

Printed-circuit board connector - MCD 1,5/ 2-G1F-3,81 - 1842911

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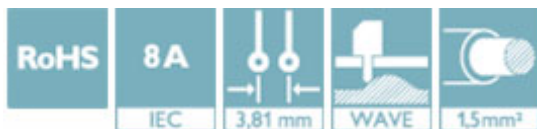


PCB headers, nominal current: 8 A, number of positions: 2, pitch: 3.81 mm, color: green, contact surface: Tin, mounting: Wave soldering, In combination with MCV plug components, both an MCVW and an MCVR plug must be used.

The figure shows a 10-pos. version with 20 contacts

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
- ✓ Conductor connection on several levels enables higher contact density



Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4017918112110

Technical data

Item properties

Brief article description	Feed-through header
Plug-in system	MINI COMBICON
Type of contact	Male connector
Range of articles	MCD 1,5/...-G1F
Pitch	3.81 mm
Number of positions	2
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	Threaded flange
Number of levels	2
Number of connections	4

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Technical data

Item properties

Number of potentials	4
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Electrical parameters

Rated current	8 A
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 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]	21.9 mm
Width [w]	18.01 mm
Height [h]	26.2 mm
Pitch	3.81 mm
Height (without solder pin)	22.7 mm
Solder pin [P]	3.5 mm
Pin spacing	12.70 mm
Pin dimensions	0.8 x 0.8 mm
Dimension a	3.81 mm

Dimensions for PCB design

Hole diameter	1.2 mm
Pin spacing	12.70 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50

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Packaging information

Denomination packing units	Pcs.
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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

Rated insulation voltage (III/3)	160 V
Rated insulation voltage (III/2)	160 V
Rated insulation voltage (II/2)	320 V
Rated surge voltage (III/3)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 kV
Minimum clearance - inhomogeneous field (III/3)	1.5 mm
Minimum clearance - inhomogeneous field (III/2)	1.5 mm
Minimum clearance - inhomogeneous field (II/2)	1.5 mm
Minimum creepage distance value (III/3)	2 mm
Minimum creepage distance value (III/2)	1.5 mm
Minimum creepage distance value (II/2)	1.6 mm

Mechanical tests (A)

Insertion strength per pos. approx.	8 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
Insertion/withdrawal cycles	25
Contact resistance R ₂ 1st level	1.3 mΩ
Contact resistance R ₂ 2nd level	2.2 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV
Insulation resistance, neighboring positions	> 2 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	2.95 kV
Power-frequency withstand voltage	1.39 kV

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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
	CSA
Flammability rating according to UL 94	V0

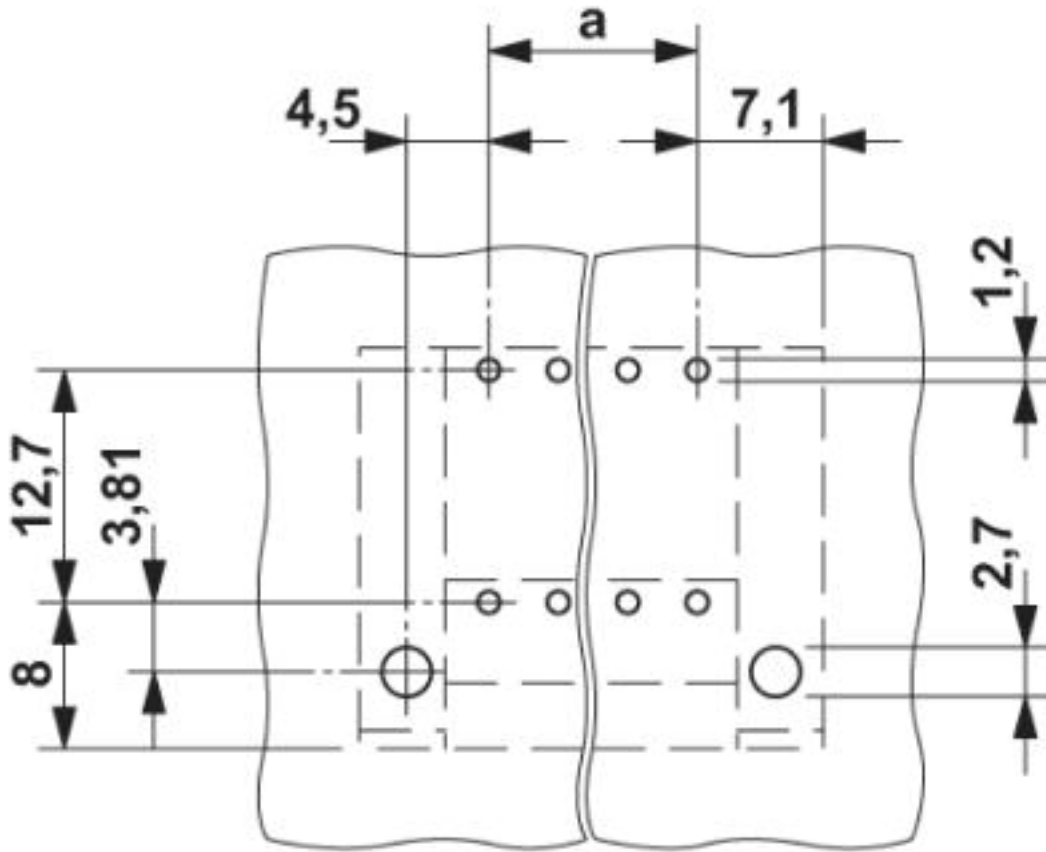
Environmental Product Compliance

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

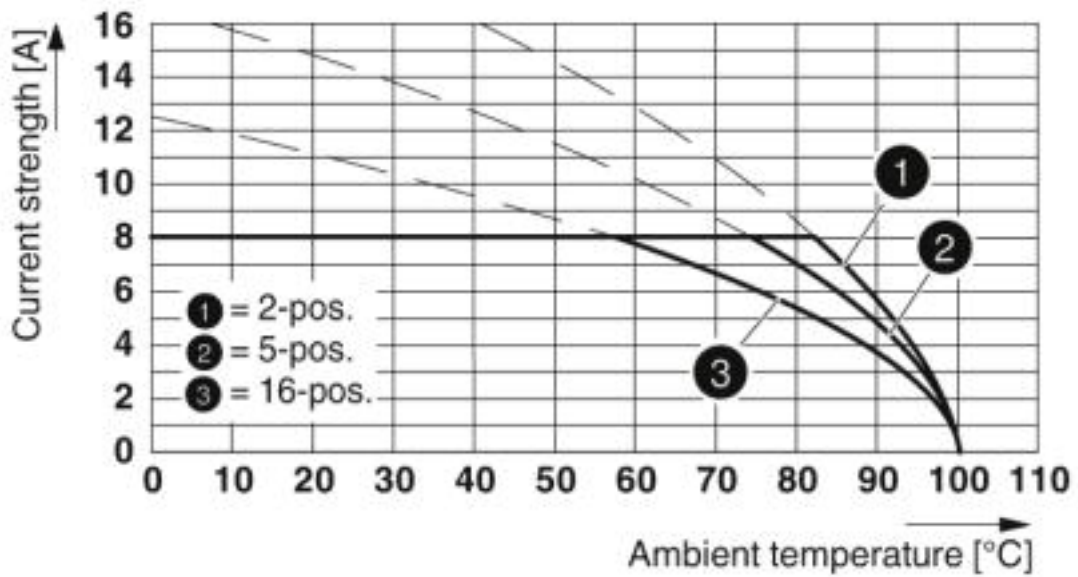
Drawings

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Drilling diagram

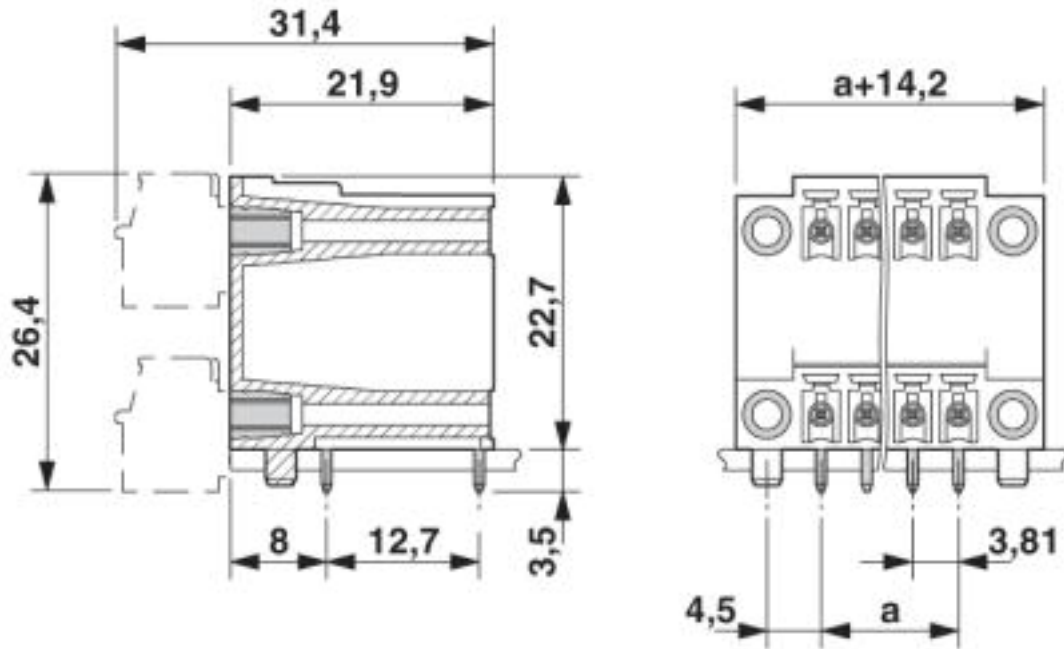


Diagram



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Dimensional drawing



Approvals

Approvals

Approvals

CSA / IECCE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

Ex Approvals

Approval details


CSA		http://www.csagroup.org/services-industries/product-listing/	13631
		B	D
Nominal voltage UN		300 V	300 V
Nominal current IN		8 A	8 A


IECEE CB Scheme		http://www.iecee.org/	DE1-60987-B1B2
Nominal voltage UN		160 V	


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Approvals

Nominal current IN	8 A
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VDE Gutachten mit Fertigungsüberwachung		http://www2.vde.com/de/Institut/Online-Service/ VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40011723
Nominal voltage UN	160 V		
Nominal current IN	8 A		

EAC		B.01742
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20110128
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	8 A	8 A	

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