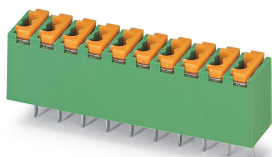


PCB terminal block - FK-MPT 0,5/ 5-3,5 - 1891098

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PCB terminal block, nominal current: 4 A, rated voltage (III/2): 250 V, nominal cross section: 0.5 mm², Number of potentials: 5, Number of rows: 1, Number of positions per row: 5, product range: FK-MPT 0,5/..-V, pitch: 3.5 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: green, 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

- ✓ 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
- ✓ Potentials can be easily looped through – ideal for BUS applications
- ✓ Small component size for applications where space is at a premium
- ✓ Vertical connection enables multi-row arrangement on the PCB



Key Commercial Data

| | |
|--------------|---|
| Packing unit | 50 pc |
| GTIN |  4 017918 169619 |
| GTIN | 4017918169619 |

Technical data

Item properties

| | |
|---------------------------|--------------------|
| Brief article description | PCB terminal block |
| Range of articles | FK-MPT 0,5/..-V |
| Pitch | 3.5 mm |
| Number of positions | 5 |
| Mounting type | Wave soldering |
| Pin layout | Linear pinning |
| Locking | without |
| Number of levels | 1 |
| Number of connections | 10 |

PCB terminal block - FK-MPT 0,5/ 5-3,5 - 1891098

Technical data

Item properties

| | |
|----------------------|---|
| Number of potentials | 5 |
|----------------------|---|

Electrical parameters

| | |
|-----------------------------|--------|
| Nominal current | 4 A |
| Nom. voltage | 250 V |
| Rated voltage (III/3) | 160 V |
| Rated voltage (III/2) | 250 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 | Push-in spring connection |
| pluggable | no |
| Conductor cross section solid | 0.12 mm ² ... 0.5 mm ² |
| Conductor cross section AWG / kcmil | 26 ... 20 |
| Stripping length | 6.5 mm |

Material data - contact

| | |
|---|---|
| Note | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201 |
| Contact material | Steel/copper |
| Surface characteristics | Tin-plated |
| Metal surface terminal point (top layer) | Tin (5 - 7 µm Sn) |
| Metal surface terminal point (middle layer) | Copper (2 - 3 µm Cu) |
| Metal surface soldering area (top layer) | Tin (5 - 7 µm Sn) |
| Metal surface soldering area (middle layer) | Copper (2 - 3 µm Cu) |

Material data - housing

| | |
|--|--------------|
| Housing color | green (6021) |
| Insulating material | PBT |
| Insulating material group | IIIa |
| CTI according to IEC 60112 | 225 |
| Flammability rating according to UL 94 | V0 |

Dimensions for the product

| | |
|-----------------------------|--|
| Caption | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
| Length [l] | 7 mm |
| Width [w] | 18 mm |
| Height [h] | 13 mm |
| Pitch | 3.5 mm |
| Height (without solder pin) | 9.5 mm |

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Technical data

Dimensions for the product

| | |
|----------------|---------------|
| Solder pin [P] | 3.5 mm |
| Pin dimensions | 0.35 x 0.9 mm |

Dimensions for PCB design

| | |
|---------------|------|
| Hole diameter | 1 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 ... 100 °C (Depending on the current carrying capacity/derating curve) |

Termination and connection method

| | |
|--|---------------------|
| Test for conductor damage and slackening | IEC 60999-1:1990-05 |
| | Test passed |

Pull-out test

| | |
|--|---------------------------------------|
| Pull-out test | IEC 60999-1:1990-05 |
| Conductor cross section / conductor type / tensile force | 0.14 mm ² / solid / > 10 N |
| | 0.5 mm ² / solid / > 30 N |

Mechanical tests according to standard

| | |
|--------------------|------------------------|
| Test specification | IEC 60999-1 (in parts) |
|--------------------|------------------------|

Electrical tests

| | |
|-----------------------------|--------|
| Rated current | 4 A |
| Rated voltage (III/2) | 250 V |
| Rated surge voltage (III/2) | 2.5 kV |

Air clearances and creepage distances

| | |
|---|---------------------|
| Clearances and creepage distances | IEC 60664-1:2007-04 |
| Specification | IEC 60664-1:2007-04 |
| Minimum clearance - inhomogeneous field (III/3) | 1.5 mm |
| Minimum clearance - inhomogeneous field (III/2) | 3 mm |
| Minimum clearance - inhomogeneous field (II/2) | 1.5 mm |
| Minimum creepage distance value (III/3) | 2.5 mm |
| Minimum creepage distance value (III/2) | 3 mm |
| Minimum creepage distance value (II/2) | 2.5 mm |

Temperature-rise test

| | |
|---------------|---------------------|
| Specification | IEC 60998-1:1990-04 |
|---------------|---------------------|

PCB terminal block - FK-MPT 0,5/ 5-3,5 - 1891098

Technical data

Temperature-rise test

| | |
|-----------------------------------|-------------------------------------|
| Requirement temperature-rise test | Increase in temperature ≤ 45 K |
|-----------------------------------|-------------------------------------|

Current carrying capacity / derating curves

| | |
|---------|--------------------------|
| Caption | Type: FK-MPT 0,5/...-3,5 |
|---------|--------------------------|

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 60512-2:1985-00 |
| Result | Test passed |
| Insulation resistance, neighboring positions | $10^{12} \Omega$ |

Mechanical strength/tumbling barrel test

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

Standards and Regulations

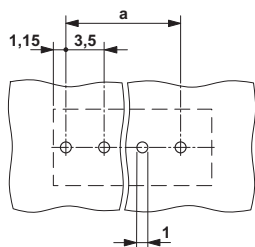
| | |
|--|--------|
| Connection in acc. with standard | EN-VDE |
| | CUL |
| Flammability rating according to UL 94 | V0 |

Environmental Product Compliance

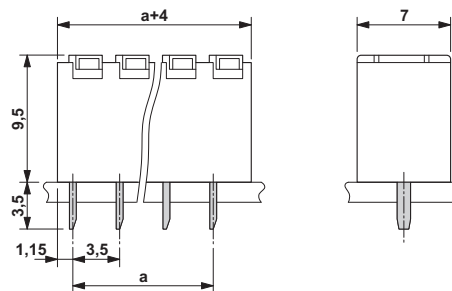
| | |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

Drawings

Drilling diagram



Dimensional drawing



PCB terminal block - FK-MPT 0,5/ 5-3,5 - 1891098

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440401 |
| eCl@ss 11.0 | 27460101 |
| eCl@ss 4.0 | 27260700 |
| 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 9.0 | 27440401 |

ETIM

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

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211801 |
| UNSPSC 7.0901 | 39121432 |
| UNSPSC 11 | 34131203 |
| UNSPSC 12.01 | 39121432 |
| UNSPSC 13.2 | 39121432 |
| UNSPSC 18.0 | 39121432 |
| UNSPSC 19.0 | 39121432 |
| UNSPSC 20.0 | 39121432 |
| UNSPSC 21.0 | 39121432 |

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / SEV / EAC / IECCEB Scheme / cULus Recognized

Ex Approvals

Approval details

PCB terminal block - FK-MPT 0,5/ 5-3,5 - 1891098

Approvals

| | | | |
|----------------------------|-------|---|--------------|
| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 60425 |
| | B | D | |
| Nominal voltage UN | 300 V | 300 V | |
| Nominal current IN | 4 A | 4 A | |
| mm ² /AWG/kcmil | 28-20 | 28-20 | |

| | | | |
|----------------------------|-------|---|--------------|
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 60425 |
| | B | D | |
| Nominal voltage UN | 300 V | 300 V | |
| Nominal current IN | 4 A | 4 A | |
| mm ² /AWG/kcmil | 28-20 | 28-20 | |

| | | | |
|----------------------------|---------|---|---------|
| SEV | | https://www.eurofins.ch/de/ | IK-4496 |
| | | | |
| Nominal voltage UN | 250 V | | |
| Nominal current IN | 3 A | | |
| mm ² /AWG/kcmil | 0.12-.5 | | |

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

| | | | |
|----------------------------|---------|---|----------|
| IECEE CB Scheme | | http://www.iecee.org/ | CH-10786 |
| | | | |
| Nominal voltage UN | 250 V | | |
| Nominal current IN | 3 A | | |
| mm ² /AWG/kcmil | 0.12-.5 | | |

| | |
|------------------|--|
| cULus Recognized | |
|------------------|--|

PCB terminal block - FK-MPT 0,5/ 5-3,5 - 1891098

Accessories

Accessories

Screwdriver tools

Screwdriver - SZF 0-0,4X2,5 - 1204504



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

Additional products

Feed-through header - FK-MPT 0,5/ 5-ICA-3,5 - 1930357



Feed-through header - FK-MPT 0,5/ 5-ICVA-3,5 - 1930506



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