

MKDS 5N HV/ 2-ZB-6,35 GY - 1704823

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PCB terminal block, nominal current: 41 A, nom. voltage: 1000 V, pitch: 6.35 mm, number of positions: 2, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: gray

The figure shows a 5-pos. 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
- Unrestricted 600-V-UL approval thanks to compact zig-zag pinning



Key Commercial Data

Packing unit	50 STK
GTIN	
GTIN	4046356738262

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	MKDS 5 N HV
Pitch	6.35 mm
Number of positions	2
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M3
Mounting type	Wave soldering
Pin layout	Zigzag pinning W
Number of levels	1

Electrical parameters

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Electrical parameters

Rated current	41 A
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

Connection capacity

Conductor cross section solid	0.2 mm ² ... 6 mm ²
Conductor cross section flexible	0.2 mm ² ... 4 mm ²
Conductor cross section AWG / kcmil	24 ... 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 4 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 4 mm ²
2 conductors with same cross section, solid	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm ² ... 0.75 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm ² ... 2.5 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	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (5 - 7 µm Sn)
Metal surface soldering area (top layer)	Tin (5 - 7 µm Sn)

Material data - housing

Housing color	gray (7042)
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

Length [l]	15.85 mm
Height [h]	27 mm
Pitch	6.35 mm
Height (without solder pin)	27 mm
Pin dimensions	0.9 x 0.9 mm
Dimension a	6.35 mm
Pin spacing	9 mm

Dimensions for PCB design

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Dimensions for PCB design

Hole diameter	1.3 mm
Pin spacing	9 mm

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	0.2 mm ² solid 10 N >
	4 mm ² flexible 60 N >
	6 mm ² solid 80 N >

Mechanical tests according to standard

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

Rated current	41 A
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

Air clearances and creepage distances

Insulating material group	I
Comparative tracking index (IEC 60112:2003-01)	CTI 600
Voltage	800 V
Rated insulation voltage (III/3)	800 V
Rated insulation voltage (III/2)	1000 V
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (III/3)	8 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (II/2)	8 kV
Minimum clearance - inhomogeneous field (III/3)	8 mm
Minimum clearance - inhomogeneous field (III/2)	8 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	10 mm

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Air clearances and creepage distances

Minimum creepage distance value (III/2)	5 mm
Minimum creepage distance value (II/2)	5 mm

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
	CUL

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"

Approvals

Approvals

Approvals


SEV / CCA / EAC / cULus Recognized

Ex Approvals


Approval details


MKDS 5N HV/ 2-ZB-6,35 GY - 1704823

Approvals

SEV		https://www.electrosuisse.ch/en/meta/shop/product-certificates.html	IK-4199
Nominal voltage UN		1000 V	
Nominal current IN		32 A	
mm ² /AWG/kcmil		4	

CCA	IK-3249		
Nominal voltage UN		1000 V	
mm ² /AWG/kcmil		4	

EAC		B.01742
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19770427
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	30 A	30 A	
mm ² /AWG/kcmil	30-10	30-10	

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