

Printed-circuit board connector - MSTB 2,5 HC/ 2-GF - 1923979

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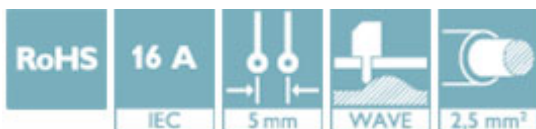
PCB headers, nominal current: 16 A, number of positions: 2, pitch: 5 mm, color: green, contact surface: Tin, mounting: Wave soldering




The figure shows a 10-position version of the product

Your advantages

- Well-known mounting principle allows worldwide use
- Screwable flange for superior mechanical stability
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies



Key Commercial Data

Packing unit	50 pc
GTIN	 4 017918 600167
GTIN	4017918600167

Technical data

Item properties

Brief article description	Feed-through header
Plug-in system	POWER COMBICON 2,5
Type of contact	Male connector
Range of articles	MSTB 2,5 HC/...GF
Pitch	5 mm
Number of positions	2
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	Threaded flange
Number of levels	1
Number of connections	2
Number of potentials	2

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Technical data

Electrical parameters

Rated current	16 A
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV

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	Tin-plated
Metal surface contact area (top layer)	Tin (3 - 5 µm Sn)
Metal surface contact area (middle layer)	Nickel (1 - 3 µm Ni),
Metal surface soldering area (top layer)	Tin (3 - 5 µm Sn)
Metal surface soldering area (middle layer)	Nickel (1 - 3 µm Ni)

Material data - housing

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]	12 mm
Width [w]	20 mm
Height [h]	12.1 mm
Pitch	5 mm
Height (without solder pin)	8.6 mm
Solder pin [P]	3.5 mm
Pin dimensions	1 x 1 mm
Dimension a	5 mm

Dimensions for PCB design

Hole diameter	1.4 mm
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Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.
Outer packaging type	Carton

General product information

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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.
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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)

Air clearances and creepage distances

Specification	IEC 60664-1:2007-04
Rated insulation voltage (III/3)	320 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)	4 mm
Minimum creepage distance value (III/2)	1.6 mm
Minimum creepage distance value (II/2)	3.2 mm

Mechanical tests (A)

Insertion strength per pos. approx.	6 N
Withdraw strength per pos. approx.	5 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 mΩ
Insertion/withdrawal cycles	50
Contact resistance R ₂	1 mΩ
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 12 TΩ

Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h

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Climatic tests (D)

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

Vibration test

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Standards and Regulations

Connection in acc. with standard	EN-VDE
	CUL
Flammability rating according to UL 94	V0

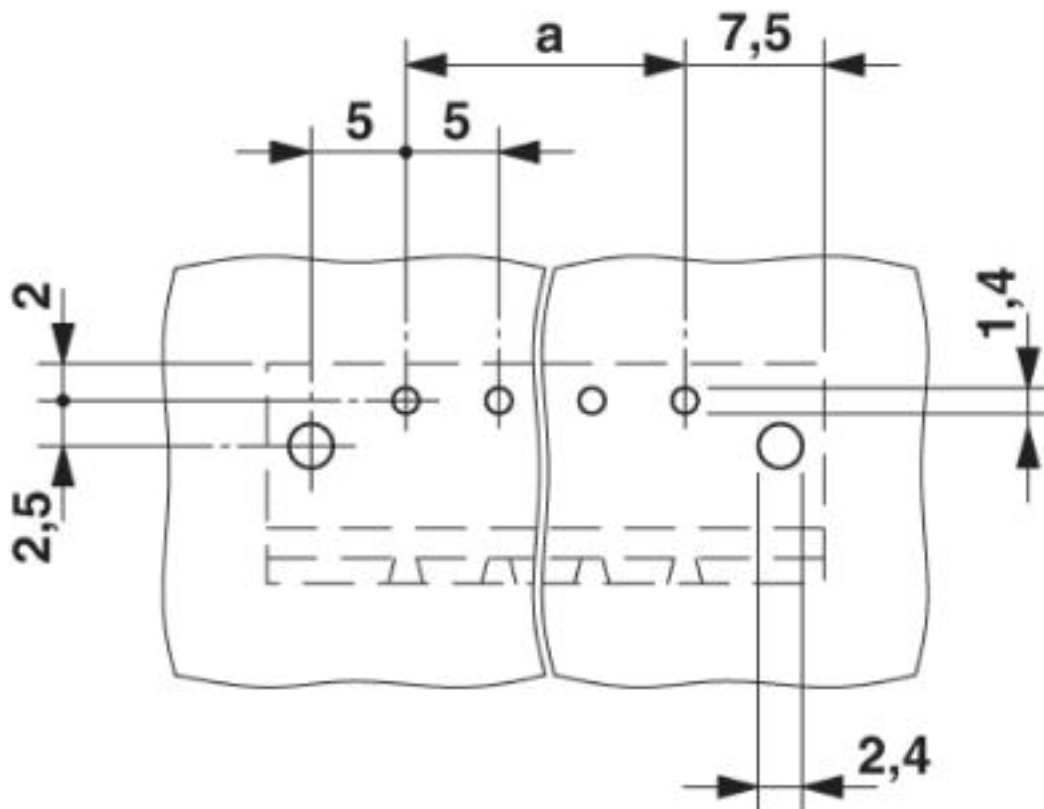
Environmental Product Compliance

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

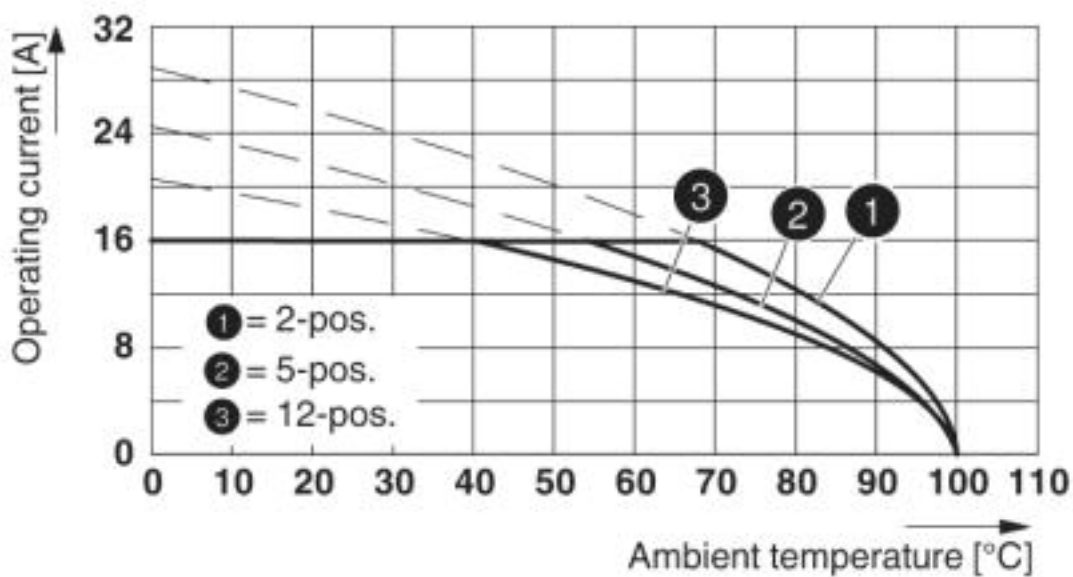
Drawings

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Drilling diagram



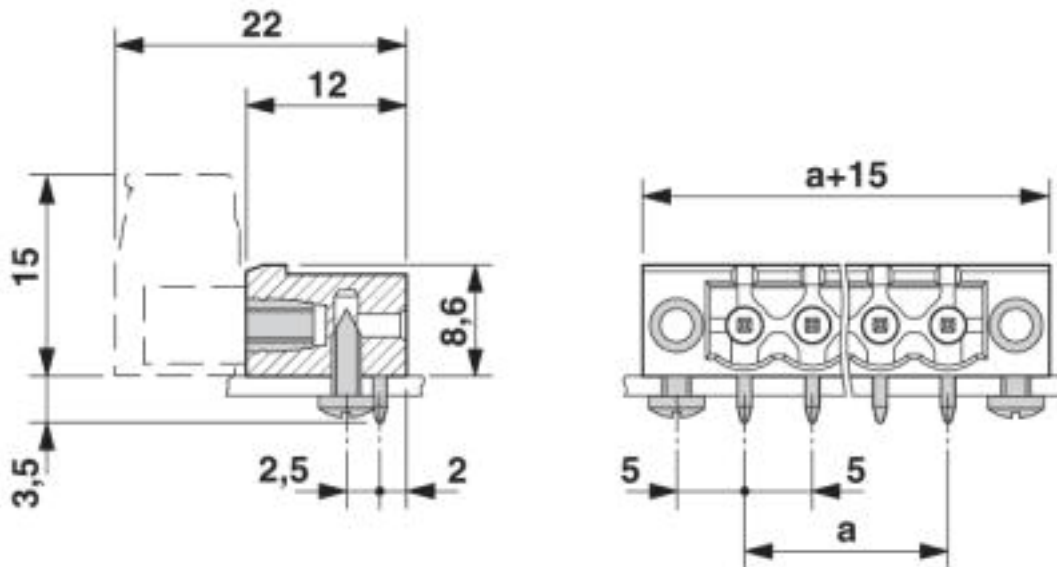
Diagram



Type: FK 2,5 HC/...-STF with MSTB 2,5 HC/...-GF

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Dimensional drawing



Approvals

Approvals

Approvals

IECEE CB Scheme / EAC / cULus Recognized / VDE Zeichengenehmigung

Ex Approvals

Approval details

IECEE CB Scheme	CB scheme	http://www.iecee.org/	DE1-60988-B1B2
Nominal voltage UN	250 V		
Nominal current IN	16 A		

EAC	EAC	B.01742
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Approvals

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19931011
	B	D	
Nominal voltage UN	300 V	150 V	
Nominal current IN	16 A	15 A	

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40050079
Nominal voltage UN		250 V	
Nominal current IN		16 A	

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