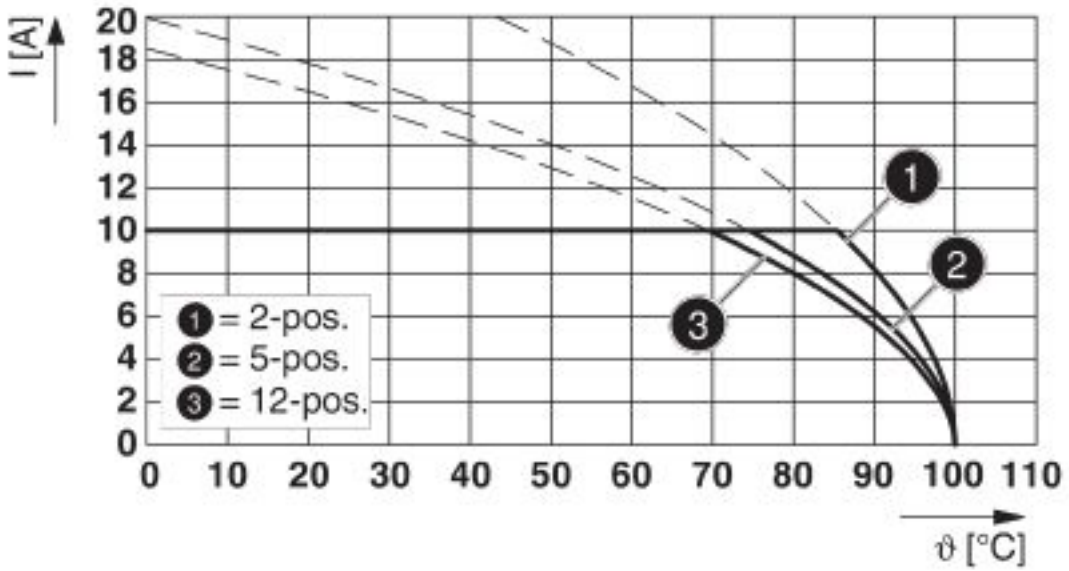
Diagram



Type: FKCT 2,5/...-ST with MDSTB 2,5/...-G

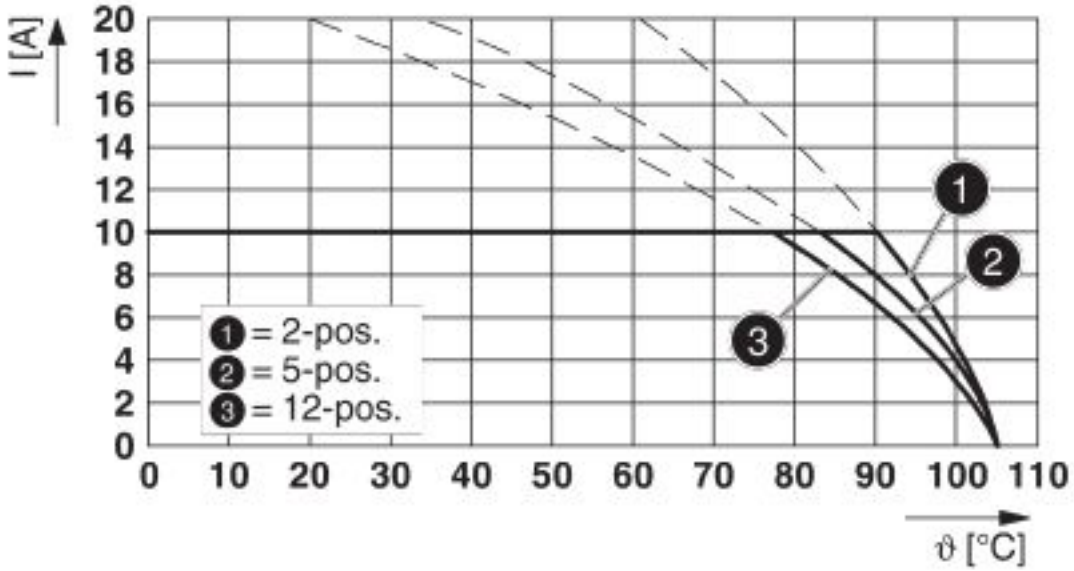
Feed-through header - MDSTB 2,5/12-G - 1846467

Diagram



Type: FKCN 2,5/...-ST with MDSTB 2,5/...-G

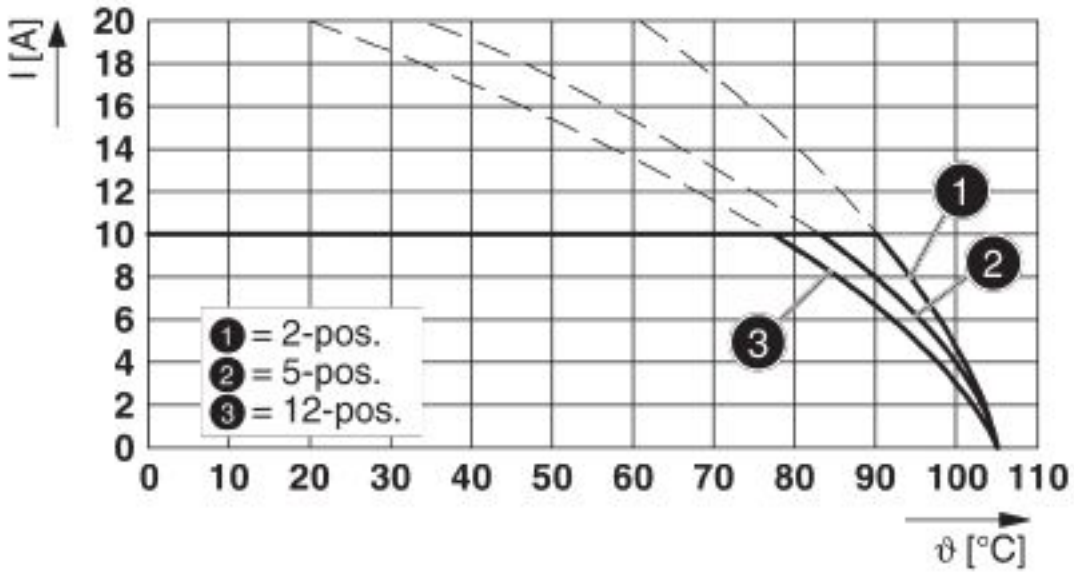
Diagram



Type: FKCVR 2,5/...-ST with MDSTB 2,5/...-G

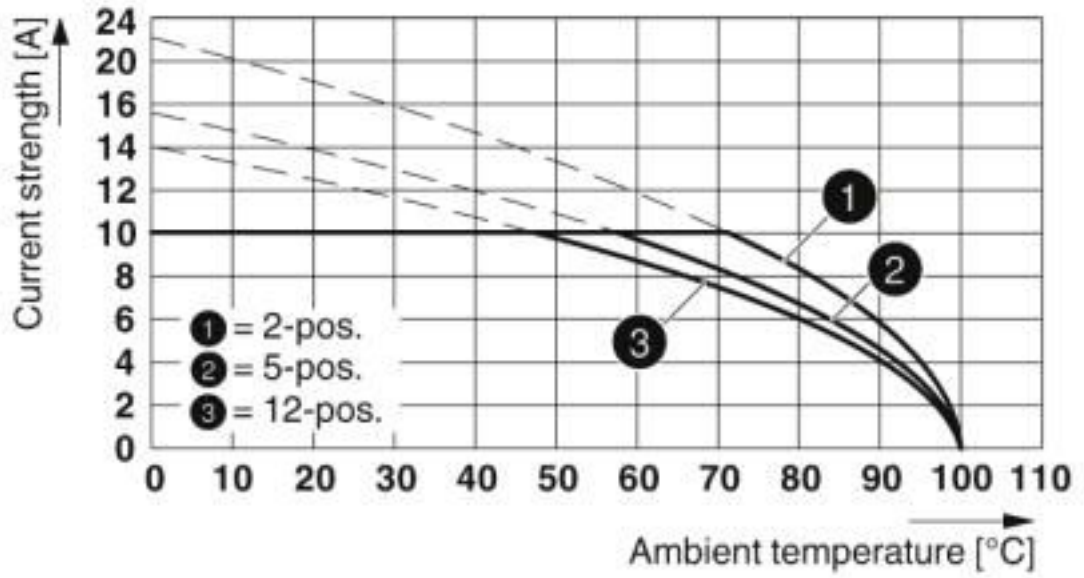
Feed-through header - MDSTB 2,5/12-G - 1846467

Diagram



Type: FKCVW 2,5/...-ST with MDSTB 2,5/...-G

Diagram



Type: MVSTB(R/W) 2,5/...-ST with MDSTB 2,5/...-G

Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 4.0	27260700

Feed-through header - MDSTB 2,5/12-G - 1846467

Classifications

eCl@ss

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
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 / IECEE CB Scheme / EAC / cULus Recognized / VDE Zeichengenehmigung

Ex Approvals

Approval details

Feed-through header - MDSTB 2,5/12-G - 1846467

Approvals

CSA		http://www.csagroup.org/services-industries/product-listing/	LR13631-2585950

	B	D
Nominal voltage UN	300 V	300 V
Nominal current IN	15 A	15 A

IECEE CB Scheme		http://www.iecee.org/	DE1-60988-B1B2

Nominal voltage UN	250 V
Nominal current IN	10 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	15 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	10 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

Feed-through header - MDSTB 2,5/12-G - 1846467

Accessories

Filler plug

Accessories - MSTB-BL - 1755477

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

Labeled terminal marker

Marker card - SK 5/3,8: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

PCB headers

Feed-through header - MDSTB 2,5/ 2-GFL - 1877740

PCB headers, nominal current: 10 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 2, pitch: 5 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm, Can be aligned! Mounting flange: Order no. 1736771, 1736768. In combination with MVSTB or FKCV plugs, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plugs is not possible!

Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

PCB headers, nominal current: 10 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]: 3.2 mm, Can be aligned! Mounting flange: Order no. 1736771, 1736768. In combination with MVSTB or FKCV plugs, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plugs is not possible!

Side element - MDSTB-SE - 1786679

Side element, for lateral sealing of MSTB headers, 2.54 mm thick, color: green

Feed-through header - MDSTB 2,5/12-G - 1846467

Accessories

Assembly adapters - MDSTB 2,5-AS - 1806588

Ejectors, for assembly on each side of the header

Additional products

Printed-circuit board connector - MSTB 2,5/12-ST - 1754643

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

Printed-circuit board connector - MSTB 2,5/12-STZ - 1759350

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

Printed-circuit board connector - MSTBP 2,5/12-ST - 1765878

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

Printed-circuit board connector - SMSTB 2,5/12-ST - 1768859

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

Feed-through header - MDSTB 2,5/12-G - 1846467

Accessories

Printed-circuit board connector - FRONT-MSTB 2,5/12-ST - 1779518

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

Printed-circuit board connector - MVSTBR 2,5/12-ST - 1792113

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

Printed-circuit board connector - MVSTBW 2,5/12-ST - 1792621

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

Printed-circuit board connector - FKCVR 2,5/12-ST - 1909812

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

Printed-circuit board connector - FKCVW 2,5/12-ST - 1910131

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

Feed-through header - MDSTB 2,5/12-G - 1846467

Accessories

Printed-circuit board connector - FKC 2,5/12-ST - 1910458

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

Printed-circuit board connector - FKCS 2,5/12-ST - 1974834

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

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:

1846467