

PCB terminal block - MKDSN 1,5/ 4-5,08 BK - 1907814

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PCB terminal block, nominal current: 13.5 A, nom. voltage: 400 V, pitch: 5.08 mm, number of positions: 4, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: black




The figure shows a 10-position version of the product

Why buy this product

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- Extremely small design for the respective conductor cross section
- The latching on the side enables various numbers of positions to be combined



Key Commercial Data

Packing unit	50 STK
GTIN	 4 017918 317980
GTIN	4017918317980

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	MKDSN 1,5
Pitch	5.08 mm
Number of positions	4
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M3
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1

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Technical data

Electrical parameters

Rated current	13.5 A
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

Connection capacity

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 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, stranded, ferrules without plastic sleeve	0.25 mm ² ... 0.5 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm ² ... 0.75 mm ²

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 (3 - 5 µm Sn)
Metal surface terminal point (middle layer)	Nickel (1.3 - 3 µm Ni)
Metal surface soldering area (top layer)	Tin (3 - 5 µm Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 - 3 µm Ni)

Material data - housing

Housing color	black (9005)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
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	Schematic representation – for additional information, see product range drawing in the Download Center
Length [l]	8.1 mm
Width [w]	20.32 mm
Height [h]	13.5 mm
Pitch	5.08 mm

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Dimensions for the product

Height (without solder pin)	10 mm
Solder pin [P]	3.5 mm
Pin dimensions	0.5 x 1 mm
Dimension a	15.24 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	50
Denomination packing units	Pcs.

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
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Pull-out test

Pull-out test	IEC 60998-2-1:2002-12
	Test passed
Conductor cross section / conductor type / tensile force	0.14 mm ² solid 10 N > 0.14 mm ² / solid / > 10 N
	0.14 mm ² flexible 10 N > 0.14 mm ² / flexible / > 10 N
	1.5 mm ² solid 40 N > 1.5 mm ² / solid / > 40 N
	1.5 mm ² flexible 40 N > 1.5 mm ² / flexible / > 40 N

Mechanical tests according to standard

Test specification	IEC 60998-2-1 (in parts)
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Electrical tests

Rated current	13.5 A
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

Air clearances and creepage distances

Insulating material group	I
Comparative tracking index (IEC 60112:2003-01)	CTI 600
Voltage	250 V
Rated insulation voltage (III/3)	250 V
Rated insulation voltage (III/2)	400 V
Rated insulation voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV

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Technical data

Air clearances and creepage distances

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)	3.2 mm
Minimum creepage distance value (III/2)	2 mm
Minimum creepage distance value (II/2)	3.2 mm
Note on connection cross section	With connected conductor 1.5 mm ² (solid).

Current carrying capacity / derating curves

Specification	IEC 60998-2-1 (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
	CSA
Flammability rating according to UL 94	V0

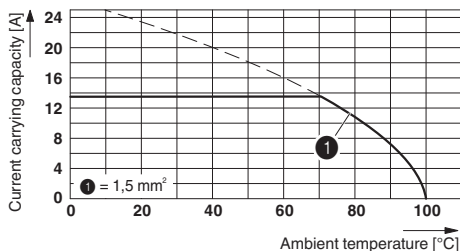
Environmental Product Compliance

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

Drawings

PCB terminal block - MKDSN 1,5/ 4-5,08 BK - 1907814

Diagram



Approvals

Approvals

Approvals

CSA / SEV / EAC / cULus Recognized / IEC CB Scheme / DNV GL

Ex Approvals

Approval details


CSA		http://www.csagroup.org/services-industries/product-listing/	13631
		D	B
Nominal voltage UN		300 V	150 V
Nominal current IN		10 A	10 A
mm²/AWG/kcmil		28-14	28-14


SEV		https://www.electrosuisse.ch/en/meta/shop/product-certificates.html	IK-3542-M1
Nominal voltage UN		250 V	
Nominal current IN		13.5 A	
mm²/AWG/kcmil		1.5	

EAC		B.01742
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Approvals

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19770427
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm ² /AWG/kcmil	30-14	30-14	

IECEE CB Scheme		http://www.iecee.org/	CH-8225
Nominal voltage UN	250 V		
Nominal current IN	13.5 A		
mm ² /AWG/kcmil	1.5		

DNV GL	http://exchange.dnv.com/tari/	TAE00001EV
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