

# PCB terminal block - SPTA-THR 1,5/10-3,81 R56 - 1071187

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>)

PCB terminal block, nominal current: 13.5 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm<sup>2</sup>, pitch: 3.81 mm, number of positions: 10, connection method: Push-in spring connection, mounting: THR soldering, conductor/PCB connection direction: 45 °, color: black, Solder pin [P]: 2.6 mm



The figure shows the 10-position version

## Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Intuitive use through colour coded actuation lever
- Angled connection enables multi-row arrangement on the PCB
- Designed for integration into the SMT soldering process



## Key Commercial Data

Packing unit	145 pc
Minimum order quantity	145 pc
GTIN	
GTIN	4055626771106

## Technical data

### Item properties

Brief article description	PCB terminal block
Range of articles	SPTA 1,5/..-THR
Pitch	3.81 mm
Number of positions	10
Connection method	Push-in spring connection
Mounting type	THR soldering
Number of levels	1

### Electrical parameters

Nominal current	13.5 A
-----------------	--------

# PCB terminal block - SPTA-THR 1,5/10-3,81 R56 - 1071187

## Technical data

### Electrical parameters

Nom. voltage	160 V
Rated voltage	160 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	250 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
Conductor cross section solid	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Conductor connection with open terminal point)
	0.34 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Push-in connection)
Conductor cross section flexible	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
Stripping length	10 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 (2 - 4 µm Sn)
Metal surface soldering area (top layer)	Tin (2 - 4 µm Sn)

### Material data - housing

Housing color	black (9005)
Insulating material	LCP GF
Insulating material group	III
CTI according to IEC 60112	175
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

Length [ l ]	11.6 mm
Width [ w ]	38.89 mm
Height [ h ]	15.07 mm
Pitch	3.81 mm
Height (without solder pin)	12.47 mm
Solder pin [P]	2.6 mm

# PCB terminal block - SPTA-THR 1,5/10-3,81 R56 - 1071187

## Technical data

### Dimensions for PCB design

Hole diameter	1.1 mm
---------------	--------

### Packaging information

Type of packaging	56 mm wide tape
Pieces per package	145
Denomination packing units	Pcs.
[W] tape width	56 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	60.4 mm
Outer packaging type	Transparent-Bag
ESD level	(D) electrostatically conductive
Specification	DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07

### General product information

Type of note	Assembly instruction:
Note	This item is not suitable for PCB cleaning with liquids.

### Processing notes

Process	Reflow/wave soldering
Specification	Following IPC/JEDEC J-STD-020E:2014-12
	Following IEC 61760-1:2006-04
	Following IEC 60068-2-58:2015-03
Moisture Sensitive Level	MSL 1
Classification temperature T <sub>c</sub>	260 °C
Solder cycles in the reflow	3

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 105 °C (Depending on the current carrying capacity/derating curve)

### Electrical tests

Rated current	13.5 A
Conductor cross section	1.5 mm <sup>2</sup>
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

### Air clearances and creepage distances

Clearances and creepage distances	IEC 60947-7-4:2013-08
Specification	IEC 60947-7-4:2013-08
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

# PCB terminal block - SPTA-THR 1,5/10-3,81 R56 - 1071187

## Technical data

### Air clearances and creepage distances

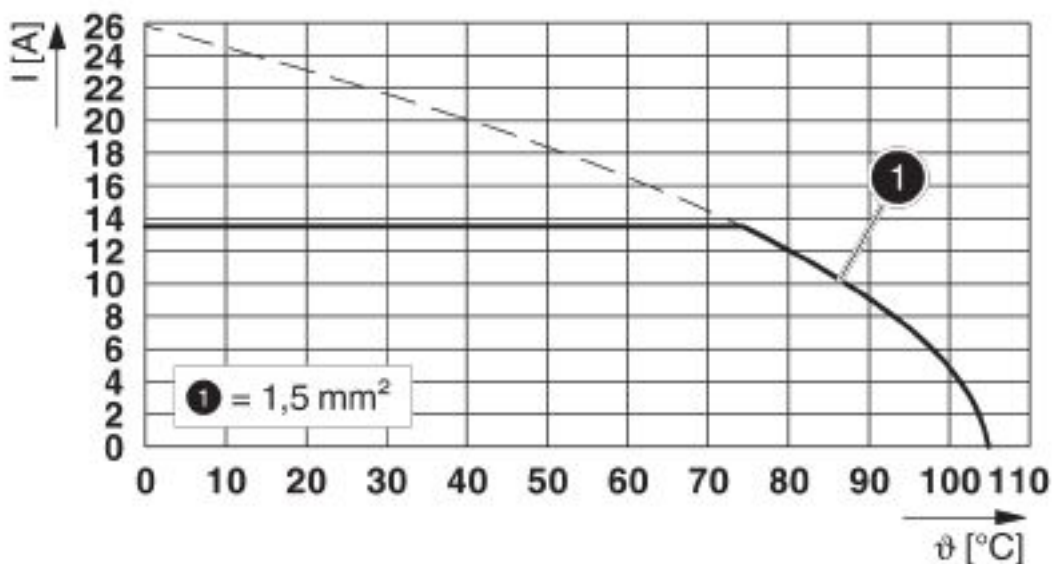
Minimum creepage distance value (III/3)	2.5 mm
Minimum creepage distance value (III/2)	1.6 mm
Minimum creepage distance value (II/2)	2.5 mm

### Current carrying capacity / derating curves

Specification	IEC 60947-7-4:2019-01
Number of positions	4
Reduction factor	1
Note	Representation based on IEC 60512-5-2:2002-02

## Drawings

Diagram



## Classifications

### eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 8.0	27440401
eCl@ss 9.0	27440401

### ETIM

ETIM 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

# PCB terminal block - SPTA-THR 1,5/10-3,81 R56 - 1071187

## Approvals

### Approvals

#### Approvals

cULus Recognized / EAC / IECEE CB Scheme / VDE Zeichengenehmigung

#### Ex Approvals

### Approval details

cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-20061129
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm <sup>2</sup> /AWG/kcmil	24-16	24-16	

EAC		B.01687
-----	--	---------

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-63833
Nominal voltage UN	160 V		
Nominal current IN	13.5 A		
mm <sup>2</sup> /AWG/kcmil	0.2-1.5		

VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40046113
Nominal voltage UN	160 V		
Nominal current IN	13.5 A		
mm <sup>2</sup> /AWG/kcmil	0.2-1.5		

## Accessories

### Accessories

Crimping tool

## PCB terminal block - SPTA-THR 1,5/10-3,81 R56 - 1071187

### Accessories

Crimping pliers - CRIMPFOX 6 - 1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>, lateral entry, trapezoidal crimp

---

### Screwdriver tools

Screwdriver - SZS 0,4X2,5 VDE - 1205037



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

---

### Test plug terminal block

Test plugs - MPS-MT 1-S - 1944372



Test plug, consisting of 1.0 mm Ø test pin and 2.0 mm Ø socket

---

Accessories - MPS-MT 1-S4-B RD - 1982800



Accessories, number of positions: 1, pitch: 0 mm

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[1071187](#)