

PCB terminal block - MKDS 1/ 2-3,81 SMD BK - 1727230

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PCB terminal block, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1 mm², pitch: 3.81 mm, number of positions: 2, connection method: Screw connection with tension sleeve, mounting: SMD soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Linear pad geometry



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
- Extremely small design for the respective conductor cross section
- Designed for integration into the SMT soldering process



Key Commercial Data

| | |
|------------------------|---|
| Packing unit | 35 pc |
| Minimum order quantity | 35 pc |
| GTIN |  4 017918 025601 |
| GTIN | 4017918025601 |

Technical data

Item properties

| | |
|---------------------------|--------------------------------------|
| Brief article description | PCB terminal block |
| Range of articles | MKDS 1/..-SMD |
| Pitch | 3.81 mm |
| Number of positions | 2 |
| Connection method | Screw connection with tension sleeve |
| Drive form screw head | Slotted |
| Screw thread | M2 |
| Mounting type | SMD soldering |
| Pin layout | Linear pad geometry |

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Technical data

Item properties

| | |
|-----------------------|---|
| Number of levels | 1 |
| Number of connections | 2 |
| Number of potentials | 2 |

Electrical parameters

| | |
|-----------------------------|--------|
| Nominal current | 8 A |
| Nom. voltage | 160 V |
| Rated voltage | 160 V |
| Rated voltage (III/2) | 160 V |
| Rated voltage (II/2) | 250 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 |

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 mm ² |
| Conductor cross section AWG / kcmil | 26 ... 16 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm ² ... 0.5 mm ² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm ² ... 0.5 mm ² |
| 2 conductors with same cross section, solid | 0.14 mm ² ... 0.5 mm ² |
| 2 conductors with same cross section, flexible | 0.14 mm ² ... 0.2 mm ² |
| Stripping length | 5 mm |
| Torque | 0.22 Nm ... 0.25 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 | IIIa |
| CTI according to IEC 60112 | 325 |
| Flammability rating according to UL 94 | V0 |

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Technical data

Material data - housing

| | |
|---|--------|
| 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] | 7.3 mm |
| Width [w] | 7.61 mm |
| Height [h] | 9.2 mm |
| Pitch | 3.81 mm |
| Height (without solder pin) | 9.2 mm |

Packaging information

| | |
|----------------------------|---------------|
| Type of packaging | Tube magazine |
| Pieces per package | 35 |
| Denomination packing units | Pcs. |

General product information

| | |
|--------------|---|
| Type of note | Note on application |
| Note | Pick and place pads may protrude beyond the components. The PCB layout must ensure that collisions are avoided when components are assembled. |

Ambient conditions

| | |
|---|---|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -40 °C ... 100 °C (dependent on the derating curve) |

Electrical tests

| | |
|-----------------------------|-------------------|
| Rated current | 8 A |
| Conductor cross section | 1 mm ² |
| Rated voltage (III/2) | 160 V |
| Rated surge voltage (III/2) | 2.5 kV |

Standards and Regulations

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

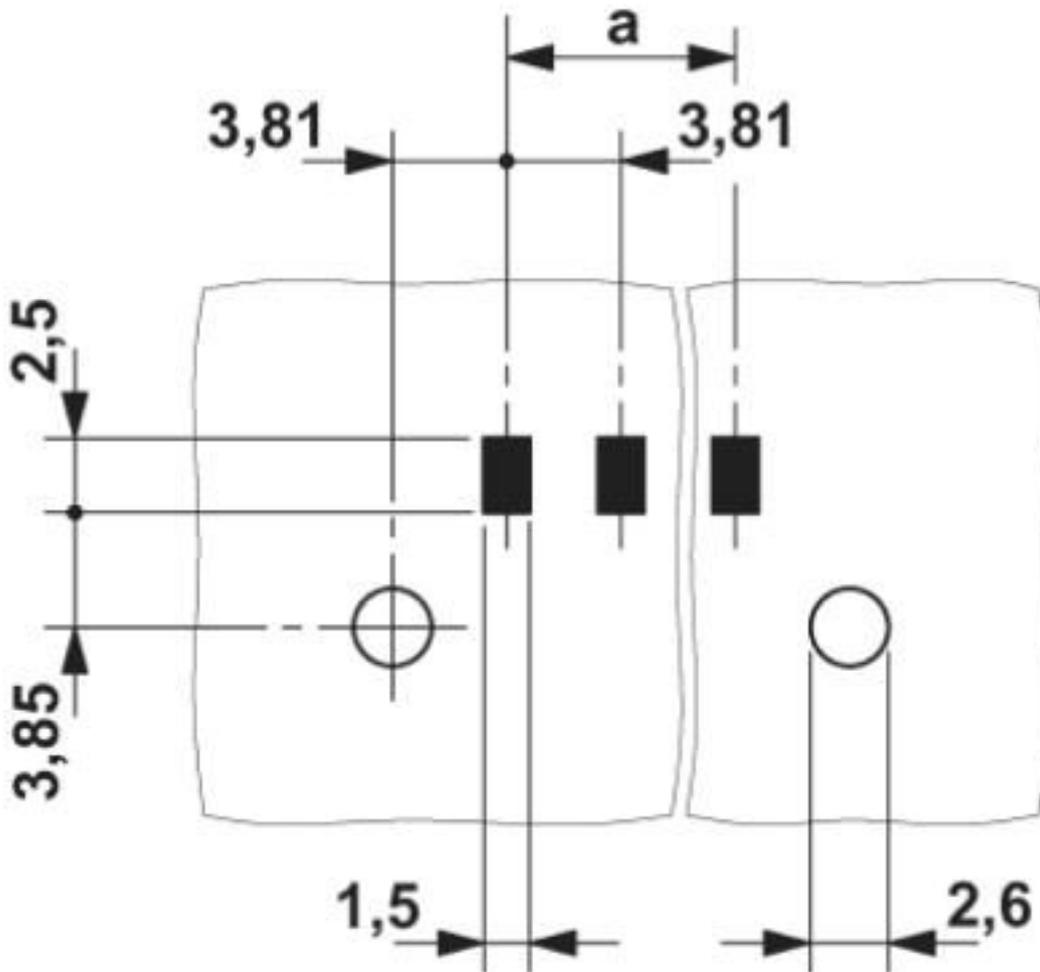
Environmental Product Compliance

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

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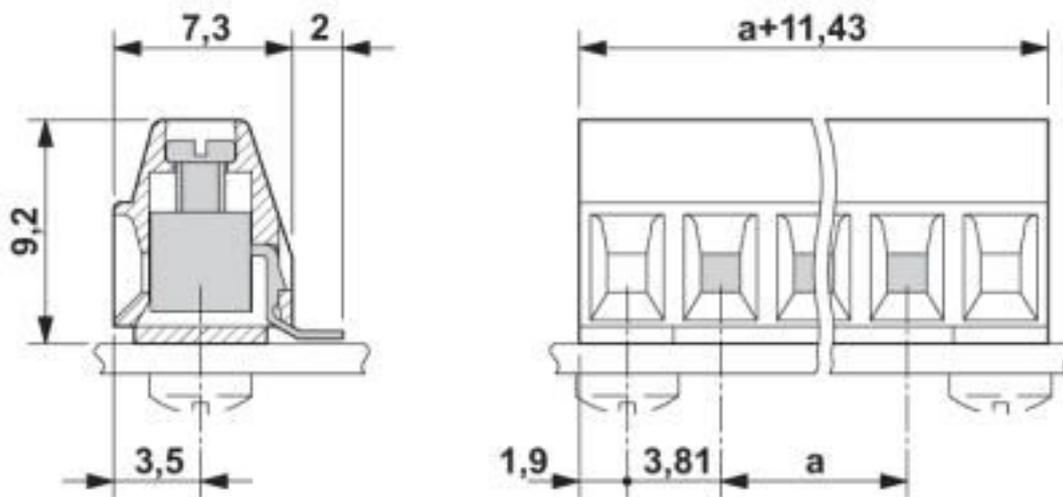
Drawings

Drilling diagram



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Dimensional drawing



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440401 |
| eCl@ss 4.0 | 27141100 |
| eCl@ss 4.1 | 27141100 |
| eCl@ss 5.0 | 27141100 |
| eCl@ss 5.1 | 27261100 |
| eCl@ss 6.0 | 27261100 |
| eCl@ss 7.0 | 27440401 |
| eCl@ss 8.0 | 27440401 |
| eCl@ss 9.0 | 27440401 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | EC002643 |
| ETIM 5.0 | EC002643 |
| ETIM 6.0 | EC002643 |
| ETIM 7.0 | EC002643 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211801 |
| UNSPSC 7.0901 | 39121432 |
| UNSPSC 11 | 39121432 |
| UNSPSC 12.01 | 39121432 |
| UNSPSC 13.2 | 39121432 |
| UNSPSC 18.0 | 39121432 |
| UNSPSC 19.0 | 39121432 |

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Classifications

UNSPSC

| | |
|-------------|----------|
| UNSPSC 20.0 | 39121432 |
| UNSPSC 21.0 | 39121432 |

Approvals

Approvals

Approvals

IECEE CB Scheme / SEV / EAC / cULus Recognized

Ex Approvals

Approval details

| | | | |
|----------------------------|---|---|----------|
| IECEE CB Scheme |  | http://www.iecee.org/ | CH-10787 |
| Nominal voltage UN | 160 V | | |
| Nominal current IN | 12 A | | |
| mm ² /AWG/kcmil | 1.5 | | |

| | | | |
|----------------------------|---|---|---------|
| SEV |  | https://www.eurofins.ch/de/ | IK-4497 |
| Nominal voltage UN | 160 V | | |
| Nominal current IN | 12 A | | |
| mm ² /AWG/kcmil | 1.5 | | |

| | | |
|-----|---|---------|
| EAC |  | B.01687 |
|-----|---|---------|

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

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Approvals

| | B | D |
|----------------------------|-------|-------|
| mm ² /AWG/kcmil | 30-16 | 30-16 |

Accessories

Accessories

Labeled terminal marker

Marker card - SK 3,81/2,8:FORTL.ZAHLEN - 0804109



Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 3.81 mm, lettering field size: 3.81 x 2.8 mm

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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