

## Sample set - SAMPLE SPT-THR 1,5/ 5-V-5,08 - 1838115

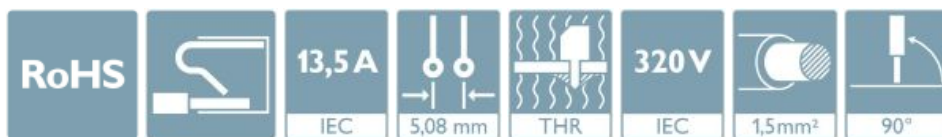
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PCB terminal block, nominal current: 13.5 A, rated voltage (III/2): 320 V, nominal cross section: 1.5 mm<sup>2</sup>, Number of potentials: 5, Number of rows: 1, Number of positions per row: 5, product range: SPT 1,5/..-V-THR, pitch: 5.08 mm, connection method: Push-in spring connection, mounting: THR soldering, conductor/PCB connection direction: 90 °, color: black, Pin layout: Linear double pinning, Solder pin [P]: 2 mm, type of packaging: packed in cardboard. SAMPLE set with 5 items in belt section. When used as part of soldering process, please use items without SAMPLE marking

### 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
- ✓ Operation and conductor connection from one direction enable integration into front of device
- ✓ Quick and convenient testing using integrated test option
- ✓ Two solder pins reduce the mechanical strain on the soldering spots



### Key Commercial Data

Packing unit	5 pc
Minimum order quantity	5 pc
GTIN	 4 055626 037561
GTIN	4055626037561
Weight per Piece (excluding packing)	3.160 g
Custom tariff number	85369010
Country of origin	Germany
Sales Key	AAABJA

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	SPT 1,5/..-V-THR
Pitch	5.08 mm
Number of positions	5

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### Technical data

#### Item properties

Mounting type	THR soldering
Pin layout	Linear double pinning
Number of levels	1
Number of connections	5
Number of potentials	5

#### Electrical parameters

Nominal current	13.5 A
Nom. voltage	320 V
Rated voltage (III/3)	250 V
Rated voltage (III/2)	320 V
Rated 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

#### 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 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

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

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [ l ]	7.7 mm

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## Technical data

### Dimensions for the product

Width [ w ]	24.32 mm
Height [ h ]	15.6 mm
Pitch	5.08 mm
Height (without solder pin)	13.6 mm
Solder pin [P]	2 mm
Pin spacing	5.5 mm
Pin dimensions	0.7 x 0.3 mm

### Dimensions for PCB design

Hole diameter	1.1 mm
Pin spacing	5.5 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	5
Denomination packing units	Pcs.

### 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-020D.1:2008-03
	Following IEC 61760-1:2006-04
	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 ... 100 °C (Depending on the current carrying capacity/derating curve)

### Termination and connection method

Connection test	IEC 60998-2-2:2002-12
Test result	Test passed
Test for conductor damage and slackening	IEC 60998-2-2:2002-12
	Test passed

### Pull-out test

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

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### Technical data

#### Pull-out test

	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
Conductor cross section	1.5 mm <sup>2</sup>
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 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)	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

#### Temperature-rise test

Specification	IEC 60998-2-1:2002-12
Requirement temperature-rise test	Increase in temperature ≤ 45 K

#### Current carrying capacity / derating curves

Caption	Type: SPT-THR 1,5/ 5-V-5,0(5,08) P26 Tested according to DIN EN 60512-5-2:2003-01 Reduction factor = 1 Number of positions: 5
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#### Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

#### Insulation resistance

Specification	IEC 60998-1:2002-12
Result	Test passed
Insulation resistance, neighboring positions	1 TΩ

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## Technical data

### Glow-wire test

Specification	IEC 60998-1:2002-12
Temperature	850 °C
Time of exposure	5 s

### Mechanical strength/tumbling barrel test

Specification	IEC 60998-1:2002-12
Number of drop cycles	50

### Standards and Regulations

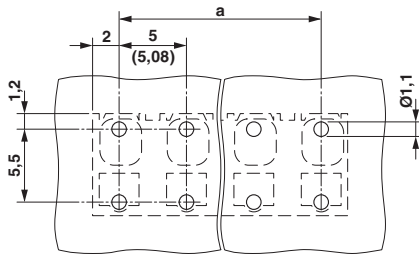
Flammability rating according to UL 94	V0
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### Environmental Product Compliance

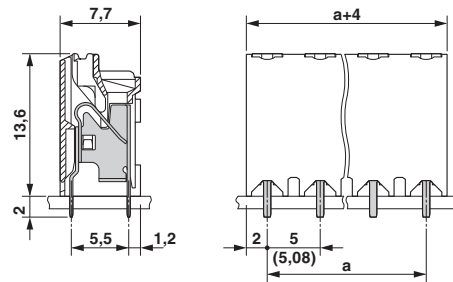
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

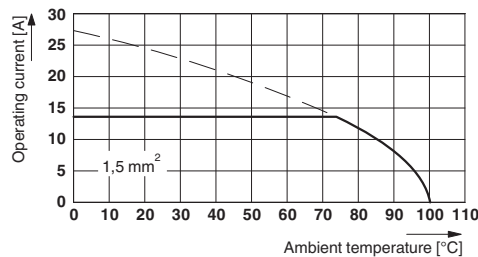
Drilling diagram



Dimensional drawing



Diagram



Type: SPT-THR 1,5/ 5-V-5,0(5,08) P26  
 Tested according to DIN EN 60512-5-2:2003-01  
 Reduction factor = 1  
 Number of positions: 5

## Classifications

eCl@ss

eCl@ss 10.0.1	27440401
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### Classifications

#### eCl@ss

eCl@ss 11.0	27460101
eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 9.0	27440401

#### ETIM

ETIM 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

#### UNSPSC

UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

### Approvals

#### Approvals

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Approvals

EAC

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Ex Approvals

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#### Approval details

EAC		B.01742
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### Accessories

#### Accessories

Cable end sleeve

## Sample set - SAMPLE SPT-THR 1,5/ 5-V-5,08 - 1838115

### Accessories

Ferrule - A 0,5 - 8 - 3202481



Ferrule, length: 8 mm, color: silver

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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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## Sample set - SAMPLE SPT-THR 1,5/ 5-V-5,08 - 1838115

### Accessories

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



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

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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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