

PTSM 0,5/ 8-2,5-H THR WH R32 - PCB terminal block



1814553

<https://www.phoenixcontact.com/us/products/1814553>

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Printed circuit board terminal, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of potentials: 8, number of rows: 1, number of positions per row: 8, product range: PTSM 0,5/..-H-THR WH, pitch: 2.5 mm, connection method: Push-in spring connection, mounting: THR soldering / wave soldering, conductor/PCB connection direction: 0 °, color: signal white, Pin layout: Linear pinning, Solder pin [P]: 2.1 mm, number of solder pins per potential: 2, type of packaging: 32 mm wide tape

Your advantages

- White design: Stable color when welding and during use
- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- High current carrying capacity of 6 A in very compact dimensions
- Designed for integration into the SMT soldering process

Commercial data

Item number	1814553
Packing unit	530 pc
Minimum order quantity	530 pc
Sales key	AA11
Product key	AAKCAB
GTIN	4046356760300
Weight per piece (including packing)	2.4 g
Weight per piece (excluding packing)	2.4 g
Customs tariff number	85369010
Country of origin	IN

Technical data

Product properties

Product type	Printed circuit board terminal
Product family	PTSM 0,5/...-H-THR WH
Product line	COMBICON Terminals XS
Type	Component suitable for through hole reflow
Number of positions	8
Pitch	2.5 mm
Number of connections	8
Number of rows	1
Number of potentials	8
Pin layout	Linear pinning
Solder pins per potential	2

Electrical properties

Properties

Nominal current I_N	6 A
Nominal voltage U_N	160 V
Rated voltage (III/3)	80 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV

Connection data

Connection technology

Type	Component suitable for through hole reflow
Nominal cross section	0.5 mm ²

Conductor connection

Connection method	Push-in spring connection
Conductor cross-section rigid	0.14 mm ² ... 0.5 mm ²
Conductor cross-section flexible	0.2 mm ² ... 0.5 mm ² (up to 0.75 mm ² supported, with a stripping length of 7.5 mm and a rated insulation voltage of 32 V at III/2)
Conductor cross-section AWG	26 ... 20
Conductor cross-section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 0.5 mm ²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 0.34 mm ² (possible from 0.14 mm ² , when using ferrule AI 0.14- 6 GY in combination with crimping pliers CRIMPFOX 10T-F)
Cylindrical gauge a x b / diameter	- / 1.2 mm
Stripping length	6 mm

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Mounting

Mounting type	THR soldering / wave soldering
Pin layout	Linear pinning

Processing notes

Process	Reflow/wave soldering
Moisture Sensitive Level	MSL 1
Classification temperature T _c	260 °C
Solder cycles in the reflow	3

Material specifications

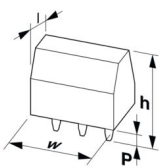
Material data - contact

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

Color (Housing)	signal white (9003)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions

Dimensional drawing	
Pitch	2.5 mm
Width [w]	20.5 mm
Height [h]	7.1 mm
Length [l]	10 mm
Installed height	5 mm
Solder pin length [P]	2.1 mm
Pin dimensions	0.3 x 0.8 mm

PCB design

Pin spacing	2.5 mm
Hole diameter	1.2 mm

Electrical tests

Air clearances and creepage distances |

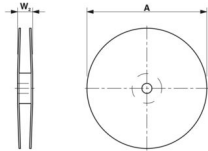
Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	80 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	2 mm
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	1.5 mm
Rated insulation voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	1.6 mm

Environmental and real-life conditions

Ambient conditions

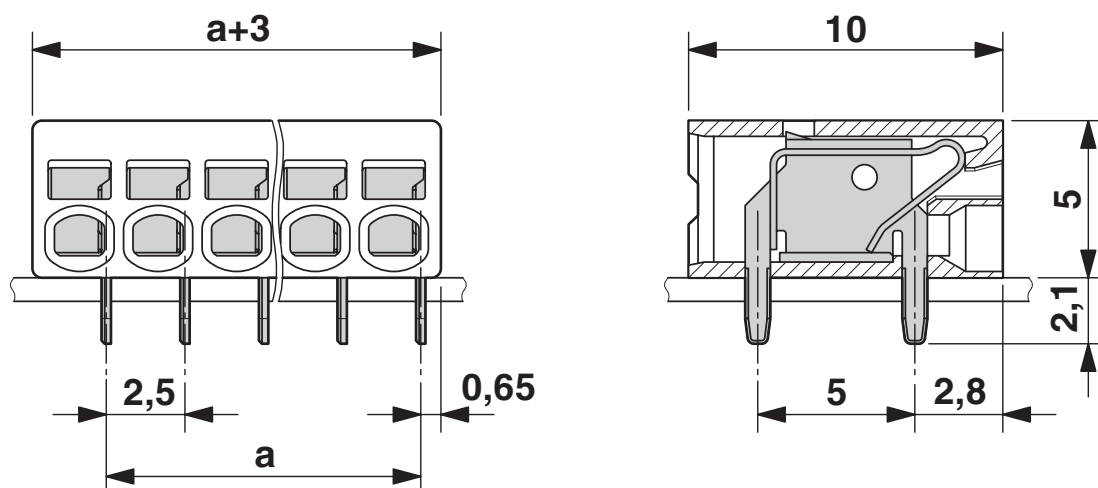
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

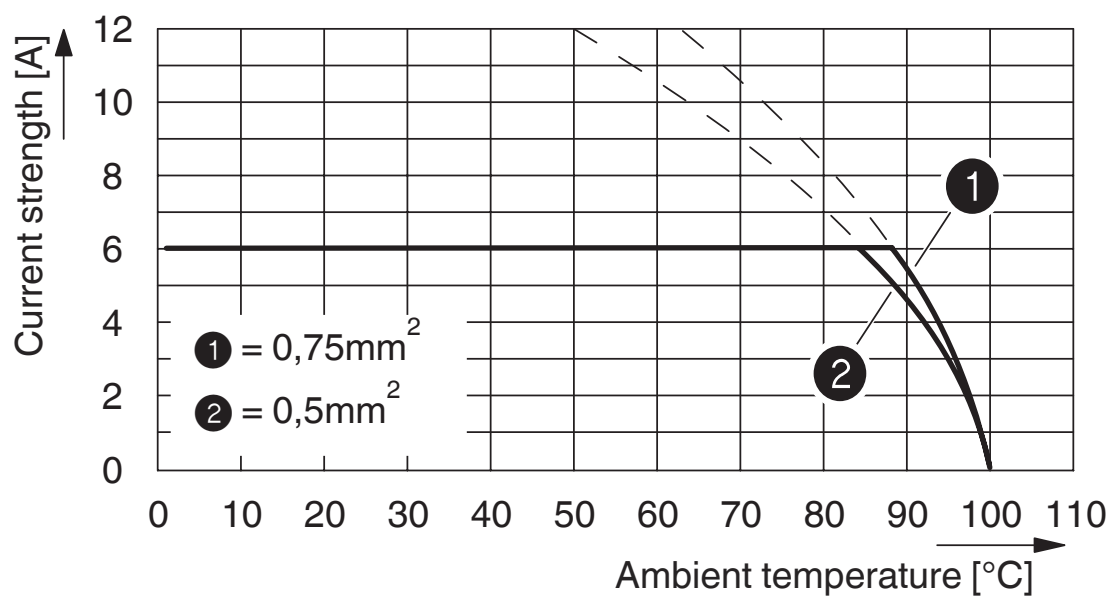
Dimensional drawing	
Type of packaging	32 mm wide tape
[W] tape width	32 mm
[W2] coil overall dimension	≤ 38.4 mm
[A] coil diameter	≤ 330 mm
Outer packaging type	Transparent-Bag

Drawings

Dimensional drawing



Diagram



Type: PTSM 0,5/...-2,5-H- THR R...

Tested in accordance with DIN EN 60512-5-2:2003-01

Reduction factor = 1

No. of positions: 5

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1814553>

 UL Recognized Approval ID: E118976-20130619				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	150 V	5 A	26 - 18	-

 cULus Recognized Approval ID: E60425-20030527				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	150 V	5 A	26 - 20	-

 VDE Zeichengenehmigung Approval ID: 40048725				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	160 V	6 A	-	0.14 - 0.5

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Classifications

ECLASS

ECLASS-13.0	27460101
ECLASS-15.0	27460101

ETIM

ETIM 9.0	EC002643
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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