

Printed-circuit board connector - FRONT-MSTB 2,5/ 2-STF-5,08 - 1777808

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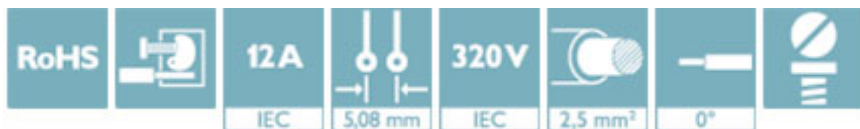
PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, number of positions: 2, pitch: 5.08 mm, connection method: Front screw connection, color: green, contact surface: Tin




The figure shows a 10-position version of the product

Why buy this product

- ✓ Well-known connection principle allows worldwide use
- ✓ Optimized for tight installation situations: operation and conductor connection from one direction
- ✓ Screwable flange for superior mechanical stability
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors



Key Commercial Data

Packing unit	100 pc
GTIN	 4 017918 039677
GTIN	4017918039677

Technical data

Item properties

Brief article description	Printed-circuit board connector
Range of articles	FRONT-MSTB 2,5/...-STF
Pitch	5.08 mm
Type of contact	Female connector
Plug-in system	CLASSIC COMBICON
Number of positions	2
Connection method	Front screw connection
Drive form screw head	Slotted (L)
Screw thread	M2,5

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Technical data

Item properties

Locking	Screw flange
Number of levels	1

Electrical parameters

Rated current	12 A
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV

Connection capacity

Conductor cross section solid	0.34 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 ... 1.5 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 mm ²

Specifications for ferrules

Recommended crimping pliers	1212034 CRIMPFOX 6
Ferrules without insulating collar, according to DIN 46228-1	Cross section: 0.5 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 0.75 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 1 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 1.5 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 2.5 mm ² ; Length: 10 mm
Recommended crimping pliers	1212034 CRIMPFOX 6
Ferrules with insulating collar, according to DIN 46228-4	Cross section: 0.5 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 0.75 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 1 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 1.5 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 2.5 mm ² ; Length: 10 mm

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 (4 - 8 µm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 µm Sn)

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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

Length [l]	27.2 mm
Width [w]	19.96 mm
Height [h]	15 mm
Pitch	5.08 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

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	0.34 mm ² / solid / > 15 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

Test specification	IEC 61984
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.	12 N
Withdraw strength per pos. approx.	9 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.	44 N

Air clearances and creepage distances

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112:2003-01)	CTI 600
Voltage	250 V
Rated insulation voltage (III/3)	250 V
Rated insulation voltage (III/2)	320 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

Current carrying capacity / derating curves

Specification	IEC 61984
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Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	12 N
Withdraw strength per pos. approx.	9 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	1.9 mΩ
Insertion/withdrawal cycles	25

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Durability tests (B)

Contact resistance R_2	1.9 m Ω
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 0.2 T Ω

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)

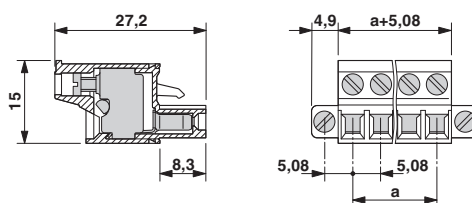
Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

Environmental Product Compliance

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

Drawings

Dimensional drawing



Approvals

Approvals

Approvals

CSA / VDE Gutachten mit Fertigungsüberwachung / IEC60384-1 CB Scheme / cULus Recognized / EAC / DNV GL

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Approvals

Ex Approvals

Approval details

CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	15 A	
mm ² /AWG/kcmil	22-12	22-12	

VDE Gutachten mit Fertigungsüberwachung		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		
mm ² /AWG/kcmil	0.34-2.5		

IECEE CB Scheme		http://www.iecee.org/	DE1-58978-B1B2
Nominal voltage UN	250 V		
Nominal current IN	12 A		
mm ² /AWG/kcmil	0.34-2.5		

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19931011
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	15 A	
mm ² /AWG/kcmil	30-12	30-12	

EAC		B.01742
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Approvals

DNV GL	http://exchange.dnv.com/tari/	TAE00001EY
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