PCB terminal block - PTSA 0,5/ 4-2,5-F - 1989764

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

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, number of potentials: 4, number of rows: 1, number of positions per row: 4, 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: Linear pinning, Solder pin [P]: 3.6 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard. Soldering legs in front area, one-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	1 pc
Minimum order quantity	250 pc
GTIN	4 017918 973360
GTIN	4017918973360
Weight per Piece (excluding packing)	1.730 g
Custom tariff number	85369010
Country of origin	Poland

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	PTSA 0,5
Pitch	2.5 mm
Number of positions	4

PCB terminal block - PTSA 0,5/ 4-2,5-F - 1989764

Technical data

Item properties

Mounting type	Wave soldering
Pin layout	Linear pinning
Number of rows	1
Number of connections	4
Number of potentials	4

Electrical parameters

Nominal current	2 A
Nom. voltage	250 V
Rated voltage (III/3)	63 V
Rated voltage (III/2)	250 V
Rated 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

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

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

PCB terminal block - PTSA 0,5/ 4-2,5-F - 1989764

Technical data

Material data - housing

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]	11.5 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

Dimensions for PCB design

Hole diameter	1 mm
Pin spacing	2.5 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	250
Denomination packing units	Pcs.

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
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 mm² / solid / > 7 N
	0.2 mm² / flexible / > 10 N
	0.5 mm² / solid / > 30 N
	0.5 mm² / flexible / > 30 N

PCB terminal block - PTSA 0,5/ 4-2,5-F - 1989764

Technical data

Mechanical tests according to standard

Test specification	IEC 60998-2-2 (in parts)

Electrical tests

Rated current	2 A
Conductor cross section	0.5 mm²
Rated voltage (III/2)	250 V
Rated surge voltage (III/2)	2.5 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)	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)	1.6 mm
Minimum creepage distance value (III/2)	1.5 mm
Minimum creepage distance value (II/2)	1.6 mm

Temperature-rise test

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

Current carrying capacity / derating curves

Caption	Derating diagram for 5 pins;reduction factor=1

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	5g (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 Ω

Glow-wire test

Specification	IEC 60998-2-2:1991-10
Temperature	850 °C

PCB terminal block - PTSA 0,5/ 4-2,5-F - 1989764

Technical data

Glow-wire test

Time of exposure	5 s

Mechanical strength/tumbling barrel test

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

Standards and Regulations

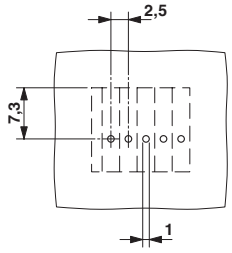
Connection in acc. with standard	EN-VDE

Environmental Product Compliance

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

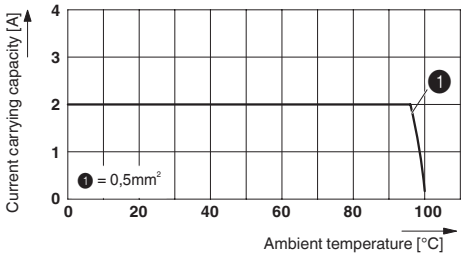
Drawings

Drilling diagram



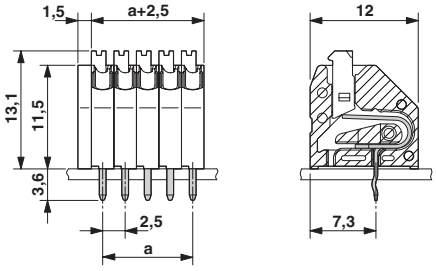
The figure shows the 5-pos. version

Diagram



Derating diagram for 5 pins;reduction factor=1

Dimensional drawing



The figure shows the 5-pos. version

PCB terminal block - PTSA 0,5/ 4-2,5-F - 1989764

Classifications

eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 11.0	27460101
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
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

Approvals

VDE Gutachten mit Fertigungsüberwachung / CCA / EAC / cULus Recognized

Ex Approvals

PCB terminal block - PTSA 0,5/ 4-2,5-F - 1989764

Approvals

Approval details

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

Nominal voltage UN	130 V
Nominal current IN	2 A
mm²/AWG/kcmil	0.5

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

EAC		B.01687

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

	B
Nominal voltage UN	150 V
Nominal current IN	2 A
mm²/AWG/kcmil	26-20

Accessories

Accessories

Screwdriver tools

Screwdriver - SZF 0-0,4X2,5 - 1204504

Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip