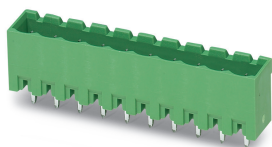


Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

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The figure shows a 10-position version of the product

PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: MSTBVA 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, plug-in system: CLASSIC COMBICON, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: packed in cardboard

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
- ✓ Closed contour for optimum stability of the plug-in connection
- ✓ Easy PCB replacement thanks to plug-in modules



Key Commercial Data

Packing unit	250 pc
Minimum order quantity	250 pc
GTIN	 4 017918 029319
GTIN	4017918029319
Weight per Piece (excluding packing)	0.700 g
Custom tariff number	85366930
Country of origin	Germany
Sales Key	AAAFEA

Technical data

Item properties

Brief article description	PCB header
Connector system	CLASSIC COMBICON
Type of contact	Male connector
Range of articles	MSTBVA 2,5/..-G
Pitch	5.08 mm

Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

Technical data

Item properties

Number of positions	2
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without
Number of rows	1
Number of connections	2
Number of potentials	2
Pin connector pattern alignment	Standard

Electrical parameters

Nominal current	12 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

Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	8.6 mm
Width [w]	12.16 mm

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Technical data

Dimensions for the product

Height [h]	15.9 mm
Pitch	5.08 mm
Height (without solder pin)	12 mm
Solder pin [P]	3.9 mm
Pin dimensions	1 x 1 mm

Dimensions for PCB design

Hole diameter	1.4 mm
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Packaging information

Type of packaging	packed in cardboard
Pieces per package	250
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
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 ₁	2.4 mΩ

Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

Technical data

Durability tests (B)

Insertion/withdrawal cycles	25
Contact resistance R_2	2.5 mΩ
Impulse withstand voltage at sea level	4.8 kV

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	24
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

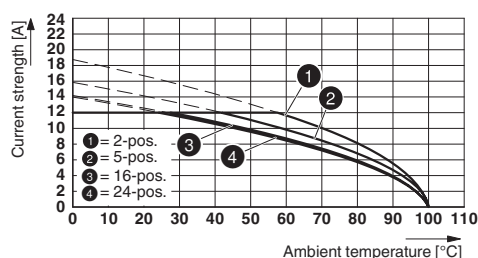
Connection in acc. with standard	EN-VDE
	CSA

Environmental Product Compliance

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

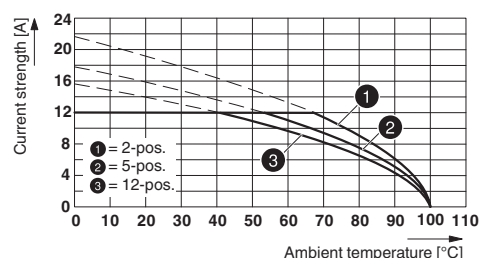
Drawings

Diagram



Type: MSTB 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

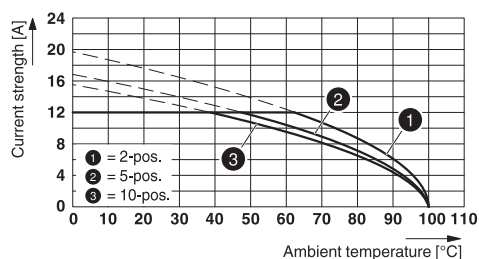
Diagram



Type: FKCN 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

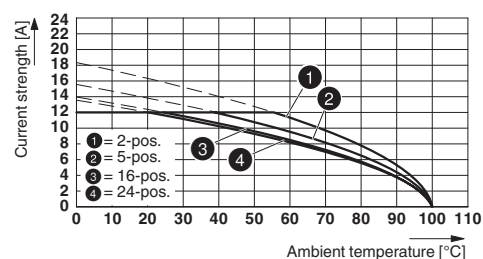
Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

Diagram



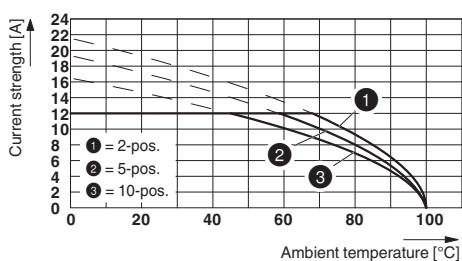
Type: TVMSTB 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

Diagram



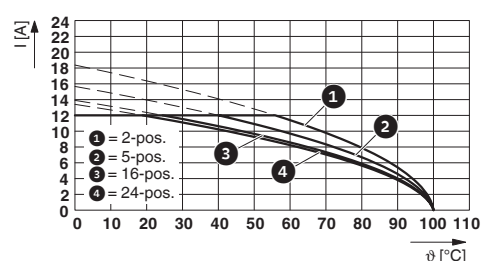
Type: MSTBP 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

Diagram



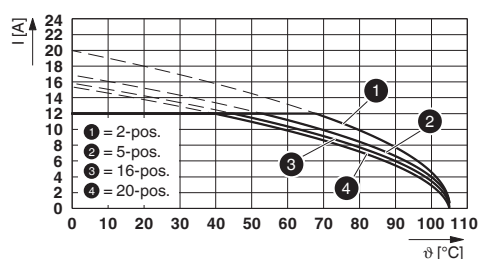
Type: TFKC 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

Diagram



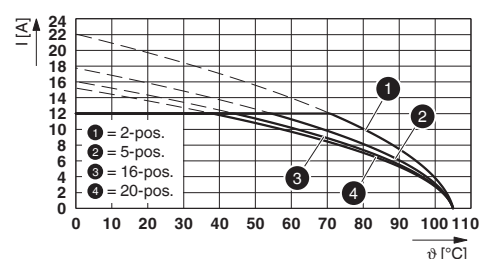
Type: FRONT-MSTB 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

Diagram



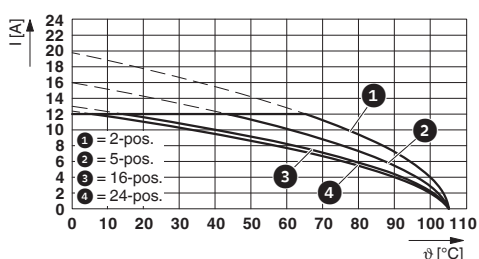
Type: FKCT 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

Diagram



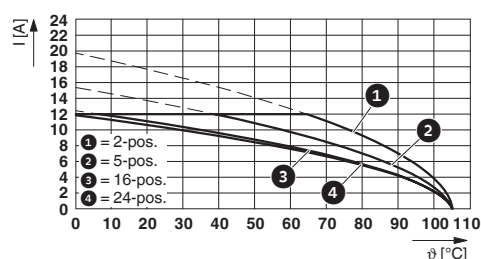
Type: FKCS 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

Diagram



Type: ICV 2,5/...-G-5,08 with MSTBVA 2,5/...-G-5,08

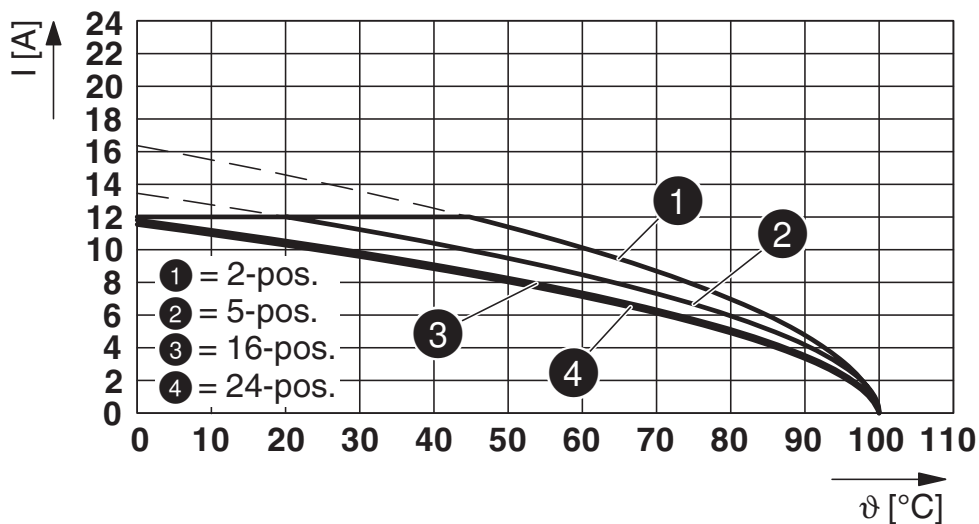
Diagram



Type: IC 2,5/...-G-5,08 with MSTBVA 2,5/...-G-5,08

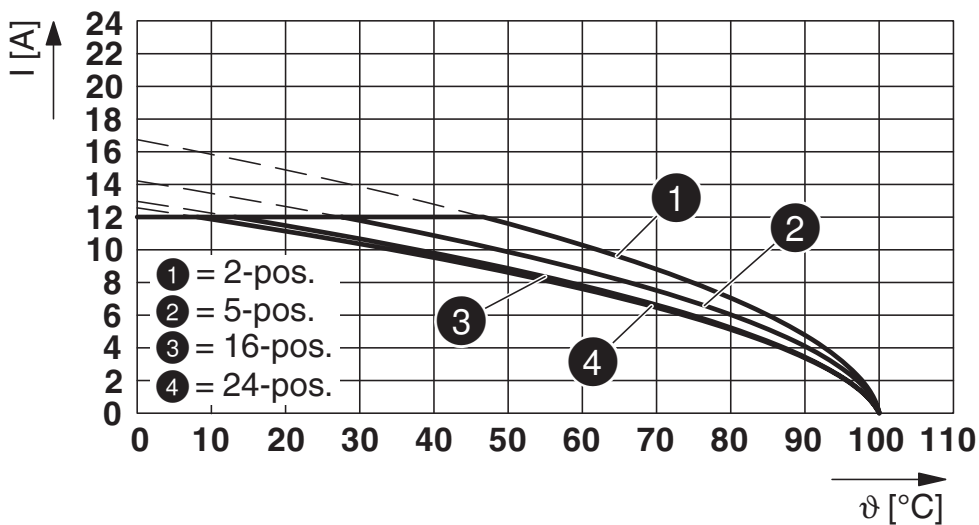
Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

Diagram



Type: MVSTB(R/W) 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

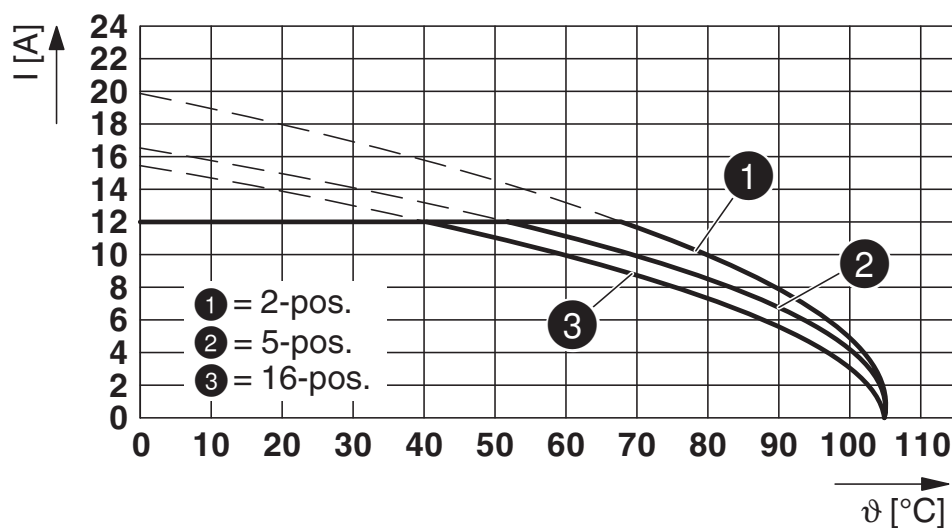
Diagram



Type: SMSTB 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

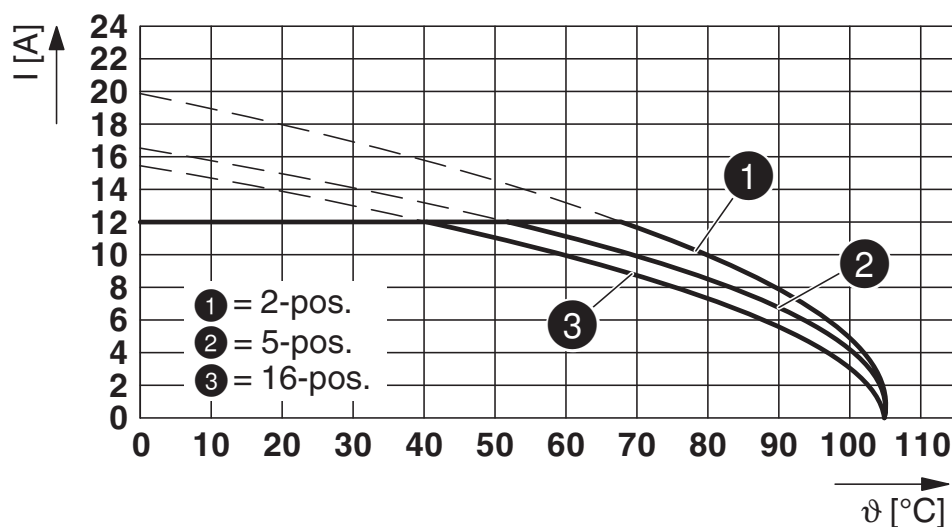
Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

Diagram



Type: FKCVR 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

Diagram



Type: FKCVW 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-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

Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

Classifications

eCl@ss

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
UNSPSC 21.0	39121409

Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

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		

Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

Approvals

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.01687
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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	

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

Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

Accessories

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 - TVMSTB 2,5/ 2-ST-5,08 - 1719008



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 4, product range: TVMSTB 2,5/...-ST, 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: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - FKCEN 2,5/ 2-ST-5,08 - 1754568



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: FKCEN 2,5/...-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - FRONT-MSTB 2,5/ 2-ST-5,08 - 1777280



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: FRONT-MSTB 2,5/...-ST, pitch: 5.08 mm, connection method: Front screw connection, screw head form: L Slotted, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

Accessories

Printed-circuit board connector - MSTBT 2,5/ 2-ST-5,08 - 1779987



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: MSTBT 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - MVSTBR 2,5/ 2-ST-5,08 - 1792249



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: MVSTBR 2,5/..-ST, 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: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - MVSTBW 2,5/ 2-ST-5,08 - 1792757



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: MVSTBW 2,5/..-ST, 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: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - MSTBC 2,5/ 2-ST-5,08 - 1808816



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: MSTBC 2,5/..-ST, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, 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

Printed-circuit board connector - MSTBC 2,5/ 2-STZ-5,08 - 1809501



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: MSTBC 2,5/..-STZ, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, 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

Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

Accessories

Printed-circuit board connector - MSTBU 2,5/ 2-STD-5,08 - 1824120



Direct plug-in block, 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: 2, Number of rows: 2, Number of positions per row: 2, number of connections: 2, product range: MSTBU 2,5/...-STD, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Direct mounting, conductor/PCB connection direction: 0 °, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - SMSTB 2,5/ 2-ST-5,08 - 1826283



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: SMSTB 2,5/...-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -45 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - TMSTBP 2,5/ 2-ST-5,08 - 1853010



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 4, product range: TMSTBP 2,5/...-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard, The plug allows conductors to be looped through from module to module.

Printed-circuit board connector - FKC 2,5/ 2-ST-5,08 - 1873058



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: FKC 2,5/...-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - FKCVW 2,5/ 2-ST-5,08 - 1873650



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: FKCVW 2,5/...-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: -90 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

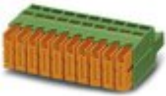
Accessories

Printed-circuit board connector - FKCVR 2,5/ 2-ST-5,08 - 1873951



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: FKCVR 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 90 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - QC 1/ 2-ST-5,08 - 1883255



PCB connector, nominal cross section: 1 mm², color: green, nominal current: 10 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Female connector, number of potentials: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: QC 1/..-ST, pitch: 5.08 mm, connection method: Displacement connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - FKCT 2,5/ 2-ST-5,08 - 1902110



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: FKCT 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - TFKC 2,5/ 2-ST-5,08 - 1962600



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 4, product range: TFKC 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector - FKCS 2,5/ 2-ST-5,08 - 1975079



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: 2, Number of rows: 1, Number of positions per row: 2, number of connections: 2, product range: FKCS 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard