

1814537

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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: 6, number of rows: 1, number of positions per row: 6, 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	1814537
Packing unit	530 pc
Minimum order quantity	530 pc
Note	Made to order (non-returnable)
Sales key	AA11
Product key	AAKCAB
GTIN	4046356760287
Weight per piece (including packing)	2.17 g
Weight per piece (excluding packing)	2.17 g
Customs tariff number	85369010
Country of origin	IN



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## Technical data

## Product properties

Product type	Printed circuit board terminal
Product family	PTSM 0,5/H-THR WH
Product line	COMBICON Terminals XS
Туре	Component suitable for through hole reflow
Number of positions	6
Pitch	2.5 mm
Number of connections	6
Number of rows	1
Number of potentials	6
Pin layout	Linear pinning
Solder pins per potential	2

### Electrical properties

#### Properties

Nominal current I <sub>N</sub>	6 A
Nominal voltage U <sub>N</sub>	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

Туре	Component suitable for through hole reflow
Nominal cross section	0.5 mm²

#### Conductor connection

Conductor connection	
Connection method	Push-in spring connection
Conductor cross-section rigid	0.14 mm² 0.5 mm²
Conductor cross-section flexible	$0.2~\text{mm}^2\ldots0.5~\text{mm}^2$ (up to $0.75~\text{mm}^2$ 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 mm² 0.5 mm²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm² 0.34 mm² (possible from 0.14 mm², 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 <sub>c</sub>	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	1
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

#### **Dimensions**

Dimensional drawing	h p
Pitch	2.5 mm
Width [w]	15.5 mm
Height [h]	7.1 mm
Length [I]	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



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#### Electrical tests

#### Air clearances and creepage distances |

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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	W <sub>1</sub>
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

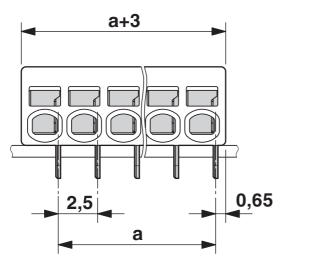


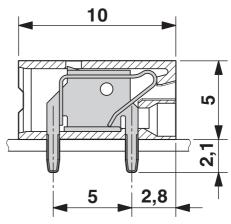
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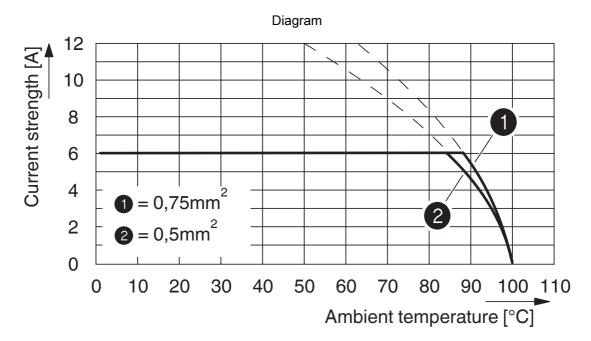
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## **Drawings**

### Dimensional drawing







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/1814537

71	UL Recognized Approval ID: E118976-20130619			
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
В				
	150 V	5 A	26 - 18	-

c <b>922</b> us	cULus Recognized Approval ID: E60425-20030527				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
В					
		150 V	5 A	26 - 20	-

	VDE Zeichengenehmigung Approval ID: 40048725				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
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	
UNSPSC			
	UNSPSC 21.0	39121400	



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## Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions		
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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