

## PCB terminal block - SPT-SMD 1,5/ 2-H-3,5 R24 - 1824527

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PCB terminal block, nominal current: 13.5 A, nom. voltage: 160 V, pitch: 3.5 mm, number of positions: 2, connection method: Push-in spring connection, mounting: SMD soldering, conductor/PCB connection direction: 0 °, 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
- Quick and convenient testing using integrated test option
- Operation and conductor connection from one direction enable integration into front of device
- Anti-rotation pins reduce the mechanical strain on the soldering spots



### Key Commercial Data

Packing unit	300 pc
Minimum order quantity	300 pc
GTIN	
GTIN	4046356816625

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	SPT 1,5/..-H-SMD
Pitch	3.5 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-H-3,5 R24 - 1824527

## Technical data

### Item properties

Number of levels	1
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### Electrical parameters

Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

### 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

### Material data - housing

Housing color	black
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 ]	13.6 mm
Width [ w ]	7.5 mm
Height [ h ]	9.7 mm
Pitch	3.5 mm
Height (without solder pin)	7.7 mm
Solder pin [P]	2 mm
Pin dimensions	0.7 x 0.3 mm
Dimension a	3.5 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
Pieces per package	300
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
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## Technical data

### Processing notes

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> / flexible / > 10 N
	1.5 mm <sup>2</sup> / solid / > 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 insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

### Air clearances and creepage distances

Insulating material group	IIIa
Comparative tracking index (IEC 60112:2003-01)	CTI 175
Voltage	160 V
Rated insulation voltage (III/2)	160 V
Rated insulation 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
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)	2.5 mm
Minimum creepage distance value (III/2)	1.6 mm

# PCB terminal block - SPT-SMD 1,5/ 2-H-3,5 R24 - 1824527

## Technical data

### Air clearances and creepage distances

Minimum creepage distance value (II/2)	3.2 mm
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### 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

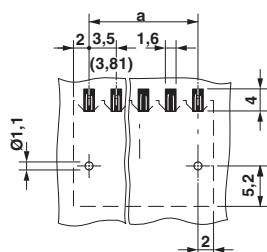
Connection in acc. with standard	EN-VDE
Flammability rating according to UL 94	V0

### Environmental Product Compliance

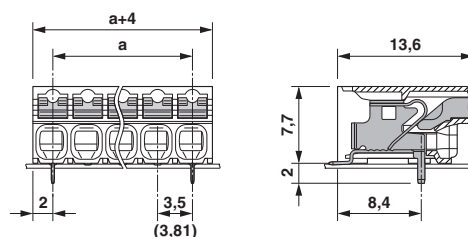
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Drilling diagram

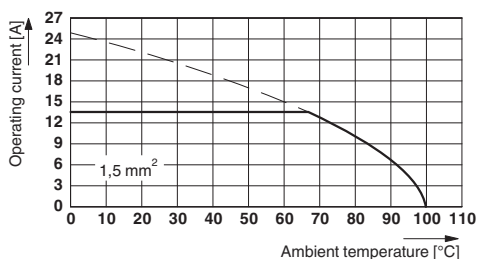


Dimensional drawing



# PCB terminal block - SPT-SMD 1,5/ 2-H-3,5 R24 - 1824527

Diagram



Type: SPT-SMD 1,5/...-H-3,5(3,81) 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 / IECEE CB 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
Nominal voltage UN	160 V		
Nominal current IN	13.5 A		
mm²/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 UN	300 V	300 V	
Nominal current IN	10 A	10 A	

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### Approvals

	D	B
mm <sup>2</sup> /AWG/kcmil	24-16	24-16

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-60621
Nominal voltage UN	160 V		
Nominal current IN	13.5 A		
mm <sup>2</sup> /AWG/kcmil	0.2-1.5		

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