Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

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)

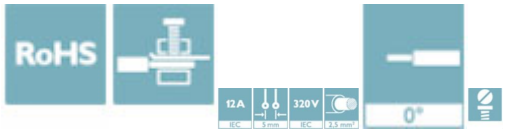
PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 4, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: light gray, contact surface: Tin, pin layout: Linear pinning



The figure shows a 10-position version of the product

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	50 pc
GTIN	4 046356 302937
GTIN	4046356302937

Technical data

Item properties

Brief article description	Printed-circuit board connector
Plug-in system	CLASSIC COMBICON
Type of contact	Female connector
Range of articles	MSTBT 2,5/..-ST
Pitch	5 mm
Number of positions	4
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Pin layout	Linear pinning
Locking	without
Number of levels	1

Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

Technical data

Item properties

Number of connections	4
Number of potentials	4

Electrical parameters

Nominal current	12 A
Nom. voltage	320 V
Rated voltage	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 2.0 mm / 2.4 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

Housing color	light gray (7035)
Insulating material	PA
Insulating material group	I

Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

Technical data

Material data - housing

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

Length [l]	18.1 mm
Width [w]	20 mm
Height [h]	15 mm
Pitch	5 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

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)

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
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 examination	Test passed IEC 60512-1-1:2002-02
Dimensional test	Test passed IEC 60512-1-2:2002-02

Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

Technical data

Mechanical tests according to standard

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
Result	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	36 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
Note on connection cross section	With connected conductor 2,5 mm².

Current carrying capacity / derating curves

Specification	IEC 61984

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	1.2 mΩ
Insertion/withdrawal cycles	25
Contact resistance R_2	1.3 mΩ
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 0,4 TΩ

Thermal tests (C)

Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

Technical data

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	18
Conductor cross section	2.5 mm²
Test current	12 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
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

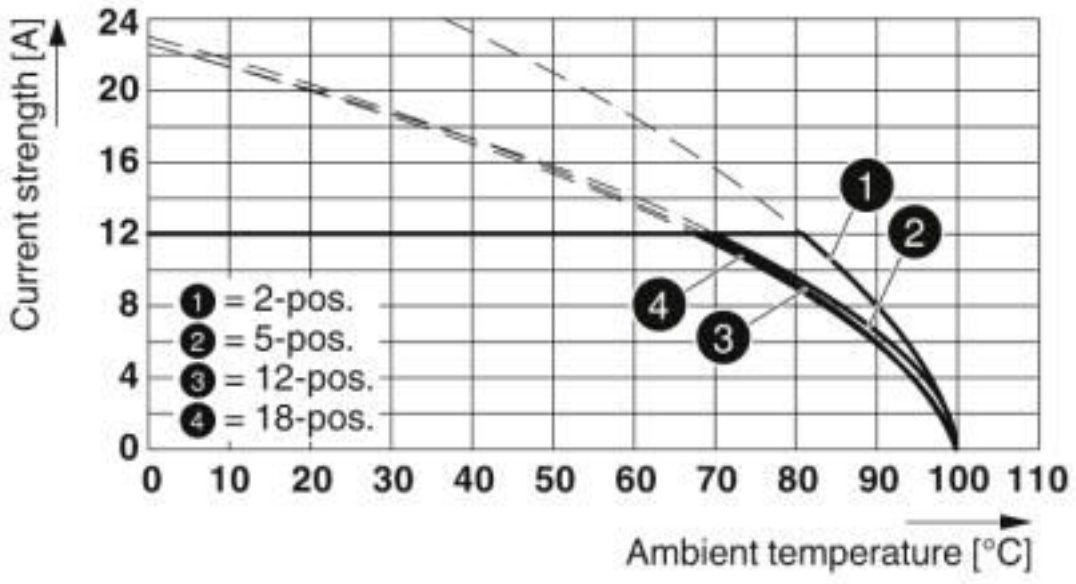
Environmental Product Compliance

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

Drawings

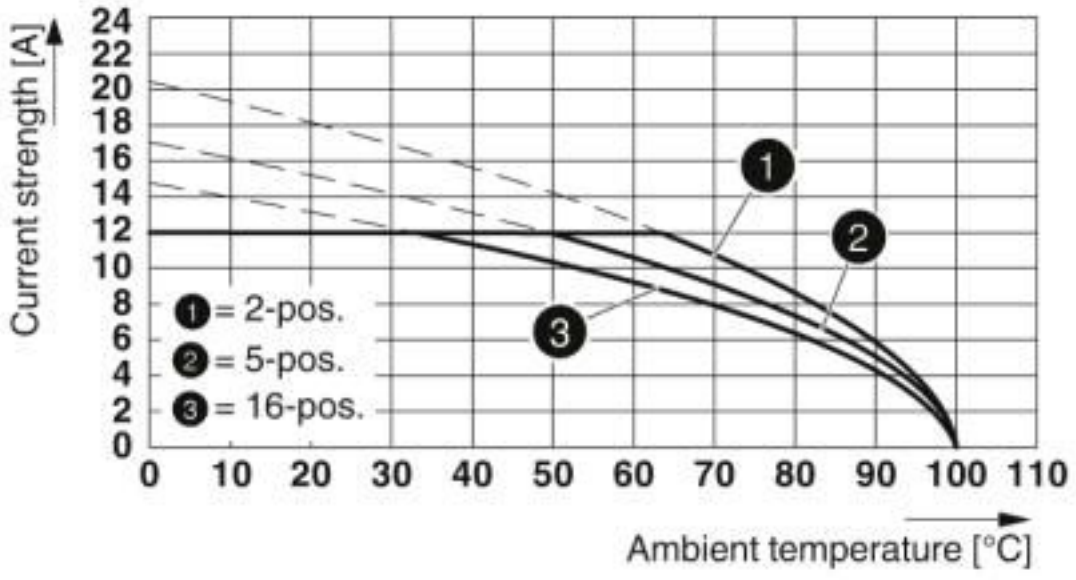
Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

Diagram



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

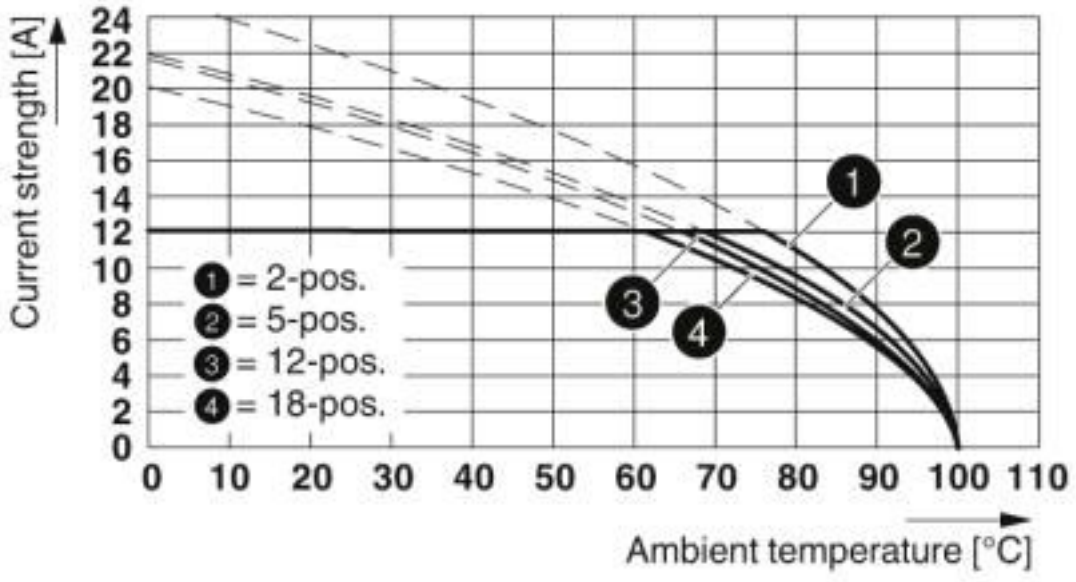
Diagram



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

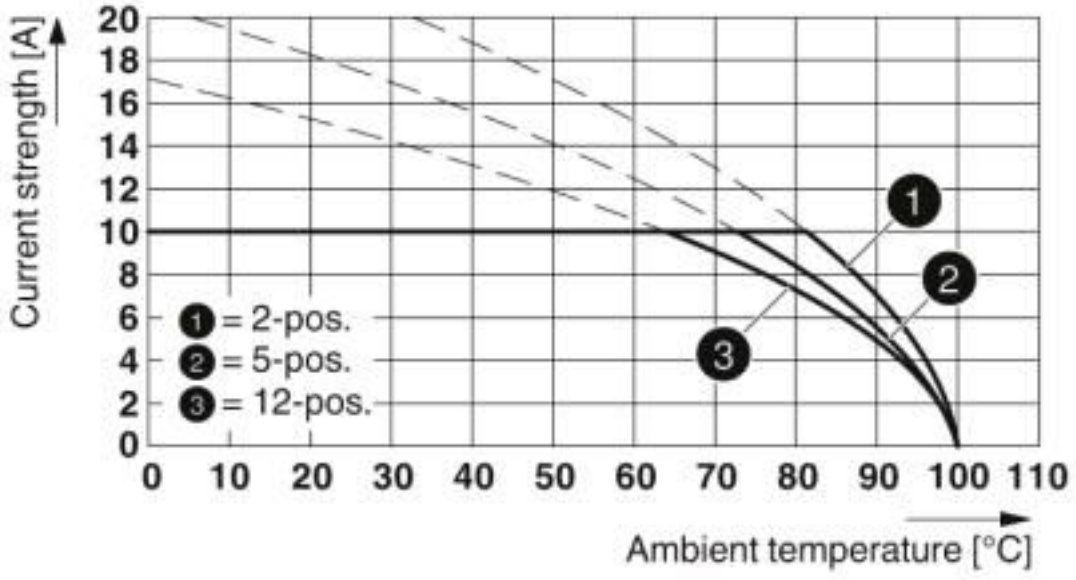
Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

Diagram



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

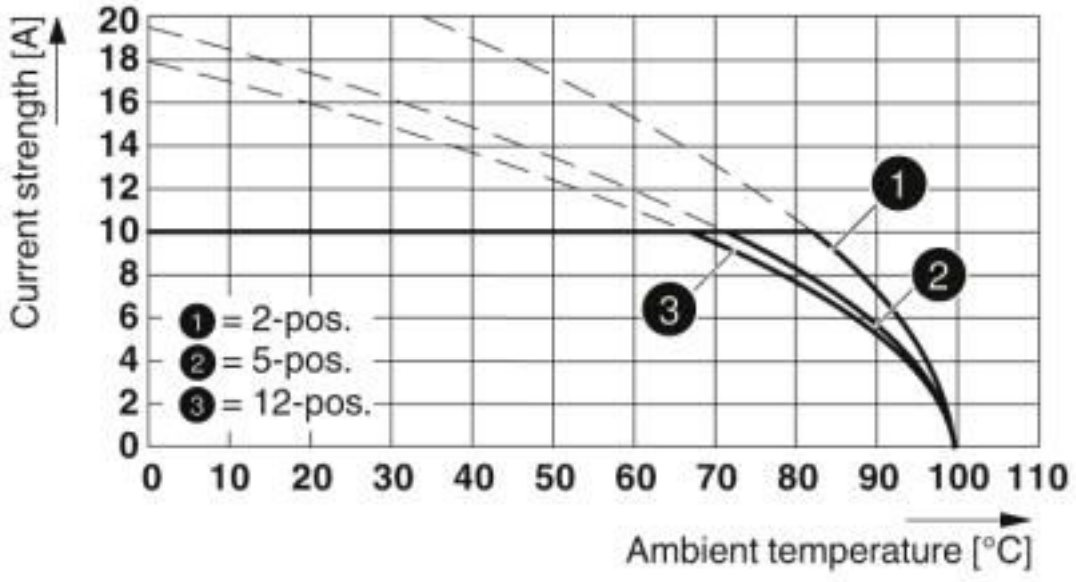
Diagram



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

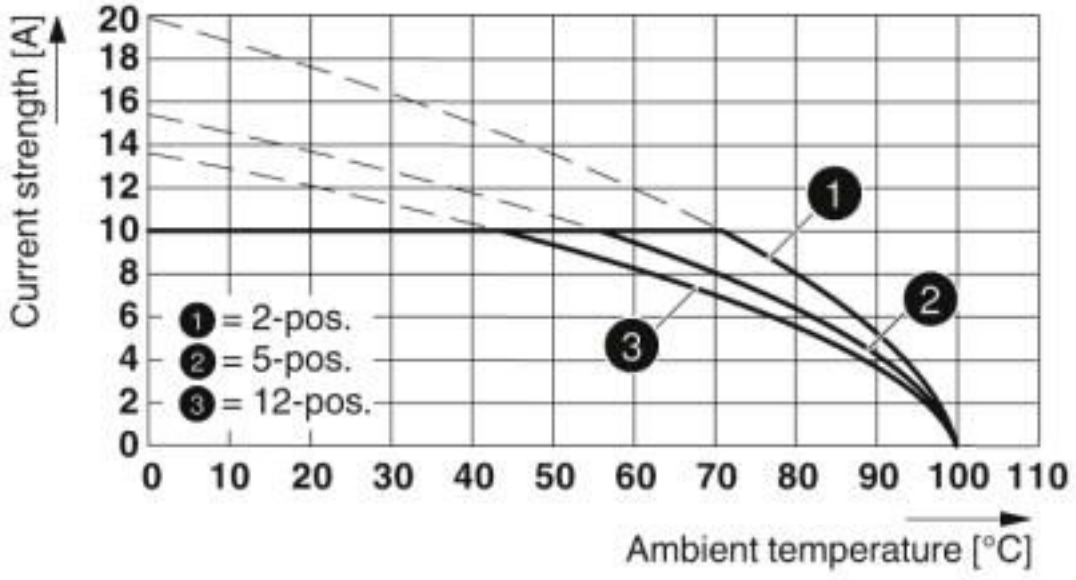
Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

Diagram



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

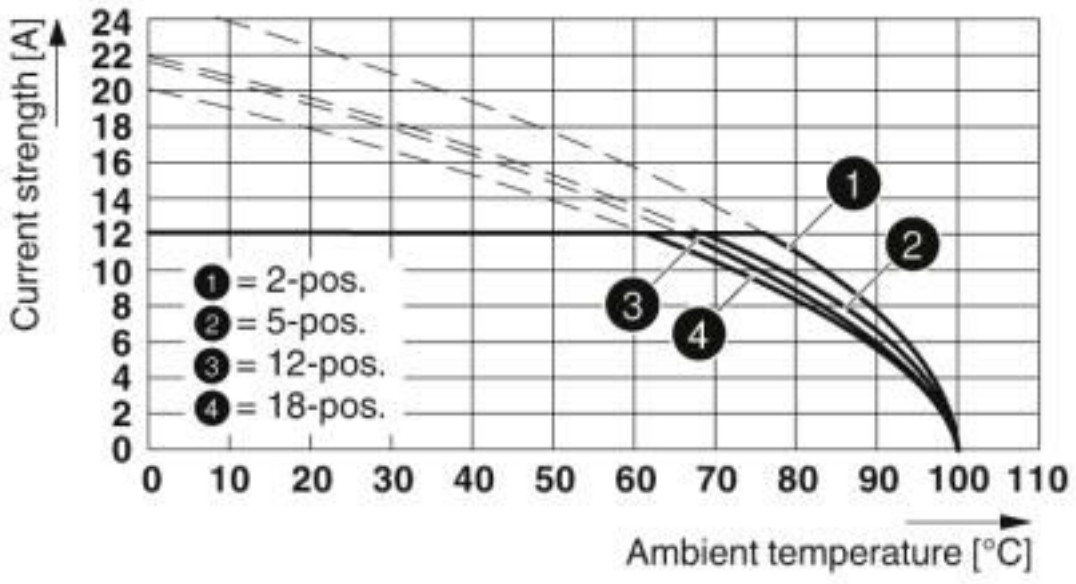
Diagram



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

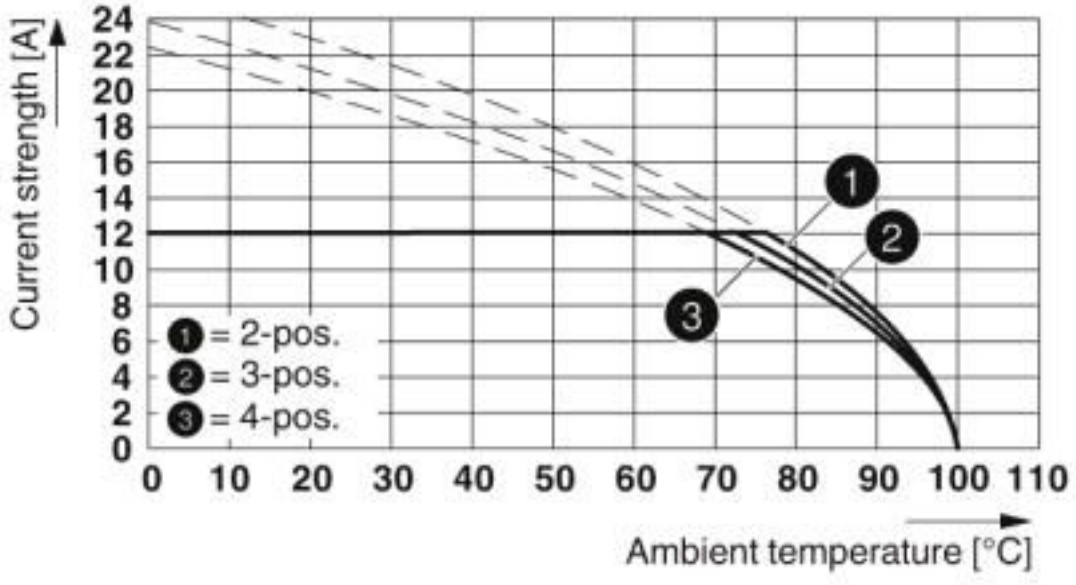
Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

Diagram



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

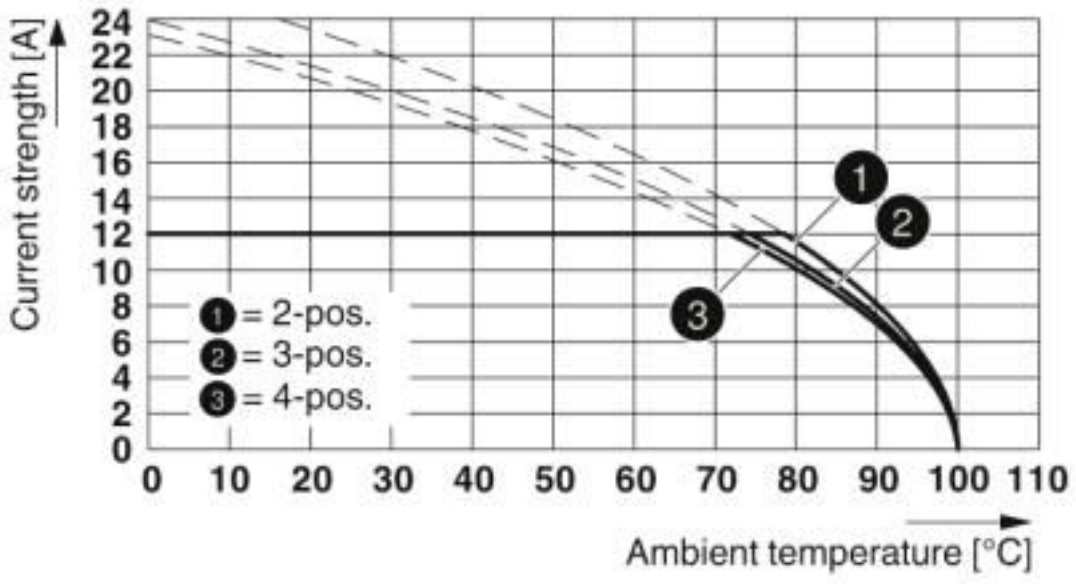
Diagram



Type: MSTBT 2,5/...-ST with MSTBO 2,5/...-G1L

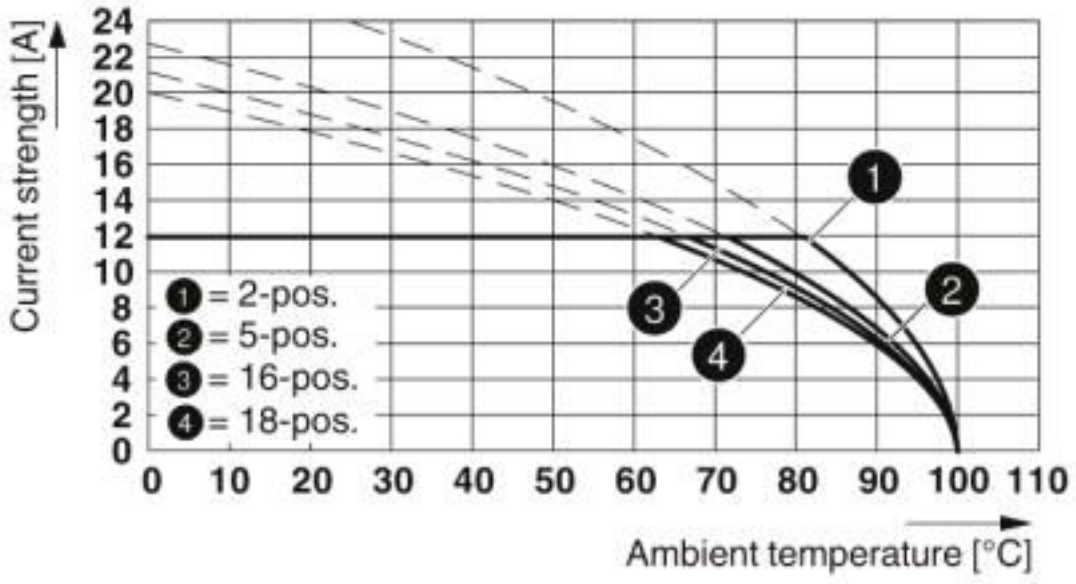
Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

Diagram



Type: MSTBT 2,5/...-ST with MSTBO 2,5/...-G1R

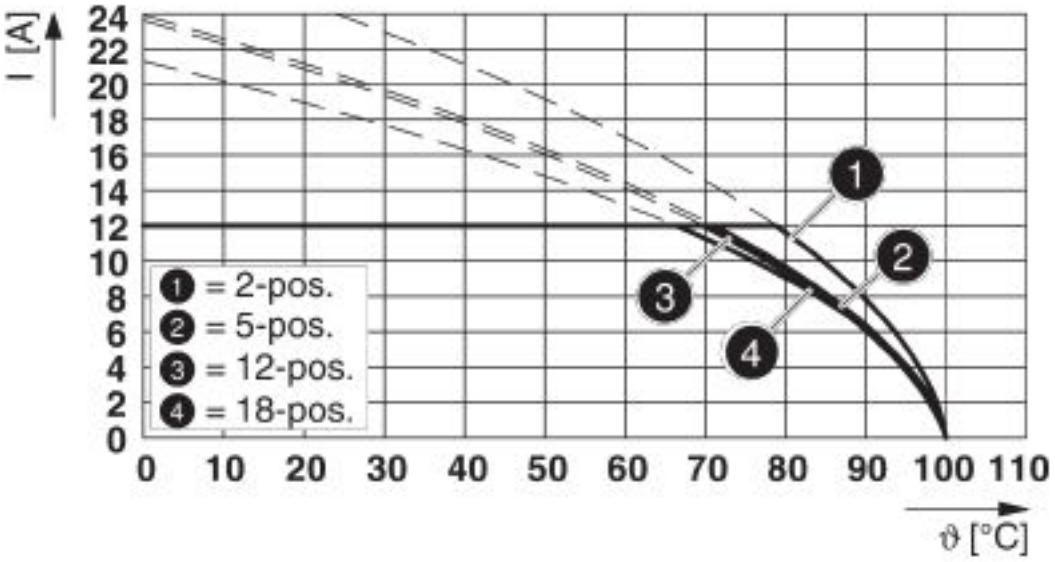
Diagram



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

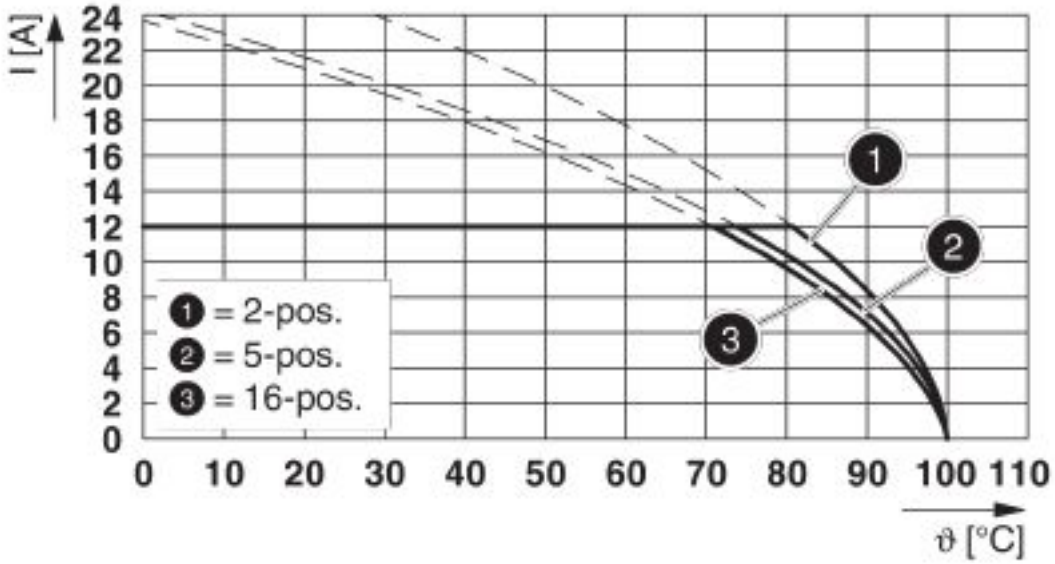
Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

Diagram



Type: MSTBT 2,5/...-ST with FKIC 2,5/...-ST

Diagram



Type: MSTBT 2,5/...-ST with FKICS 2,5/...-ST

Classifications

eCl@ss

eCl@ss 10.0.1	27440309

Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

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
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

Printed-circuit board connector - MSTBT 2,5/ 4-ST GY7035 BD:5-8 - 1743676

Approvals

CSA		http://www.csagroup.org/services-industries/product-listing/	13631

	B	D
Nominal voltage UN	300 V	300 V
Nominal current IN	10 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

VDE Zeichengenehmigung		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

Phoenix Contact 2020 © - all rights reserved
http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
http://www.phoenixcontact.com