

Printed-circuit board connector - TVMSTB 2,5/ 2-STF-5,08 - 1719095

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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 the 10-position version

Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Screwable flange for superior mechanical stability
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Potentials can be easily looped through – ideal for BUS applications



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 046356 156301
GTIN	4046356156301
Weight per Piece (excluding packing)	7.980 g
Custom tariff number	85366990
Country of origin	Slovakia

Technical data

Item properties

Brief article description	Printed-circuit board connector
Plug-in system	CLASSIC COMBICON
Type of contact	Female connector
Range of articles	TVMSTB 2,5/...-STF

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Technical data

Item properties

Pitch	5.08 mm
Number of positions	2
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M3
Locking	Screw flange
Number of levels	1
Number of connections	4
Number of potentials	2

Electrical parameters

Rated current	12 A
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

Connection capacity

Conductor cross section solid	0.2 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG / kcmil	24 ... 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 2.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 2.5 mm ²
2 conductors with same cross section, solid	0.2 mm ² ... 1 mm ²
2 conductors with same cross section, flexible	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm ² ... 1 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm ² ... 1.5 mm ²
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 (1 - 3 µm Sn)
Metal surface contact area (top layer)	Tin (1 - 3 µm Sn)

Material data - housing

Insulating material	PA
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Technical data

Material data - housing

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

Length [l]	19.6 mm
Width [w]	20.16 mm
Height [h]	25.8 mm
Pitch	5.08 mm
Height (without solder pin)	25.8 mm
Dimension a	5.08 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
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
Conductor cross section / conductor type / tensile force	0.2 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	2.5 mm ² / solid / > 50 N
	2.5 mm ² / flexible / > 50 N

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

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Mechanical tests according to standard

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.	27 N

Air clearances and creepage distances

Specification	IEC 60664-1:2007-04
Rated insulation voltage (III/3)	250 V
Rated insulation voltage (III/2)	400 V
Rated insulation 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
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 mm ² (stranded).

Current carrying capacity / derating curves

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 ₁	2.3 mΩ
Insertion/withdrawal cycles	25
Contact resistance R ₂	2.5 mΩ

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Technical data

Durability tests (B)

Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 6 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 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

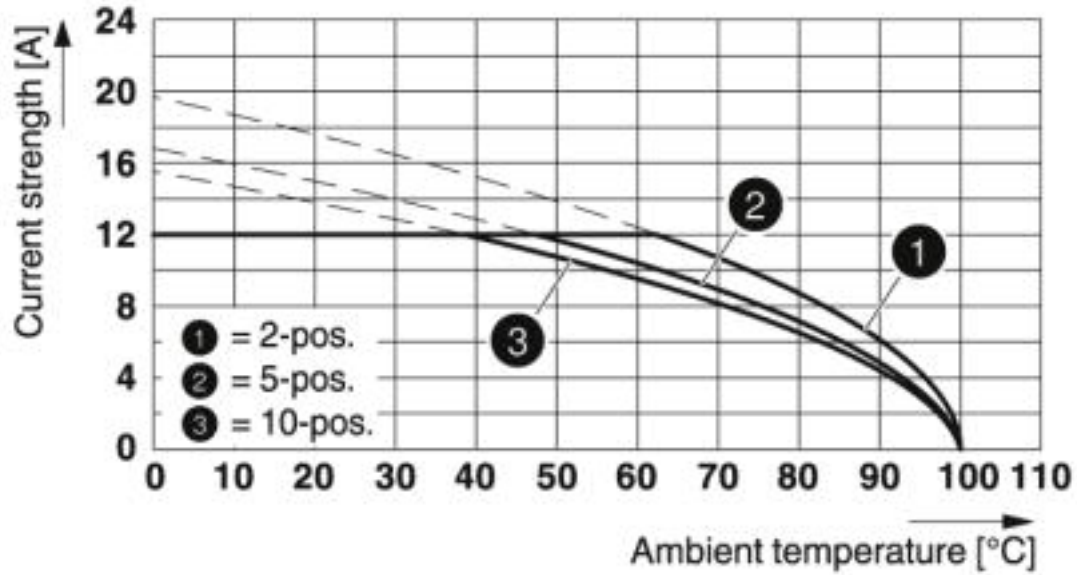
Environmental Product Compliance

	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

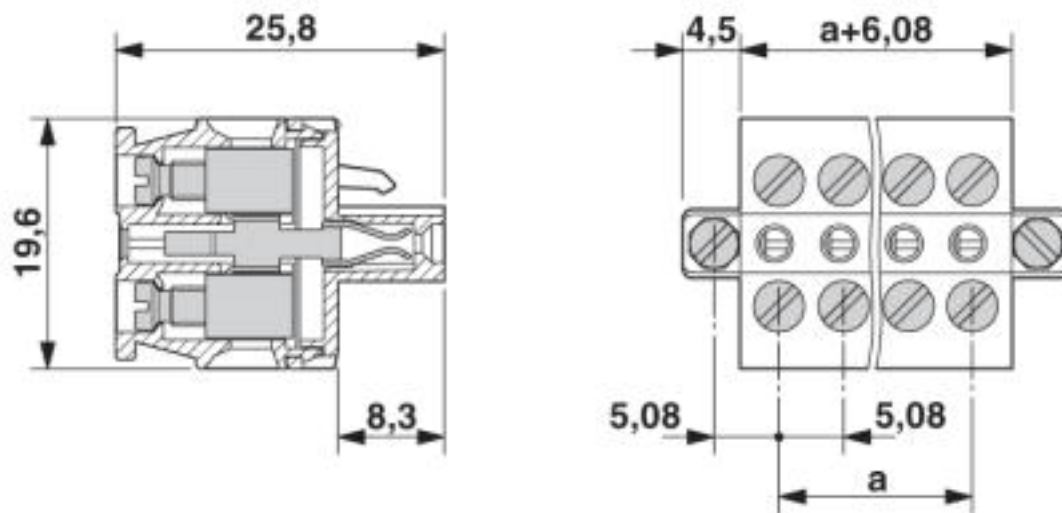
Printed-circuit board connector - TVMSTB 2,5/ 2-STF-5,08 - 1719095

Diagram



Type: TVMSTB 2,5/...-STF-5,08 with MSTBV 2,5/...-GF-5,08

Dimensional drawing



Classifications

eCl@ss

eCl@ss 4.0	27260700
eCl@ss 4.1	27260700

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Classifications

eCl@ss

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

Approvals


Approvals

Approvals

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

Ex Approvals

Approval details

IECEE CB Scheme		http://www.iecee.org/	DE1-58421-B1B2
Nominal voltage UN	400 V		

Printed-circuit board connector - TVMSTB 2,5/ 2-STF-5,08 - 1719095

Approvals

Nominal current IN	12 A
mm ² /AWG/kcmil	0.2-2.5

VDE Gutachten mit Fertigungsüberwachung		http://www2.vde.com/de/Institut/Online-Service/ VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40041286
Nominal voltage UN	400 V		
Nominal current IN	12 A		
mm ² /AWG/kcmil	0.2-2.5		

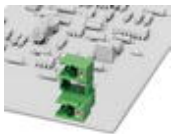
EAC		B.01742
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19931011
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm ² /AWG/kcmil	30-12	30-12	

Accessories

Additional products

Feed-through header - MDSTB 2,5/ 2-GFR-5,08 - 1736768



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 - TVMSTB 2,5/ 2-STF-5,08 - 1719095

Accessories

Feed-through header - MDSTB 2,5/ 2-GFL-5,08 - 1736771



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!

Feed-through header - MSTB 2,5/ 2-GF-5,08 - 1776508



PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Gold-plated contact surface / color: Green RAL 6021

Printed-circuit board connector - MSTBV 2,5/ 2-GF-5,08 - 1777073



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 - MDSTBV 2,5/ 2-GFL-5,08 - 1836477



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 - MDSTBV 2,5/ 2-GFR-5,08 - 1836480

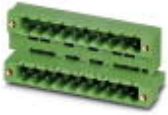


PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, The article can be aligned to create different nos. of positions! In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

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Accessories

Feed-through header - MDSTB 2,5/ 2-GF-5,08 - 1842364



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 - MDSTBV 2,5/ 2-GF-5,08 - 1845633



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-GF-5,08 - 1898981



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-GF-5,08 - 1899281



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

Feed-through header - EMSTB 2,5/ 2-GF-5,08 - 1899618



PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Press-in technology

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Accessories

Feed-through header - EMSTBV 2,5/ 2-GF-5,08 - 1915217

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Press-in technology



Feed-through header - MSTB 2,5/ 2-GF-5,08 THT - 1927564

PCB headers, number of positions: 2, pitch: 5.08 mm, color: black, User information and design recommendations for through hole reflow technology can be found under "Downloads"



Feed-through header - MSTBV 2,5/ 2-GF-5,08 THT - 1940897

PCB headers, number of positions: 2, pitch: 5.08 mm, color: black, User information and design recommendations for through hole reflow technology can be found under "Downloads"



Printed-circuit board connector - CC 2,5/ 2-GF-5,08 P26THR - 1954692

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-GF-5,08 P26THRR32 - 1954809

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 - TVMSTB 2,5/ 2-STF-5,08 - 1719095

Accessories

Printed-circuit board connector - CCV 2,5/ 2-GF-5,08 P26THR - 1955633

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-GF-5,08 P26THRR32 - 1955743

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"

