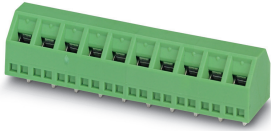


PCB terminal block - SMKDSN 1,5/ 4 BK - 1800410

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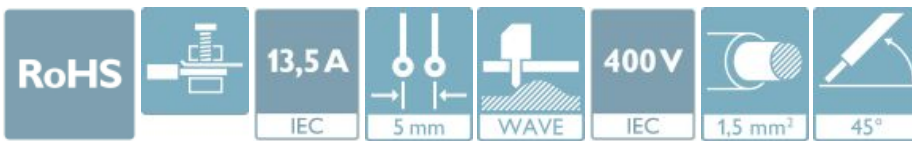
PCB terminal block, nominal current: 13.5 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm², Number of potentials: 4, Number of rows: 1, Number of positions per row: 4, product range: SMKDSN 1,5, pitch: 5 mm, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/ PCB connection direction: 45 °, color: black, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm, type of packaging: packed in cardboard



The figure shows a 10-position version of the product

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- Angled connection enables multi-row arrangement on the PCB
- Extremely small design for the respective conductor cross section



Key Commercial Data

Packing unit	250 pc
Minimum order quantity	250 pc
GTIN	
GTIN	4055626331065

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	SMKDSN 1,5
Pitch	5 mm
Number of positions	4
Screw thread	M3
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1
Number of connections	4

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Technical data

Item properties

Number of potentials	4
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Electrical parameters

Nominal current	13.5 A
Nom. voltage	400 V
Rated voltage (III/3)	250 V
Rated voltage (III/2)	400 V
Rated voltage (II/2)	630 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	Screw connection with tension sleeve
pluggable	no
Conductor cross section solid	0.14 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section AWG / kcmil	26 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 1.5 mm ²
2 conductors with same cross section, solid	0.14 mm ² ... 0.75 mm ²
2 conductors with same cross section, flexible	0.14 mm ² ... 0.75 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm ² ... 0.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 1 mm ²
Stripping length	6 mm
Torque	0.5 Nm ... 0.6 Nm

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	Tin-plated
Metal surface terminal point (top layer)	Tin (5 - 7 µm Sn)
Metal surface terminal point (middle layer)	Nickel (2 - 3 µm Ni)
Metal surface soldering area (top layer)	Tin (5 - 7 µm Sn)
Metal surface soldering area (middle layer)	Nickel (2 - 3 µm Ni)

Material data - housing

Housing color	black (9005)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600

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Material data - housing

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

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	12 mm
Width [w]	21 mm
Height [h]	14.5 mm
Pitch	5 mm
Height (without solder pin)	11 mm
Solder pin [P]	3.5 mm
Pin dimensions	0.5 x 1 mm

Dimensions for PCB design

Hole diameter	1.3 mm
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Packaging information

Type of packaging	packed in cardboard
Pieces per package	250
Denomination packing units	Pcs.

General product information

Type of note	Note on application
Note	For safe conductor connection, always adhere to a defined tightening torque. Particularly in the case of PCB terminal blocks with two or three positions, the individual solder pin for each contact point cannot compensate for this. That is why the terminal blocks must be supported during conductor connection (held with one hand, support on the housing).

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

Test for conductor damage and slackening	IEC 60998-1:1990-04
	Test passed

Pull-out test

Pull-out test	IEC 60998-1:1990-04
Conductor cross section / conductor type / tensile force	0.14 mm ² / solid / > 10 N
	0.14 mm ² / flexible / > 10 N

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Pull-out test

	1.5 mm ² / solid / > 40 N
	1.5 mm ² / flexible / > 40 N

Mechanical tests according to standard

Test specification	IEC 60998-1 (in parts)
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Electrical tests

Rated current	13.5 A
Conductor cross section	1.5 mm ²
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

Air clearances and creepage distances

Clearances and creepage distances	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
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)	3.2 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm

Temperature-rise test

Specification	IEC 60998-1:1990-04
Requirement temperature-rise test	Increase in temperature ≤ 45 K

Current carrying capacity / derating curves

Caption	Type: SMKDSN 1,5/...(-5,08) 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 60068-2-6:1995-03
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 60998-1:1990-04
Result	Test passed
Insulation resistance, neighboring positions	10 ⁹ Ω

Glow-wire test

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Technical data

Glow-wire test

Specification	IEC 60998-1:1990-04
Temperature	850 °C
Time of exposure	5 s

Mechanical strength/tumbling barrel test

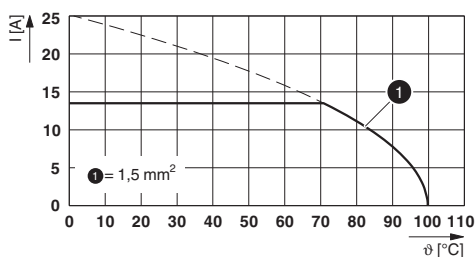
Specification	IEC 60998-1:1990-04
Number of drop cycles	50

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Diagram



Type: SMKDSN 1,5/...(-5,08)
 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
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 6.0	EC002643
ETIM 7.0	EC002643

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Approvals


Approvals

Approvals

EAC

Ex Approvals

Approval details

EAC		B.01687
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