

# PCB terminal block - PTSA 0,5/19-2,5-ZI - 1782899

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PCB terminal block, nominal current: 2 A, rated voltage (III/2): 250 V, nominal cross section: 0.5 mm<sup>2</sup>, Number of potentials: 19, Number of rows: 1, Number of positions per row: 19, product range: PTSA 0,5, pitch: 2.5 mm, 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, type of packaging: packed in cardboard

The figure shows a 10-position version of the product

## 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	
GTIN	4046356562652

## Technical data

### Item properties

Brief article description	PCB terminal block
Range of articles	PTSA 0,5
Pitch	2.5 mm
Number of positions	19
Mounting type	Wave soldering
Pin layout	Zigzag pinning W
Number of levels	1
Number of connections	19
Number of potentials	19

### Electrical parameters

Nominal current	2 A
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## Technical data

### Electrical parameters

Nom. voltage	250 V
Rated voltage (III/3)	160 V
Rated voltage (III/2)	250 V
Rated 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

### Connection capacity

Connection method	Push-in spring connection
pluggable	no
Conductor cross section solid	0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>
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

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

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [ l ]	12 mm
Width [ w ]	49 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

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## Technical data

### Dimensions for the product

Pin dimensions	0.4 x 0.75 mm
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### Dimensions for PCB design

Hole diameter	1 mm
Pin spacing	2.5 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 ... 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
Conductor cross section / conductor type / tensile force	0.14 mm <sup>2</sup> / solid / > 7 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	0.5 mm <sup>2</sup> / solid / > 30 N
	0.5 mm <sup>2</sup> / flexible / > 30 N

### Mechanical tests according to standard

Test specification	IEC 60998-2-2 (in parts)
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### Electrical tests

Rated current	2 A
Conductor cross section	0.5 mm <sup>2</sup>
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
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

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## Technical data

### Air clearances and creepage distances

Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3 mm

### Temperature-rise test

Specification	IEC 60998-2-1:1990-04
Requirement temperature-rise test	Increase in temperature $\leq 45$ K

### Current carrying capacity / derating curves

Caption	Derating diagram for 5 pins;reduction factor=1
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### Vibration test

Specification	IEC 60068-2-6:1995-03
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

### Insulation resistance

Specification	IEC 60998-2-2:1991-10
Result	Test passed
Insulation resistance, neighboring positions	$10^9 \Omega$

### Glow-wire test

Specification	IEC 60998-2-2:1991-10
Temperature	850 °C
Time of exposure	5 s

### Mechanical strength/tumbling barrel test

Specification	IEC 60998-1:1990-04
Number of drop cycles	50

### Standards and Regulations

Connection in acc. with standard	EN-VDE
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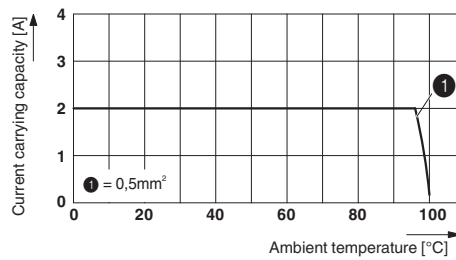
### Environmental Product Compliance

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

## Drawings

# PCB terminal block - PTSA 0,5/19-2,5-ZI - 1782899

Diagram



Derating diagram for 5 pins;reduction factor=1

## Classifications

### eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 11.0	27460101
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 9.0	27440401

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

### UNSPSC

UNSPSC 6.01	30211801
UNSPSC 7.0901	39121432
UNSPSC 11	34131203
UNSPSC 12.01	39121432
UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

## Approvals

Approvals

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### Approvals

Approvals


EAC

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Ex Approvals

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### Approval details

EAC		B.01687
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