Printed-circuit board connector - MSTB 2,5/ 2-ST-5,08 GY - 1763919

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The figure shows a 10-pos. version of the product in green

PCB connector, nominal cross section: 2.5 mm², color: gray, 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: MSTB 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

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	4 017918 215408
GTIN	4017918215408
Custom tariff number	85366990
Country of origin	Germany

Technical data

Item properties

Brief article description	PCB connector
Connector system	CLASSIC COMBICON
Type of contact	Female connector
Range of articles	MSTB 2,5/..-ST
Pitch	5.08 mm

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Technical data

Item properties

Number of positions	2
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

Nominal current	12 A
Nom. voltage	320 V
Rated voltage (III/3)	250 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

Connection capacity

Connection method	Screw connection with tension sleeve
pluggable	Yes
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, flexible, with ferrule without plastic sleeve	0.25 mm² ... 1 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule 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

Flange specifications

Type of locking	without
Mounting flange	without

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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

Housing color	gray (7042)
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]	18.3 mm
Width [w]	10.16 mm
Height [h]	15 mm
Pitch	5.08 mm
Height (without solder pin)	15 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)

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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
Conductor cross section / conductor type / tensile force	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	2.5 mm² / solid / > 50 N
	2.5 mm² / flexible / > 50 N

Mechanical tests according to standard

Test specification	IEC 61984
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Resistance of inscriptions	IEC 60068-2-70:1995-12
Insertion and withdrawal force	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	IEC 60512-13-5:2006-02
Contact holder in insert	IEC 60512-15-1:2008-05
Test force per pos.	27 N

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)	3.2 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm

Current carrying capacity / derating curves

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

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N

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Technical data

Mechanical tests (A)

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	1.3 mΩ
Insertion/withdrawal cycles	25
Contact resistance R_2	1.4 mΩ
Impulse withstand voltage at sea level	4.8 kV

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	12
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

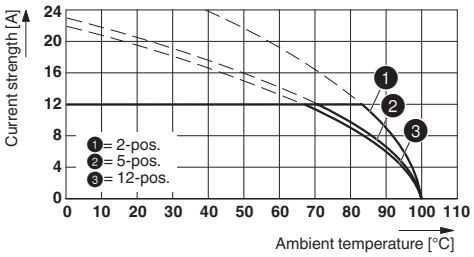
Environmental Product Compliance

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

Drawings

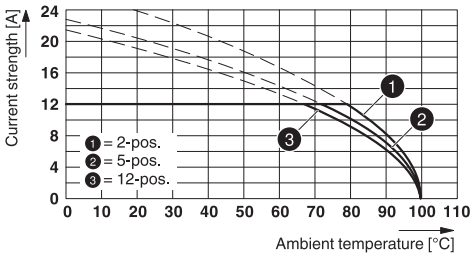
Printed-circuit board connector - MSTB 2,5/ 2-ST-5,08 GY - 1763919

Diagram



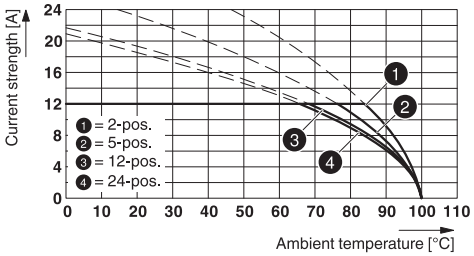
Type: MSTB 2,5/...-ST-5,08 with CC 2,5/...-G-5,08 P26THR

Diagram



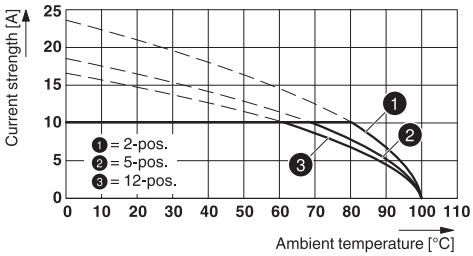
Type: MSTB 2,5/...-ST-5,08 with CCV 2,5/...-G-5,08 P26THR

Diagram



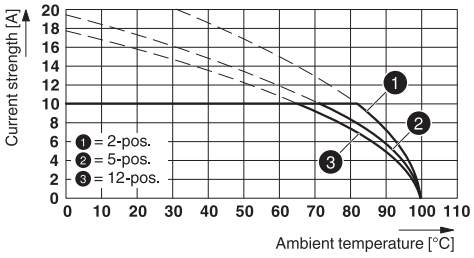
Type: MSTB 2,5/...-ST-5,08 with CCVA 2,5/...-G-5,08 P26THR

Diagram



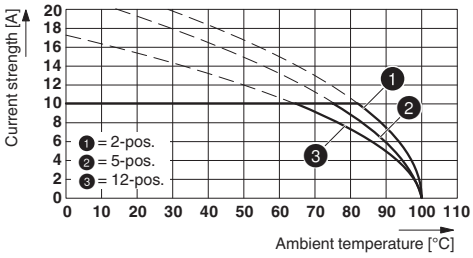
Type: MSTB 2,5/...-ST-5,08 with MDSTB 2,5/...-G-5,08

Diagram



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

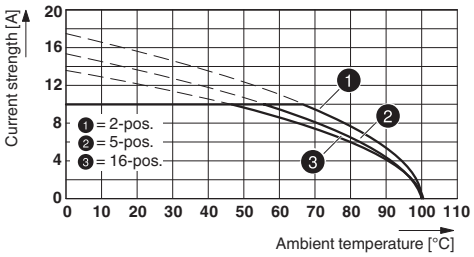
Diagram



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

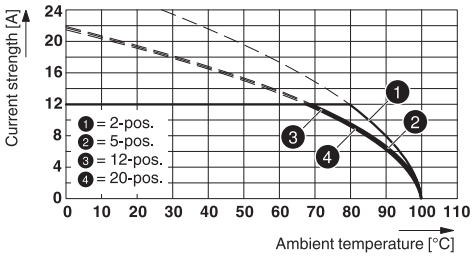
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Diagram



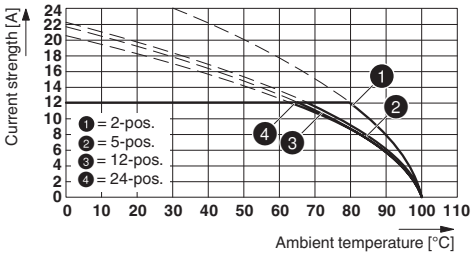
Type: MSTB 2,5/...-ST-5,08 with MDSTBV 2,5/...-G-5,08

Diagram



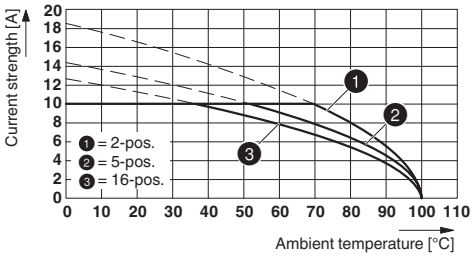
Type: MSTB 2,5/...-ST-5,08 with MVSTBU 2,5/...-GB-5,08

Diagram



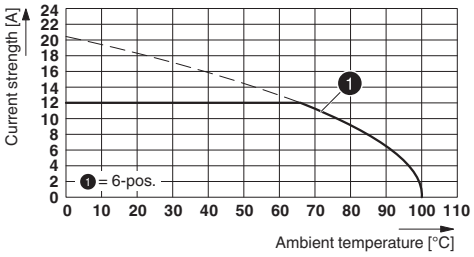
Type: MSTB 2,5/...-ST-5,08 with MSTB 2,5/...-G-5,08

Diagram



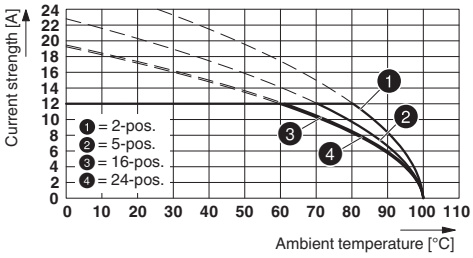
Type: MSTBP 2,5/...-ST-5,08 with MDSTBVA 2,5/...-G-5,08

Diagram



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

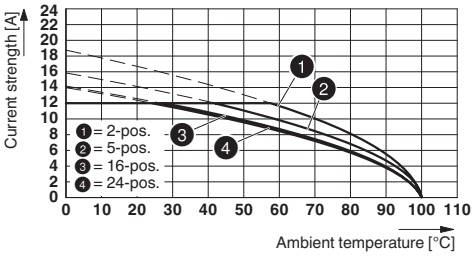
Diagram



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

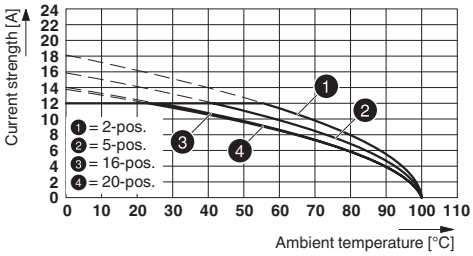
Printed-circuit board connector - MSTB 2,5/ 2-ST-5,08 GY - 1763919

Diagram



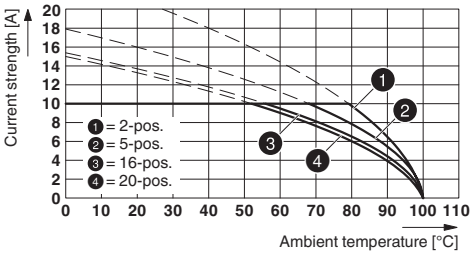
Type: MSTB 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

Diagram



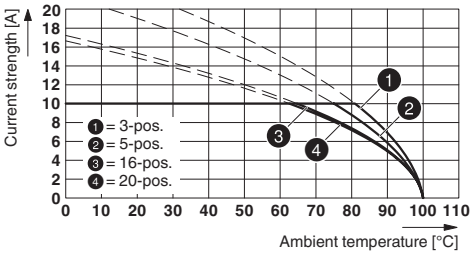
Type: MSTB 2,5/...-ST-5,08 with MSTBV 2,5/...-G-5,08

Diagram



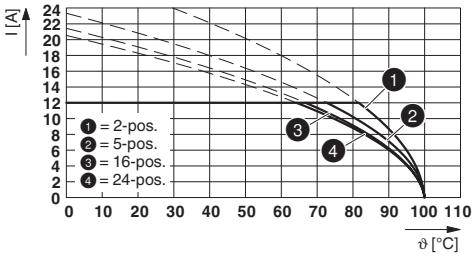
Type: MSTB 2,5/...-ST-5,08 with MDSTB 2,5/...-G1-5,08

Diagram



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

Diagram



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

Classifications

eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 11.0	27460202
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700

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Classifications

eCl@ss

eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440309
eCl@ss 9.0	27440309

ETIM

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

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

Printed-circuit board connector - MSTB 2,5/ 2-ST-5,08 GY - 1763919

Approvals

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40050694

Nominal voltage UN	250 V
Nominal current IN	12 A
mm²/AWG/kcmil	0.2-2.5

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	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

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
mm²/AWG/kcmil	30-12	30-12

Accessories

Accessories

Printed-circuit board connector - MSTB 2,5/ 2-ST-5,08 GY - 1763919

Accessories

Bridge

Insertion bridge - EBP 2- 5 - 1733169



Insertion bridge for connectors with 5.0 mm or 5.08 mm pitch

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

Printed-circuit board connector - MSTB 2,5/ 2-ST-5,08 GY - 1763919

Accessories

Screwdriver - SZS 0,6X3,5 - 1205053



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

Terminal marking

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

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