

## Sample set - SAMPLE SPT-SMD 1,5/ 9-H-3,81 - 1838746

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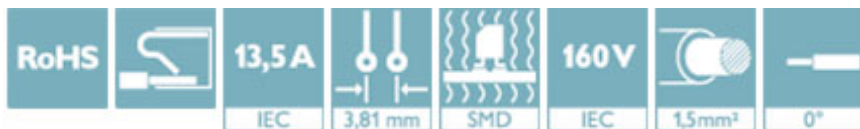
PCB terminal block, nominal current: 13.5 A, nom. voltage: 160 V, pitch: 3.81 mm, number of positions: 9, connection method: Push-in spring connection, mounting: SMD soldering, conductor/PCB connection direction: 0 °, color: black



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
- 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	1
GTIN	
GTIN	4055626040738
Custom tariff number	85369010

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	SPT 1,5/..-H-SMD
Pitch	3.81 mm
Number of positions	9
Connection method	Push-in spring connection
Mounting type	SMD soldering
Pin layout	Linear pad geometry

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### Technical data

#### Item properties

Number of levels	1
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#### Electrical parameters

Rated current	13.5 A
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 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>
Stripping length	8 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 (4 - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 µm Sn)

#### Material data - housing

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 ]	34.48 mm
Height [ h ]	7.7 mm
Pitch	3.81 mm
Height (without solder pin)	7.7 mm
Pin spacing	7 mm
Dimension a	30.48 mm

#### Dimensions for PCB design

Hole diameter	1.1 mm
Pin spacing	7 mm

#### Packaging information

Type of packaging	packed in cardboard
Pieces per package	5

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## Technical data

### Packaging information

Denomination packing units	Pcs.
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### 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 current	13.5 A
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

### Air clearances and creepage distances

Insulating material group	IIIa
Voltage	160 V
Rated insulation voltage (III/3)	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

### 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

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## Technical data

### Vibration test

Humid heat	48 h/30 °C/92 %
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### 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

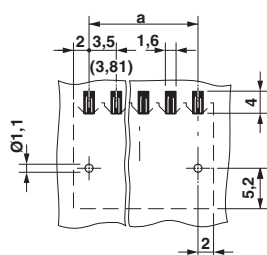
Connection in acc. with standard	EN-VDE
Flammability rating according to UL 94	V0

### Environmental Product Compliance

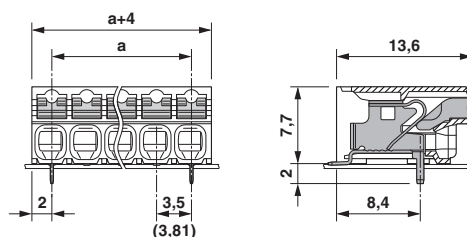
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

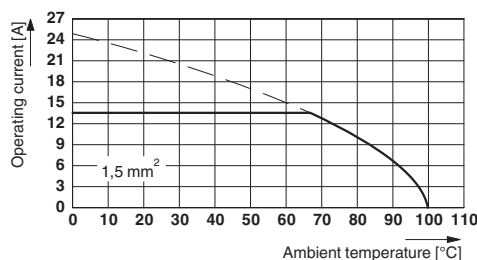
Drilling diagram



Dimensional drawing



Diagram



## Classifications

### eCl@ss

eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 8.0	27440401

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## Classifications

### eCl@ss

eCl@ss 9.0	27440401
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### ETIM

ETIM 5.0	EC002643
ETIM 6.0	EC002643

### UNSPSC

UNSPSC 13.2	39121432
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## Approvals

### Approvals

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#### Approvals

EAC

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#### Ex Approvals

### Approval details

EAC		B.01742
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## Accessories

### Accessories

#### Connector

Ferrule - A 0,5 - 8 - 3202481



Ferrule, length: 8 mm, color: silver

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### Accessories

Ferrule - A 0,75- 8 - 3202504



Ferrule, length: 8 mm, color: silver

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Ferrule - A 1 - 8 - 3202517



Ferrule, length: 8 mm, color: silver

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Ferrule - AI 0,25- 8 YE - 3203037



Ferrule, sleeve length: 8 mm, length: 12.5 mm, color: yellow

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Ferrule - AI 0,5 - 8 WH - 3200014



Ferrule, sleeve length: 8 mm, length: 14 mm, color: white

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Ferrule - AI 0,5 - 8 WH -1000 - 3200881



Ferrule, sleeve length: 8 mm, length: 14 mm, color: white

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### Accessories

Ferrule - AI 0,75- 8 GY - 3200519



Ferrule, sleeve length: 8 mm, length: 14 mm, color: gray

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Ferrule - AI 0,75- 8 GY -1000 - 3200894



Ferrule, sleeve length: 8 mm, length: 14 mm, color: gray

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### Crimping tool

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

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### 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

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