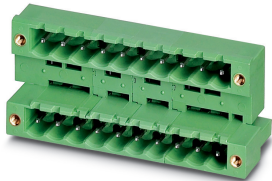


Feed-through header - MDSTB 2,5/ 8-GF-5,08 - 1842429

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PCB header, nominal cross section: 2.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 16, Number of rows: 2, Number of positions per row: 8, number of connections: 16, product range: MDSTB 2,5/..-GF, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard, The article can be aligned to create different nos. of positions! 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!

The figure shows a 10-pos. version with 20 contacts

Your advantages

- ✓ Screwable flange for superior mechanical stability
- ✓ 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	1 pc
Minimum order quantity	50 pc
GTIN	
GTIN	4017918184025
Weight per Piece (excluding packing)	16.790 g
Custom tariff number	85366930
Country of origin	Germany

Technical data

Item properties

Brief article description	Feed-through header
Plug-in system	CLASSIC COMBICON

Feed-through header - MDSTB 2,5/ 8-GF-5,08 - 1842429

Technical data

Item properties

Type of contact	Male connector
Range of articles	MDSTB 2,5/..-GF
Pitch	5.08 mm
Number of positions	8
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	Threaded flange
Number of levels	2
Number of connections	16
Number of potentials	16
Pin connector pattern alignment	Standard

Electrical parameters

Nominal current	10 A
Nom. voltage	320 V
Rated voltage (III/3)	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	hot-dip 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	PBT
Insulating material group	IIIa
CTI according to IEC 60112	225
Flammability rating according to UL 94	V0

Flange specifications

Feed-through header - MDSTB 2,5/ 8-GF-5,08 - 1842429

Technical data

Flange specifications

Type of locking	Screw locking
Mounting flange	Threaded flange
Torque	0.3 Nm

Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	22.1 mm
Width [w]	53.34 mm
Height [h]	26.9 mm
Pitch	5.08 mm
Height (without solder pin)	23.7 mm
Solder pin [P]	3.2 mm
Pin spacing	10.16 mm
Pin dimensions	1 x 1 mm

Dimensions for PCB design

Hole diameter	1.4 mm
Pin spacing	10.16 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
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

Feed-through header - MDSTB 2,5/ 8-GF-5,08 - 1842429

Technical data

Air clearances and creepage distances

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

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	17
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

Vibration test

Specification	IEC60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)

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Technical data

Vibration test

Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Standards and Regulations

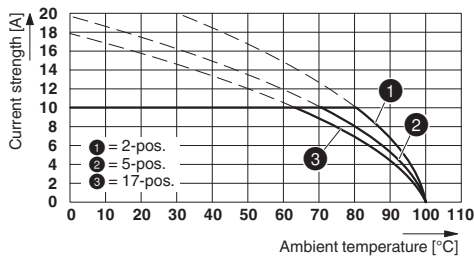
Connection in acc. with standard	CUL
Flammability rating according to UL 94	V0

Environmental Product Compliance

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

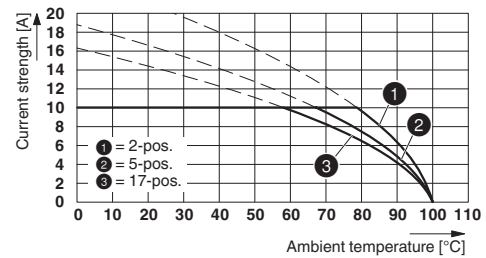
Drawings

Diagram



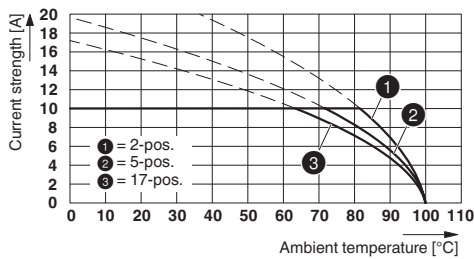
Type: MSTB 2,5/...-STF-5,08 with MDSTB 2,5/...-GF-5,08

Diagram



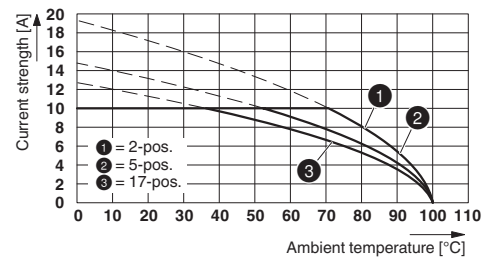
Type: FRONT-MSTB 2,5/...-STF-5,08 with MDSTB 2,5/...-GF-5,08

Diagram



Type: MSTBT 2,5/...-STF-5,08 with MDSTB 2,5/...-GF-5,08

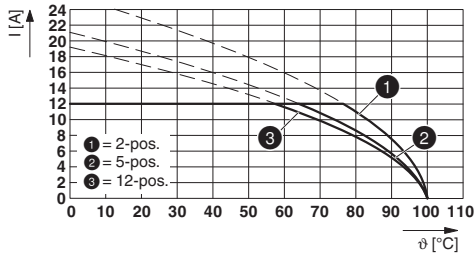
Diagram



Type: MVSTB(R/W) 2,5/...-STF-5,08 with MDSTB 2,5/...-GF-5,08

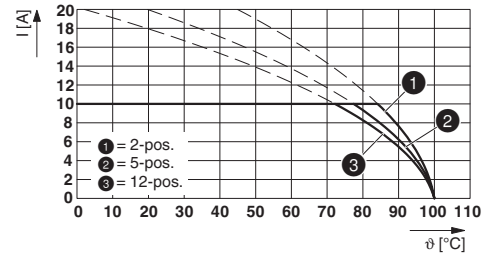
Feed-through header - MDSTB 2,5/ 8-GF-5,08 - 1842429

Diagram



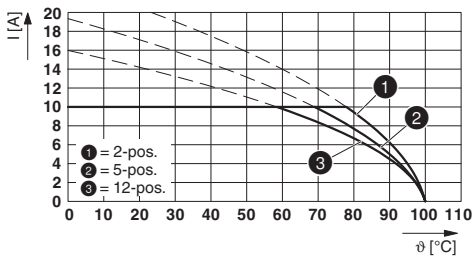
Type: FKCN 2,5/...-STF-5,08 with MDSTB 2,5/...-GF-5,08

Diagram



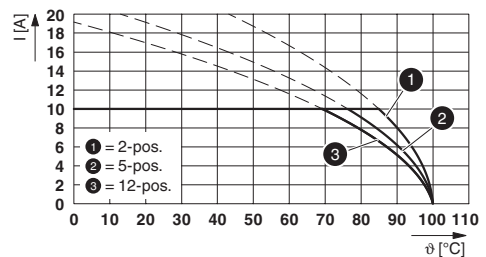
Type: FKCV(W/R) 2,5/...-STF-5,08 with MDSTB 2,5/...-GF-5,08

Diagram



Type: FKCT 2,5/...-STF-5,08 with MDSTB 2,5/...-GF-5,08

Diagram



Type: FKCS 2,5/...-STF-5,08 with MDSTB 2,5/...-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 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

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Classifications

ETIM

ETIM 7.0	EC002637
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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

IECEE CB Scheme / EAC / cULus Recognized / VDE Zeichengenehmigung

Ex Approvals

Approval details

IECEE CB Scheme		http://www.iecee.org/	DE1-60988-B1B2
Nominal voltage UN	250 V		
Nominal current IN	10 A		

EAC		B.01687
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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	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



Filler plug

Accessories - MSTB-BL - 1755477



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

Labeled terminal marker

Feed-through header - MDSTB 2,5/ 8-GF-5,08 - 1842429

Accessories

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 - TVMSTB 2,5/ 8-STF-5,08 - 1719150



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 400 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 16, product range: TVMSTB 2,5/...-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 90 °, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Printed-circuit board connector - FRONT-MSTB 2,5/ 8-STF-5,08 - 1777798



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: FRONT-MSTB 2,5/...-STF, pitch: 5.08 mm, connection method: Front screw connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Printed-circuit board connector - MSTB 2,5/ 8-STF-5,08 - 1778043



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: MSTB 2,5/...-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Printed-circuit board connector - MSTBC 2,5/ 8-STZF-5,08 - 1809792



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: MSTBC 2,5/...-STZF, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross section range [mm²] data: 10A/MSTBC-MT 0,5-1,0 (3190564); 10A/MSTBC-MT 0,5-1,0 BA (3190645); 12A/MSTBC-MT 1,5-2,5 (3190551); 12A/MSTBC-MT 1,5-2,5 BA (3190658). BA = Bandkontakte

Feed-through header - MDSTB 2,5/ 8-GF-5,08 - 1842429

Accessories

Printed-circuit board connector - MVSTBW 2,5/ 8-STF-5,08 - 1834961



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: MVSTBW 2,5/..-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: -90 °, Locking clip: - Locking clip, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Printed-circuit board connector - MVSTBR 2,5/ 8-STF-5,08 - 1835151



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: MVSTBR 2,5/..-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 90 °, Locking clip: - Locking clip, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Printed-circuit board connector - TMSTBP 2,5/ 8-STF-5,08 - 1853162



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 16, product range: TMSTBP 2,5/..-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard, The plug allows conductors to be looped through from module to module.

Printed-circuit board connector - FKCVW 2,5/ 8-STF-5,08 - 1873265



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: FKCVW 2,5/..-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Printed-circuit board connector - FKCVW 2,5/ 8-STF-5,08 - 1873867



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: FKCVW 2,5/..-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: -90 °, Locking clip: - Locking clip, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Feed-through header - MDSTB 2,5/ 8-GF-5,08 - 1842429

Accessories

Printed-circuit board connector - FKCVR 2,5/ 8-STF-5,08 - 1874167



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: FKCVR 2,5/...-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 90 °, Locking clip: - Locking clip, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Printed-circuit board connector - TFKC 2,5/ 8-STF-5,08 - 1962752



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 16, product range: TFKC 2,5/...-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Printed-circuit board connector - SMSTB 2,5/ 8-STF-5,08 - 1971125



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: SMSTB 2,5/...-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: -45 °, Locking clip: - Locking clip, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Printed-circuit board connector - FKCS 2,5/ 8-STF-5,08 - 1975325



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: FKCS 2,5/...-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, Stecksystem: CLASSIC COMBICON, Locking: Screw locking, type of packaging: packed in cardboard