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PCB connector, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



The figure shows a 10-position version of the product

#### Your advantages

- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors













### **Key Commercial Data**

Packing unit	1 pc
GTIN	4 017918 029548
GTIN	4017918029548
Weight per Piece (excluding packing)	3.600 g
Custom tariff number	85366990
Country of origin	United States

#### Technical data

#### Item properties

Brief article description	Printed-circuit board connector
Plug-in system	CLASSIC COMBICON
Type of contact	Female connector
Range of articles	MSTB 2,5/ST
Pitch	5.08 mm



#### Technical data

#### Item properties

Number of positions	2
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M3
Locking	without
Number of levels	1
Number of connections	2
Number of potentials	2

#### Electrical parameters

Rated current	12 A

#### Connection capacity

Conductor cross section solid	0.2 mm² 2.5 mm²
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross section AWG / kcmil	24 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 2.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 2.5 mm²
2 conductors with same cross section, solid	0.2 mm² 1 mm²
2 conductors with same cross section, flexible	0.2 mm² 1.5 mm²
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm² 1 mm²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm² 1.5 mm²
Cylindrical gauge a x b / diameter	2.8 mm x 2.4 mm / 2.5 mm
Stripping length	7 mm
Torque	0.5 Nm 0.6 Nm

#### 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 terminal point (top layer)	Tin (5 - 7 μm Sn)
Metal surface contact area (top layer)	Tin (5 - 7 µm Sn)

### Material data - housing

Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600



### Technical data

### Material data - housing

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 [1]	18.3 mm
Width [w]	10.16 mm
Height [ h ]	15 mm
Pitch	5.08 mm
Height (without solder pin)	15 mm
Dimension a	5.08 mm

#### Packaging information

Type of packaging	packed in cardboard
Pieces per package	100
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)

#### Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

#### Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed

#### Mechanical tests according to standard

Visual examination	Test passed IEC 60512-1-1:2002-02
Dimensional test	Test passed IEC 60512-1-2:2002-02
Resistance of marking	Test passed IEC 60068-2-70:1995-12
Result	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Polarization and coding	Test passed IEC 60512-13-5:2006-02



### Technical data

#### Mechanical tests according to standard

Result	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	27 N

#### Air clearances and creepage distances

Specification	IEC 60664-1:2007-04
Rated insulation voltage (III/3)	250 V
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)	3.2 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 <sub>1</sub>	1.3 mΩ
Insertion/withdrawal cycles	25
Contact resistance R <sub>2</sub>	1.4 mΩ
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 2 TΩ

#### Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	$0.2~\mathrm{dm^3SO_2}$ 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

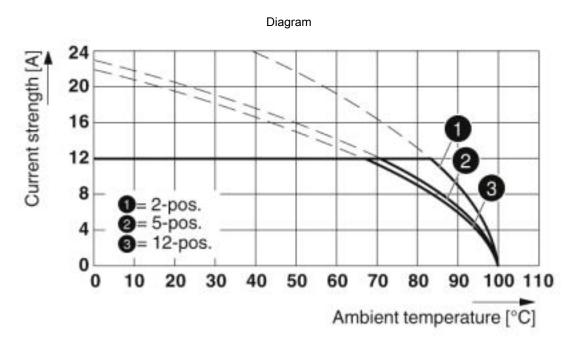


#### Technical data

#### **Environmental Product Compliance**

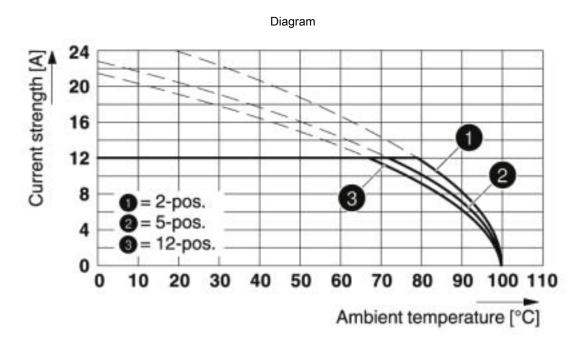
REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

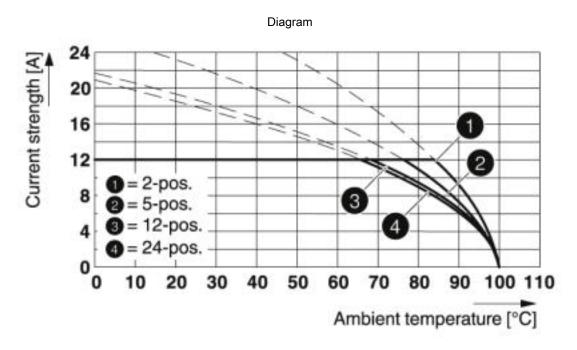


Type: MSTB 2,5/...-ST-5,08 with CC 2,5/...-G-5,08 P26THR



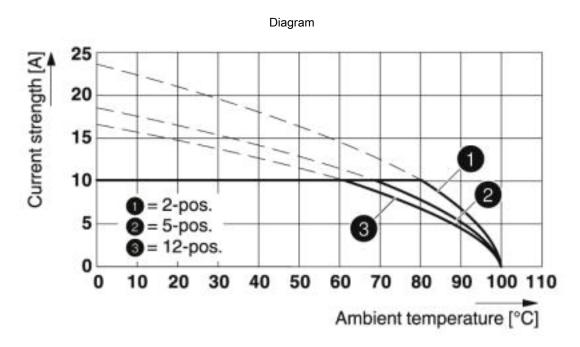


Type: MSTB 2,5/...-ST-5,08 with CCV 2,5/...-G-5,08 P26THR

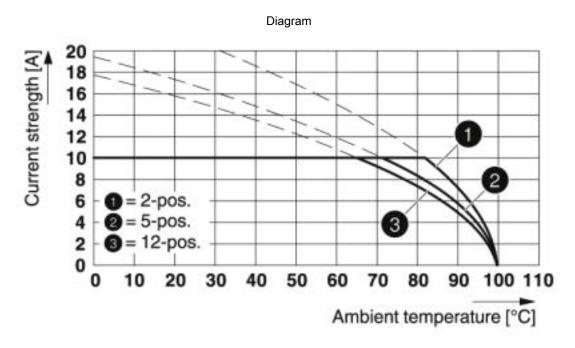


Type: MSTB 2,5/...-ST-5,08 with CCVA 2,5/...-G-5,08 P26THR



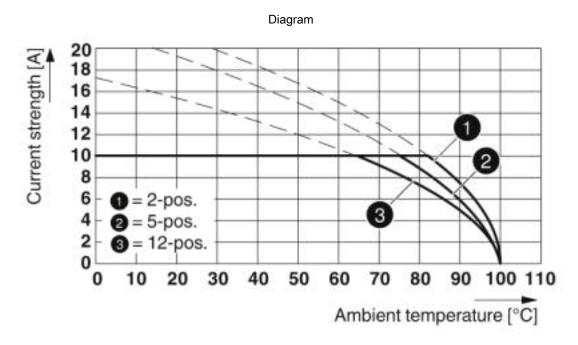


Type: MSTB 2,5/...-ST-5,08 with MDSTB 2,5/...-G-5,08

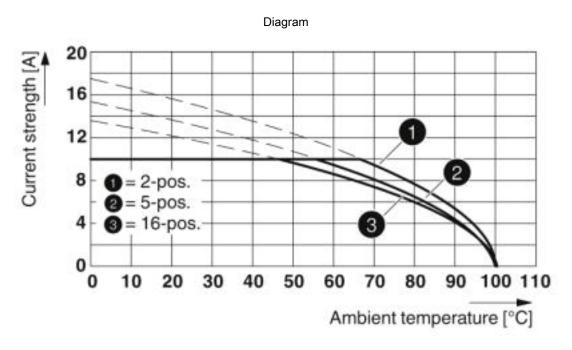


Type: MSTB 2,5/...-ST-5,08 with MDSTBA 2,5/...-G-5,08



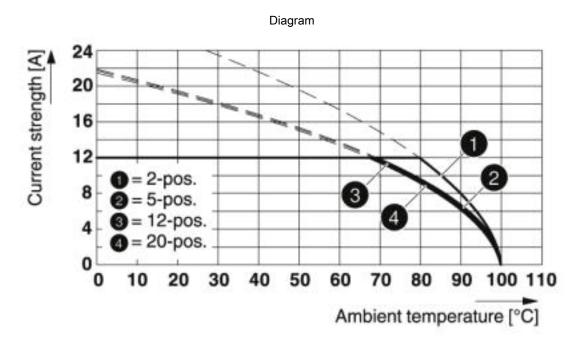


Type: MSTB 2,5/...-ST-5,08 with MDSTBW 2,5/...-G-5,08

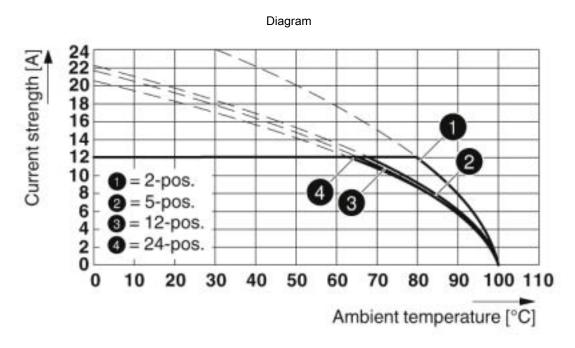


Type: MSTB 2,5/...-ST-5,08 with MDSTBV 2,5/...-G-5,08



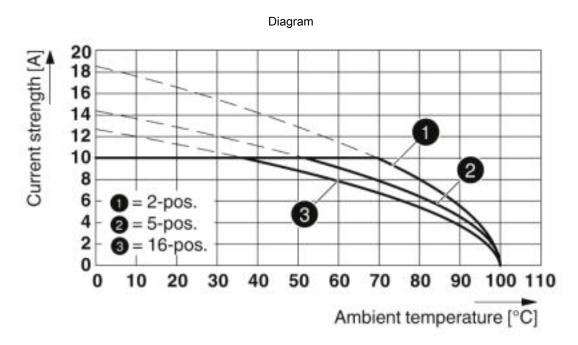


Type: MSTB 2,5/...-ST-5,08 with MVSTBU 2,5/...-GB-5,08

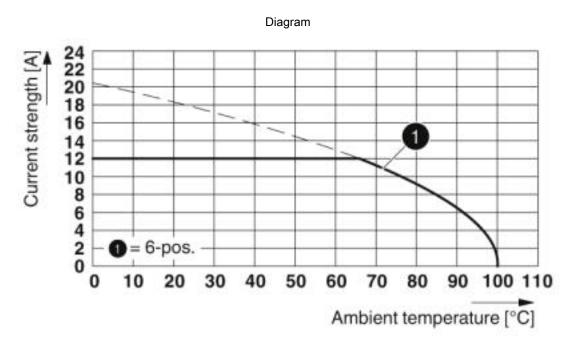


Type: MSTB 2,5/...-ST-5,08 with MSTB 2,5/...-G-5,08



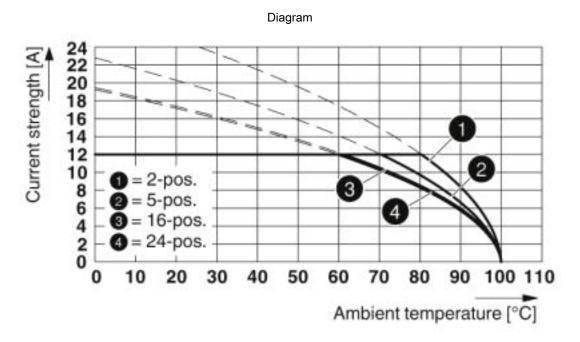


Type: MSTBP 2,5/...-ST-5,08 with MDSTBVA 2,5/...-G-5,08

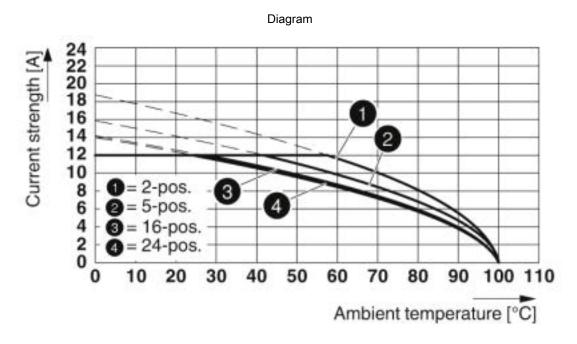


Type: MSTB 2,5/..-ST(-5,08) with EMSTBVA 2,5/...-G(-5,08)



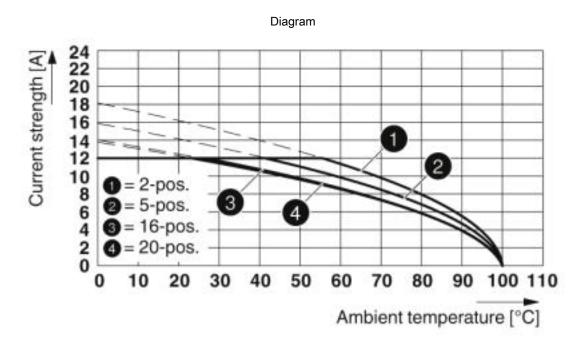


Type: MSTB 2,5/...-ST-5,08 with MSTBW 2,5/...-G-5,08

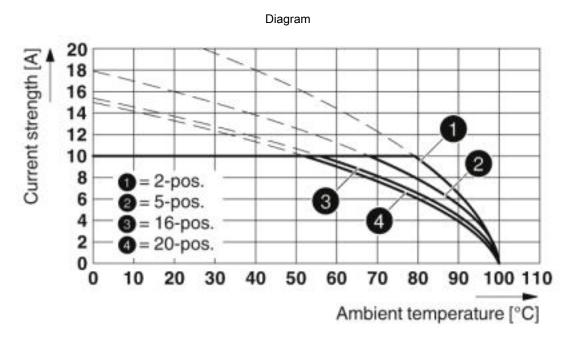


Type: MSTB 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08



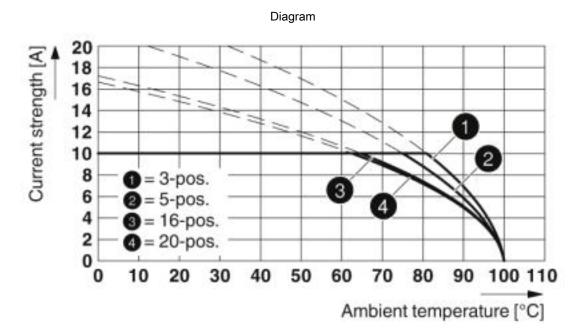


Type: MSTB 2,5/...-ST-5,08 with MSTBV 2,5/...-G-5,08



Type: MSTB 2,5/...-ST-5,08 with MDSTB 2,5/...-G1-5,08





Type: MSTB 2,5/...-ST-5,08 with MDSTBV 2,5/...-G1-5,08

#### 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	27440309
eCl@ss 8.0	27440309
eCl@ss 9.0	27440309

#### **ETIM**

ETIM 3.0	EC001121
ETIM 4.0	EC002638
ETIM 5.0	EC002638
ETIM 6.0	EC002638
ETIM 7.0	EC002638

#### **UNSPSC**

UNSPSC 6.01	30211810



### Classifications

#### **UNSPSC**

UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121409

### Approvals

#### Approvals

Approvals

CSA / IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

Ex Approvals

#### Approval details

CSA <b>(P</b> )	http://www.csagroup.org/services-industries/product-listing/ LR13631-2585950	
	В	D
Nominal voltage UN	300 V	300 V
Nominal current IN	15 A	10 A
mm²/AWG/kcmil	28-12	28-12

IECEE CB Scheme	http://www.iecee.org/ DE1-60988-B1B2
Nominal voltage UN	250 V
Nominal current IN	12 A
mm²/AWG/kcmil	0.2-2.5



### Approvals

VDE Gutachten mit Fertigungsüberwachung	VDE	http://www2.vde.com/de/Institut/Online-Service/ VDE-gepruefteProdukte/Seiten/Online-Suche.aspx 40004701		
Nominal voltage UN			250 V	
Nominal current IN			12 A	
mm²/AWG/kcmil			0.2-2.5	

EAC	EAC	B.01742
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cULus Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-19931011	
	В	D
Nominal voltage UN	300 V	150 V
Nominal current IN	15 A	15 A
mm²/AWG/kcmil	30-12	30-12

#### Accessories

#### Accessories

#### Bridge

Insertion bridge - EBP 2- 5 - 1733169



Insertion bridge, fully insulated, for connectors with 5.0 or 5.08 mm pitch, no. of positions: 2

#### Cable housing

Cable housing - KGG-MSTB 2,5/ 2 - 1803934



Cable housing, pitch: 0 mm, number of positions: 2, dimension a: 10 mm, color: green



#### Accessories

#### Coding element

Coding profile - CP-MSTB - 1734634



Coding profile, is inserted into the slot on the plug or inverted header, red 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

#### 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

#### Screwdriver tools

Screwdriver - SZS 0,6X3,5 - 1205053



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size:  $0.6 \times 3.5 \times 100$  mm, 2-component grip, with non-slip grip

#### Terminal marking



#### Accessories

Marker card - SK U/2,8 WH:UNBEDRUCKT - 0803883



Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm, Number of individual labels: 3600

#### Additional products

Feed-through header - MSTBW 2,5/ 2-G-5,08 - 1735882



PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

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



PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

Printed-circuit board connector - MSTBA 2,5/ 2-G-5,08 - 1757242



PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

Feed-through header - MSTBV 2,5/ 2-G-5,08 - 1758018



PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering



#### Accessories

Feed-through header - MSTB 2,5/ 2-G-5,08 - 1759017

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering



Feed-through header - MDSTB 2,5/ 2-G-5,08 - 1762062



PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, 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!

Printed-circuit board connector - MDSTBV 2,5/ 2-G-5,08 - 1763074



PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Can be aligned! Mounting flange: Order No. 1836477, 1836480. 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!

Feed-through header - SMSTBA 2,5/ 2-G-5,08 - 1767371



PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

Printed-circuit board connector - SMSTB 2,5/ 2-G-5,08 - 1769463



PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering



#### Accessories

Feed-through header - MSTBA 2,5/ 2-G-5,08-LA - 1770944



PCB headers, number of positions: 2, pitch: 5.08 mm, color: green

Feed-through header - MDSTBW 2,5/ 2-G-5,08 - 1802430



PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, 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!

Feed-through header - MDSTBA 2,5/ 2-G-5,08 - 1842063



PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, 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!

Feed-through header - MDSTBVA 2,5/ 2-G-5,08 - 1845332



PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, 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!

Feed-through header - MDSTBA 2,5/ 2-GL-5,08 - 1877601



PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, 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!



#### Accessories

Feed-through header - MDSTBA 2,5/ 2-GR-5,08 - 1877614



PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, 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!

Feed-through header - MDSTBVA 2,5/ 2-GL-5,08 - 1877627



PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, 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!

Feed-through header - MDSTBVA 2,5/ 2-GR-5,08 - 1877630



PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, 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!

Printed-circuit board connector - DFK-MSTBA 2,5/ 2-G-5,08 - 1898839



Feed-through header, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

Printed-circuit board connector - DFK-MSTBVA 2,5/ 2-G-5,08 - 1899139



Feed-through header, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering



#### Accessories

Printed-circuit board connector - CC 2,5/ 2-G-5,08 P26THR - 1954388

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"



Printed-circuit board connector - CC 2,5/ 2-G-5,08 P26THRR32 - 1954582



PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"

Printed-circuit board connector - CCA 2,5/ 2-G-5,08 P26THR - 1954919

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"



Printed-circuit board connector - CCA 2,5/ 2-G-5,08 P26THRR32 - 1955031

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"



Printed-circuit board connector - CCV 2,5/ 2-G-5,08 P26THR - 1955387

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"





#### Accessories

Printed-circuit board connector - CCV 2,5/ 2-G-5,08 P26THRR32 - 1955523



PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"

Printed-circuit board connector - CCVA 2,5/ 2-G-5,08 P26THR - 1955853



PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"

Printed-circuit board connector - CCVA 2,5/ 2-G-5,08 P26THRR32 - 1955963



PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under "Downloads"

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