

# PCB terminal block - SPT-SMD 1,5/ 2-V-5,0 R24 - 1824307

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PCB terminal block, nominal current: 13.5 A, nom. voltage: 320 V, pitch: 5 mm, number of positions: 2, connection method: Push-in spring connection, mounting: SMD soldering, conductor/PCB connection direction: 90 °, color: black. Sample values available under SAMPLE SPT...



The figure shows the 10-position version

## Why buy this product

- 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
- Designed for integration into the SMT soldering process
- Operation and conductor connection from one direction enable integration into front of device
- Quick and convenient testing using integrated test option
- Two soldering spots per position reduce the mechanical strain on the soldering spots



## Key Commercial Data

Packing unit	200 STK
Minimum order quantity	200 STK
GTIN	
GTIN	4046356816403

## Technical data

### Item properties

Brief article description	PCB terminal block
Range of articles	SPT 1,5/..-V-SMD
Pitch	5 mm
Number of positions	2
Connection method	Push-in spring connection
Mounting type	SMD soldering
Pin layout	Linear pad geometry

# PCB terminal block - SPT-SMD 1,5/ 2-V-5,0 R24 - 1824307

## Technical data

### Item properties

Number of levels	1
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### Electrical parameters

Rated current	13.5 A
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV

### Connection capacity

Conductor cross section solid	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.2 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>

### 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	black (9005)
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

### Dimensions for the product

Length [ l ]	7.7 mm
Width [ w ]	9 mm
Height [ h ]	13.6 mm
Pitch	5 mm
Height (without solder pin)	13.6 mm
Pin dimensions	0.7 x 0.3 mm
Dimension a	5 mm
Pin spacing	7 mm

### Dimensions for PCB design

Hole diameter	1.1 mm
Pin spacing	7 mm

### Packaging information

Type of packaging	24 mm wide tape
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## Technical data

### Packaging information

Pieces per package	200
Denomination packing units	Pcs.
[W] tape width	24 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	30.4 mm
Outer packaging type	Transparent-Bag

### Processing notes

Process	Reflow soldering
Specification	Following IPC/JEDEC J-STD-020D.1:2008-03
	Following IEC 60068-2-58:2005-02
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

### Termination and connection method

Connection test	IEC 60998-2-2:2002-12
Test result	Test passed

### Pull-out test

Pull-out test	IEC 60998-2-2:2002-12
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm <sup>2</sup> solid 10 N > 0.2 mm <sup>2</sup> / solid / > 10 N
	0.2 mm <sup>2</sup> flexible 10 N > 0.2 mm <sup>2</sup> / flexible / > 10 N
	1.5 mm <sup>2</sup> solid 40 N > 1.5 mm <sup>2</sup> / solid / > 40 N
	1.5 mm <sup>2</sup> flexible 40 N > 1.5 mm <sup>2</sup> / flexible / > 40 N

### Mechanical tests according to standard

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

Rated current	13.5 A
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV

### Air clearances and creepage distances

Insulating material group	IIIa
Comparative tracking index (IEC 60112:2003-01)	CTI 175
Voltage	250 V
Rated insulation voltage (III/3)	250 V

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## Technical data

### Air clearances and creepage distances

Rated insulation voltage (III/2)	320 V
Rated insulation voltage (II/2)	500 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV
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)	4 mm
Minimum creepage distance value (III/2)	3.2 mm
Minimum creepage distance value (II/2)	5 mm

### Current carrying capacity / derating curves

Specification	IEC 60998-2-2 (in parts)
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### Vibration test

Resistance to ageing, to humidity conditions, to ingress of solid objects and to harmful ingress of water	Test passed IEC 60998-1:2002-12 168 h/100°C 48 h/30 °C/92 %
Test result	Test passed
Test specification	IEC 60998-1:2002-12
Dry heat	168 h/100°C
Humid heat	48 h/30 °C/92 %

### Resistance to ageing, humidity and penetration of solids

Test result	Test passed
Test specification	IEC 60998-1:2002-12
Dry heat	168 h/100°C
Humid heat	48 h/30 °C/92 %

### Standards and Regulations

Connection in acc. with standard	EN-VDE
Flammability rating according to UL 94	V0

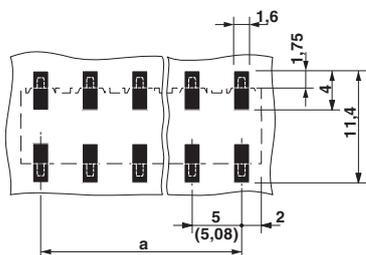
### Environmental Product Compliance

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

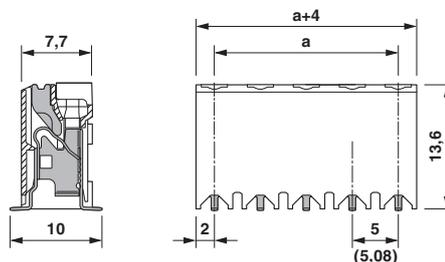
## Drawings

# PCB terminal block - SPT-SMD 1,5/ 2-V-5,0 R24 - 1824307

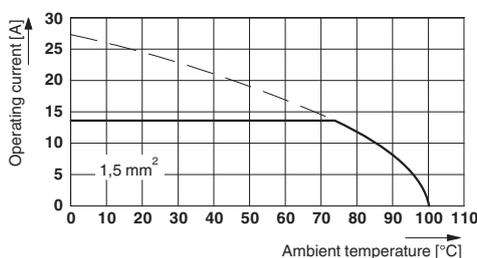
Drilling diagram



Dimensional drawing



Diagram



Type: SPT-SMD 1,5/...-V-5,0(5,08) R..  
 Tested in accordance with DIN EN 60512-5-2:2003-01  
 Reduction factor = 1  
 Number of positions: 5

## Approvals

### Approvals

#### Approvals

EAC / VDE approval of drawings / cULus Recognized / IECCEB Scheme

#### Ex Approvals

### Approval details

EAC		B.01742
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VDE approval of drawings		<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
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Nominal voltage UN	320 V
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## PCB terminal block - SPT-SMD 1,5/ 2-V-5,0 R24 - 1824307

### Approvals

Nominal current I <sub>N</sub>	13.5 A
mm <sup>2</sup> /AWG/kcmil	0.2-1.5

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		
	D	B
Nominal voltage U <sub>N</sub>	300 V	300 V
Nominal current I <sub>N</sub>	10 A	10 A
mm <sup>2</sup> /AWG/kcmil	24-16	24-16

IECEx CB Scheme  <a href="http://www.iecee.org/">http://www.iecee.org/</a> DE1-60621	
Nominal voltage U <sub>N</sub>	320 V
Nominal current I <sub>N</sub>	13.5 A
mm <sup>2</sup> /AWG/kcmil	0.2-1.5

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