PCB terminal block - PTSA 0,5/22-2,5-Z - 1990203

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The figure shows a 10-position version of the product

PCB terminal block, nominal current: 2 A, rated voltage (III/2): 250 V, Nominal cross section: 0.5 mm², pitch: 2.5 mm, number of positions: 22, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Zigzag pinning W, Solder pin [P]: 3.6 mm. Offset soldering legs, two-rowed

Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Angled connection enables multi-row arrangement on the PCB



Key Commercial Data

Packing unit	50 pc
GTIN	4 017918 973773
GTIN	4017918973773

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	PTSA 0,5
Pitch	2.5 mm
Number of positions	22
Connection method	Push-in spring connection
Mounting type	Wave soldering
Pin layout	Zigzag pinning W
Number of levels	1
Number of connections	22
Number of potentials	22

Electrical parameters

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Electrical parameters

Nom. voltage	250 V

Connection capacity

Connection method	Push-in spring connection
pluggable	no
Conductor cross section solid	0.14 mm² ... 0.5 mm²
Conductor cross section flexible	0.2 mm² ... 0.5 mm²
Conductor cross section AWG / kcmil	24 ... 20
Stripping length	9 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 soldering area (top layer)	Tin (4 - 8 µm Sn)

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

Caption	The figure shows the 5-pos. version
Length [l]	12 mm
Width [w]	56.5 mm
Height [h]	16.7 mm
Pitch	2.5 mm
Height (without solder pin)	13.1 mm
Solder pin [P]	3.6 mm
Pin spacing	2.5 mm
Pin dimensions	0.4 x 0.75 mm
Dimension a	52.5 mm

Dimensions for PCB design

Hole diameter	1 mm
Pin spacing	2.5 mm

Packaging information

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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 ... 55 °C
Ambient temperature (operation)	-40 °C ... 85 °C

Termination and connection method

Connection test	IEC 60998-2-2:1991-10
Test result	Test passed
Test for conductor damage and slackening	IEC 60998-2-2:1991-10
	Test passed

Pull-out test

Pull-out test	IEC 60998-2-2:1991-10
	Test passed
Conductor cross section / conductor type / tensile force	0.14 mm² / solid / > 7 N
	0.2 mm² / flexible / > 10 N
	0.5 mm² / solid / > 30 N
	0.5 mm² / flexible / > 30 N

Electrical tests

Rated current	2 A
Conductor cross section	0.5 mm²
Rated voltage (III/2)	250 V
Rated surge voltage (III/2)	4 kV

Air clearances and creepage distances

Clearances and creepage distances	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Rated insulation voltage (III/3)	160 V
Rated insulation voltage (III/2)	250 V
Rated insulation voltage (II/2)	400 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 mm
Minimum creepage distance value (III/2)	3 mm

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Air clearances and creepage distances

Minimum creepage distance value (II/2)	3 mm

Current carrying capacity / derating curves

Vibration test

Specification	IEC 60068-2-6:1995-03
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

Resistance to ageing, humidity and penetration of solids

Dry heat	168 h/100°C
Humid heat	48 h/30 °C/92 %

Standards and Regulations

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

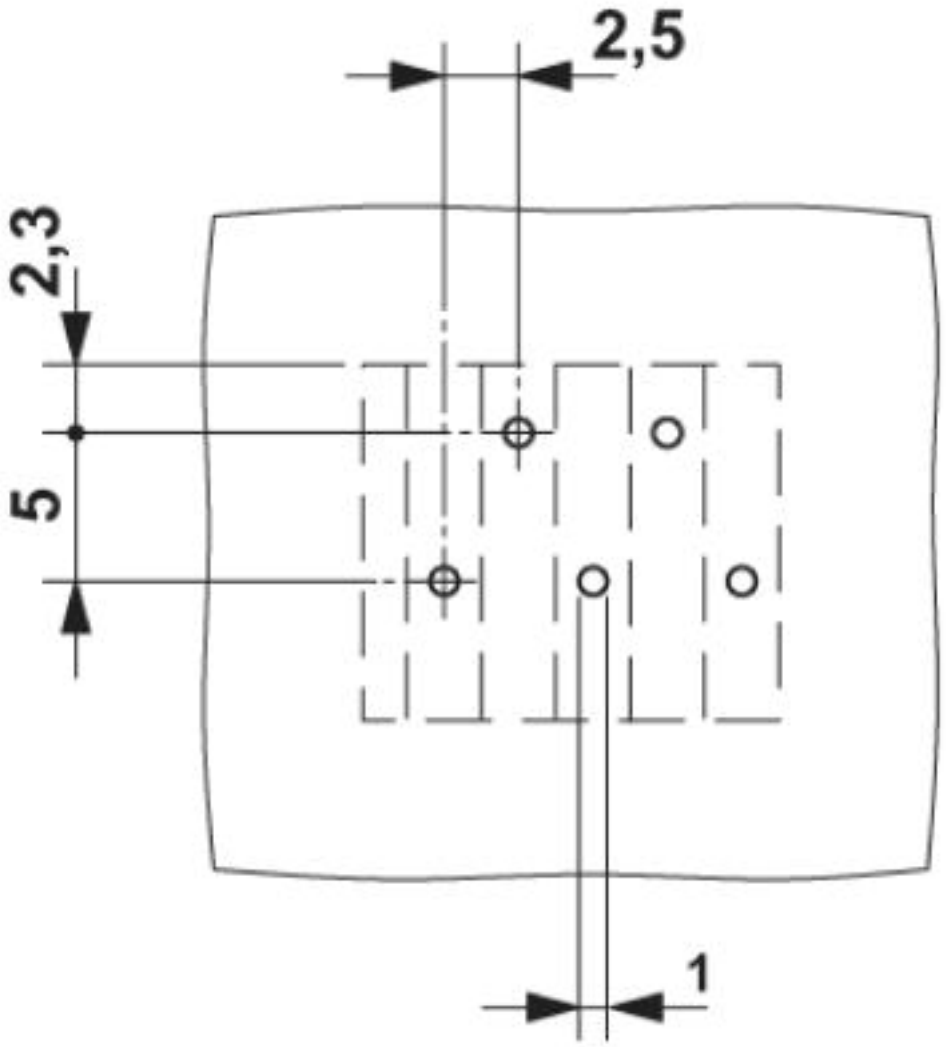
Environmental Product Compliance

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

Drawings

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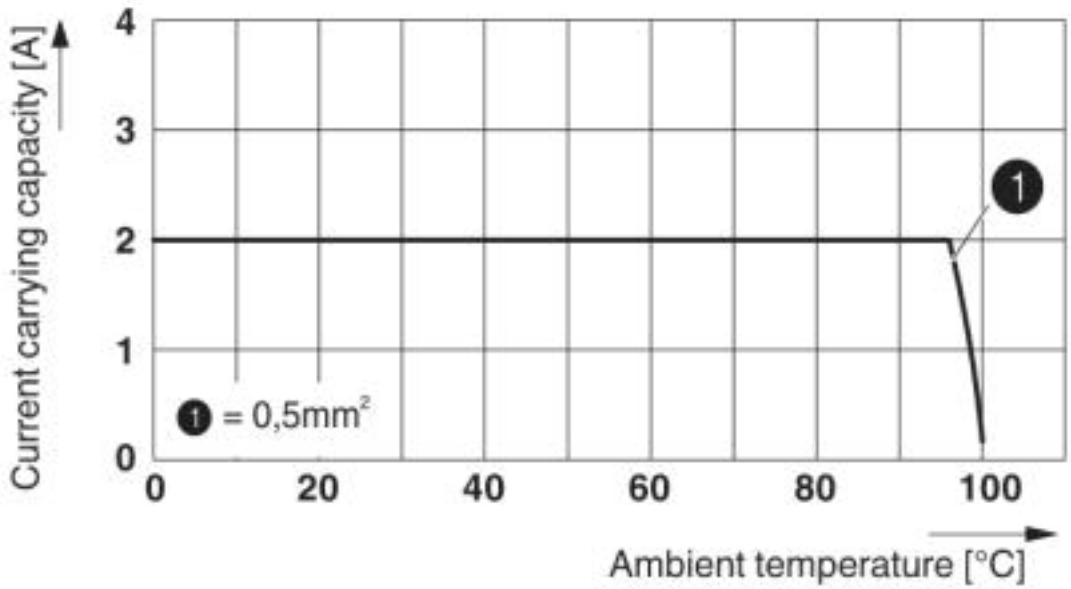
Drilling diagram



The figure shows the 5-pos. version – Zig-zag pinning starts at the right-hand position. Other pinning available on request.

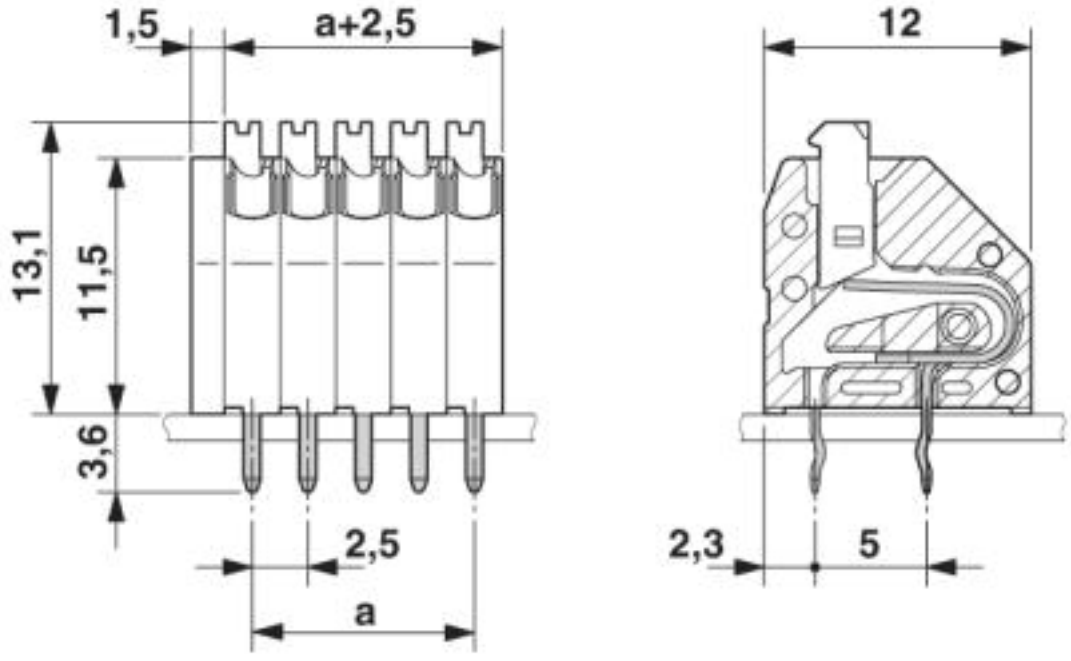
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Diagram



Derating diagram for 5 pins;reduction factor=1

Dimensional drawing



The figure shows the 5-pos. version

Approvals

Approvals

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Approvals

Approvals

CCA / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

Ex Approvals

Approval details

CCA	CCA/DE1 34204
Nominal current IN	2 A
mm²/AWG/kcmil	0.5

VDE Gutachten mit Fertigungsüberwachung	http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40013932

Nominal voltage UN	250 V
Nominal current IN	2 A
mm²/AWG/kcmil	0.5

EAC	B.01742

cULus Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20030527

	B	D
Nominal voltage UN	300 V	300 V
Nominal current IN	2 A	2 A
mm²/AWG/kcmil	26-20	26-20

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