

Printed-circuit board connector - DMCV 0,5/ 5-G1-2,54 SMD R44 - 1845205

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PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 5, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: SMD soldering, pin layout: Linear pad geometry, solder pin [P]: 2 mm, Sample values available under SAMPLE DMC...



The figure shows a 10-pos. version with 20 contacts

Your advantages

- ✓ Gold-plated contacts ensure transfer quality remains stable over the long term
- ✓ Designed for integration into the SMT soldering process
- ✓ Vertical connection enables multi-row arrangement on the PCB
- ✓ Integrated solder anchors reduce the mechanical strain on the soldering spots
- ✓ Small component size for applications where space is at a premium
- ✓ Supplied in tape-on-reel packing according to IEC 60286-3 for automated mounting



Key Commercial Data

| | |
|------------------------|---------------|
| Packing unit | 330 pc |
| Minimum order quantity | 330 pc |
| GTIN | |
| GTIN | 4046356965040 |

Technical data

Item properties

| | |
|---------------------------|---------------------------|
| Brief article description | Feed-through header |
| Plug-in system | MICRO COMBICON - DFMC 0,5 |
| Type of contact | Male connector |
| Range of articles | DMCV 0,5/...-G1-SMD |
| Pitch | 2.54 mm |
| Number of positions | 5 |
| Mounting type | SMD soldering |

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Technical data

Item properties

| | |
|-----------------------|---------------------|
| Pin layout | Linear pad geometry |
| Locking | without |
| Number of levels | 2 |
| Number of connections | 10 |
| Number of potentials | 10 |

Electrical parameters

| | |
|-----------------------------|--------|
| Nominal current | 6 A |
| Nom. voltage | 160 V |
| Rated voltage | 32 V |
| Rated voltage (III/2) | 160 V |
| Rated voltage (II/2) | 160 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 |

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 | Completely gold-plated |
| Metal surface contact area (top layer) | Gold (0.25 Au) |
| Metal surface contact area (middle layer) | Nickel (2 - 4 µm Ni), |
| Metal surface soldering area (top layer) | Gold (0.25 Au) |
| Metal surface soldering area (middle layer) | Nickel (2 - 4 µm Ni) |

Material data - housing

| | |
|--|--------------|
| Housing color | black (9005) |
| Insulating material | LCP |
| Insulating material group | IIIa |
| CTI according to IEC 60112 | 175 |
| Flammability rating according to UL 94 | V0 |

Dimensions for the product

| | |
|-----------------------------|----------------|
| Length [l] | 7.39 mm |
| Width [w] | 13.2 mm |
| Height [h] | 9.1 mm |
| Pitch | 2.54 mm |
| Height (without solder pin) | 7.1 mm |
| Solder pin [P] | 2 mm |
| Pin spacing | 2.54 mm |
| Pin dimensions | 0.64 x 0.64 mm |

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Technical data

Dimensions for PCB design

| | |
|---------------|---------|
| Hole diameter | 1.2 mm |
| Pin spacing | 2.54 mm |

Packaging information

| | |
|-----------------------------|--|
| Type of packaging | 44 mm wide tape |
| Pieces per package | 330 |
| Denomination packing units | Pcs. |
| [W] tape width | 44 mm |
| [A] coil diameter | 330 mm |
| [W2] coil overall dimension | 50.4 mm |
| Outer packaging type | Transparent-Bag |
| ESD level | (D) electrostatically conductive |
| Specification | DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07 |

Processing notes

| | |
|---|--|
| Process | Reflow soldering |
| Specification | Following IPC/JEDEC J-STD-020D.1:2008-03 |
| | Following IEC 60068-2-58:2005-02 |
| Moisture Sensitive Level | MSL 1 |
| Classification temperature T _c | 260 °C |
| Solder cycles in the reflow | 3 |

Ambient conditions

| | |
|---|---|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -40 °C ... 105 °C (dependent on the derating curve) |

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) | 1.5 mm |
| Minimum clearance - inhomogeneous field (II/2) | 1.5 mm |
| Minimum creepage distance value (III/3) | 1.5 mm |
| Minimum creepage distance value (III/2) | 1.6 mm |
| Minimum creepage distance value (II/2) | 1.6 mm |

Mechanical tests (A)

| | |
|--|-------------|
| Test specification | IEC 61984 |
| Insertion strength per pos. approx. | 2 N |
| Withdraw strength per pos. approx. | 1 N |
| Polarization when inserted requirement >20 N | Test passed |

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Technical data

Mechanical tests (A)

| | |
|---|-------------|
| Contact holder in insert requirements >20 N | Test passed |
|---|-------------|

Durability tests (B)

| | |
|--|-----------------------|
| Specification | IEC 60512-9-1:2010-03 |
| Contact resistance R ₁ | 2.5 mΩ |
| Insertion/withdrawal cycles | 100 |
| Contact resistance R ₂ | 2.7 mΩ |
| Impulse withstand voltage at sea level | 2.95 kV |
| Power-frequency withstand voltage | 1.39 kV |
| Insulation resistance, neighboring positions | > 7 GΩ |

Thermal tests (C)

| | |
|---|-----------------------|
| Specification | IEC 60512-5-1:2002-02 |
| Number of positions | 16 |
| Conductor cross section | 0.5 mm ² |
| Test current | 6 A |
| Upper limiting temperature requirements <100 °C | Test passed |

Climatic tests (D)

| | |
|--|--|
| Specification | DIN 50018:2013-05 |
| Cold stress | -40 °C/2 h |
| Thermal stress | 105 °C/168 h |
| Corrosive stress | 1.0 dm ³ SO ₂ on 300 dm ³ /40 °C/3 cycles |
| Impulse withstand voltage at sea level | 2.95 kV |
| Power-frequency withstand voltage | 1.39 kV |

Environmental and durability tests (E)

| | |
|---------------------------------------|-------------------------------------|
| Specification | IEC 61984:2008-10 |
| Result, degree of protection, IP code | Finger safety with IP20 test finger |

Vibration test

| | |
|------------------------|------------------------|
| Specification | IEC 60068-2-6:2007-12 |
| Result | Test passed |
| Frequency | 10 - 500 - 10 Hz |
| Sweep speed | 1 octave/min |
| Amplitude | 0.35 mm (10 - 60.1 Hz) |
| Acceleration | 5g (60.1 - 500 Hz) |
| Test duration per axis | 2 h |

Standards and Regulations

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

Printed-circuit board connector - DMCV 0,5/ 5-G1-2,54 SMD R44 - 1845205

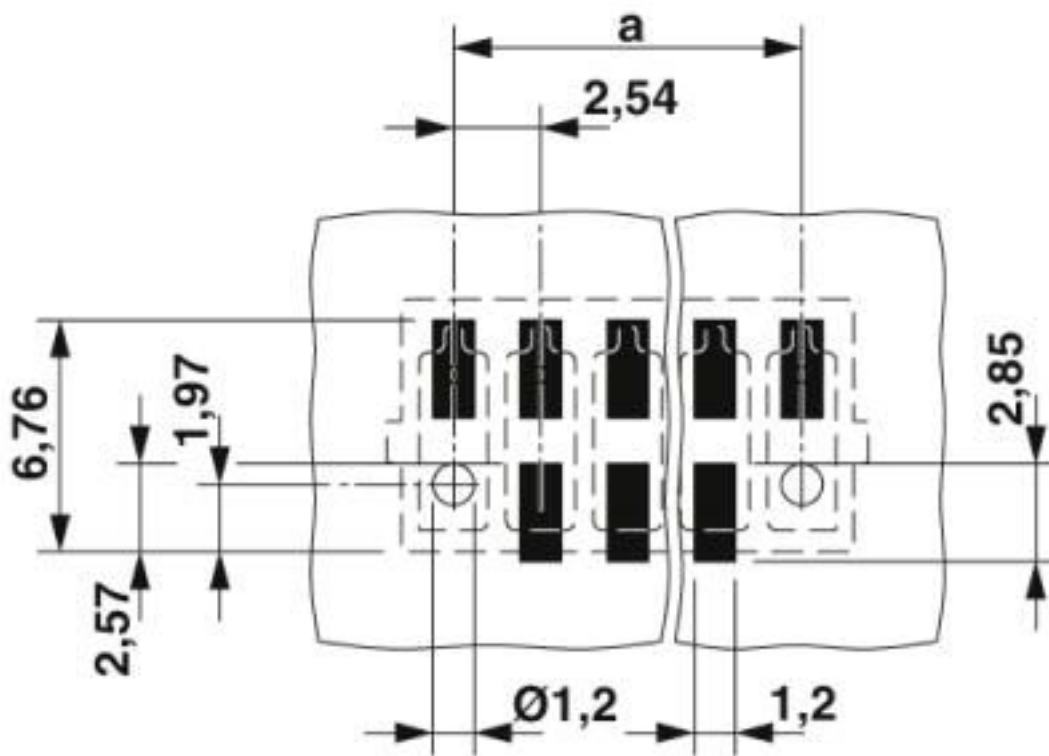
Technical data

Environmental Product Compliance

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

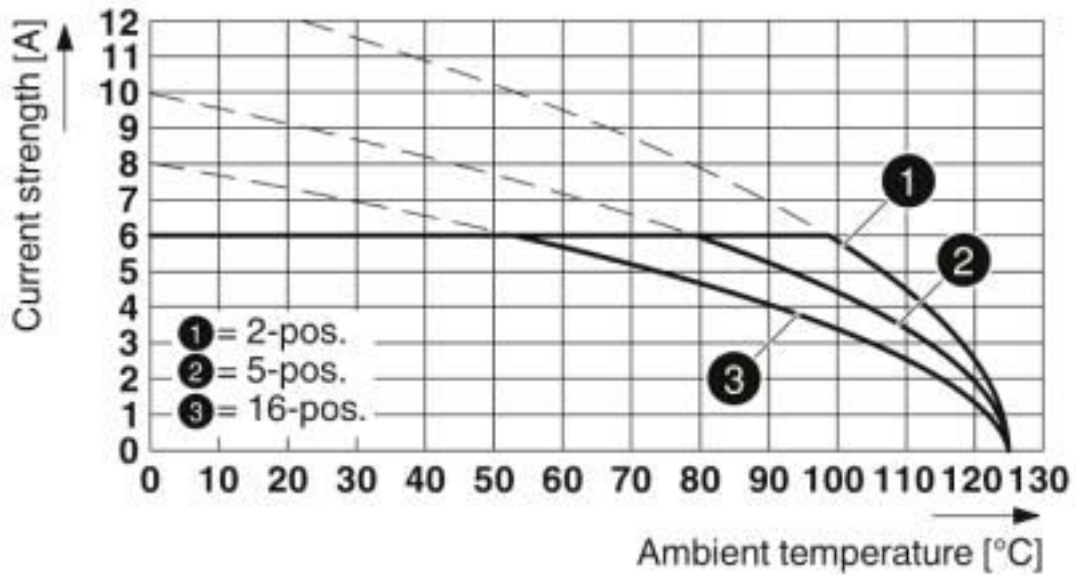
Drawings

Drilling diagram



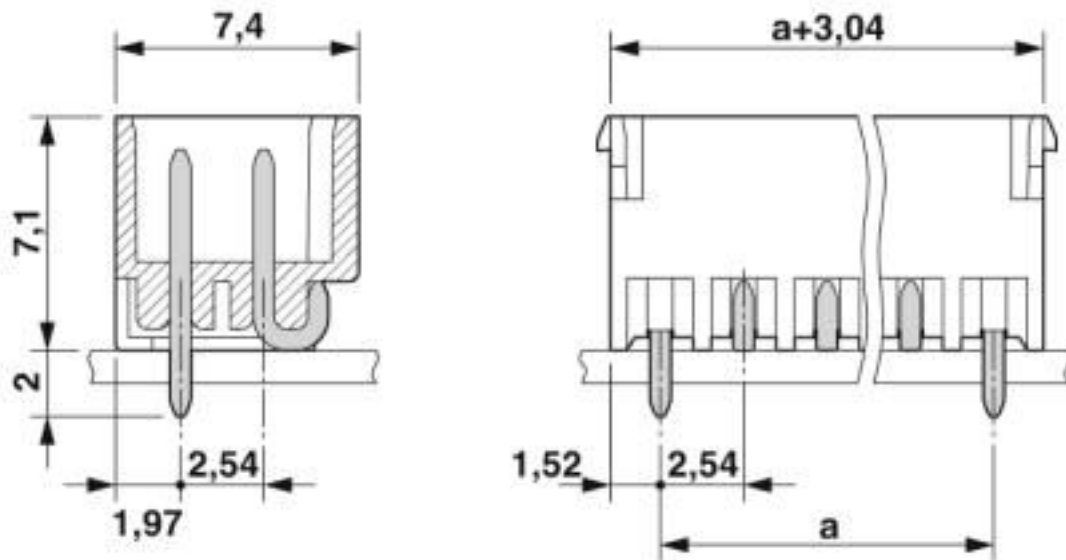
Printed-circuit board connector - DMCV 0,5/ 5-G1-2,54 SMD R44 - 1845205

Diagram



Type: DFMC 0,5/...-ST-2,54 with DMCV 0,5/...-G1-2,54 SMD R...

Dimensional drawing



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440402 |
| eCl@ss 4.0 | 27260700 |
| eCl@ss 4.1 | 27260700 |

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Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 5.0 | 27260700 |
| eCl@ss 5.1 | 27260700 |
| eCl@ss 6.0 | 27260700 |
| eCl@ss 7.0 | 27440402 |
| eCl@ss 8.0 | 27440402 |
| eCl@ss 9.0 | 27440402 |

ETIM

| | |
|----------|----------|
| ETIM 4.0 | EC002637 |
| ETIM 5.0 | EC002637 |
| ETIM 6.0 | EC002637 |
| ETIM 7.0 | EC002637 |

UNSPSC

| | |
|-------------|----------|
| UNSPSC 13.2 | 39121409 |
| UNSPSC 18.0 | 39121409 |
| UNSPSC 19.0 | 39121409 |
| UNSPSC 20.0 | 39121409 |
| UNSPSC 21.0 | 39121409 |

Approvals


Approvals

Approvals

IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

Ex Approvals

Approval details

| | | | |
|--------------------|---|---|--------------|
| IECEE CB Scheme |  | http://www.iecee.org/ | DE1-59151-M1 |
| Nominal voltage UN | 160 V | | |
| Nominal current IN | 6 A | | |

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Approvals

| | | | |
|---|--|---|----------|
| VDE Gutachten mit Fertigungsüberwachung | | http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx | 40042389 |
| Nominal voltage UN | | 160 V | |
| Nominal current IN | | 6 A | |

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

| | | | |
|--------------------|-------|---|-----------------|
| cULus Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E60425-19920306 |
| | B | C | |
| Nominal voltage UN | 150 V | 50 V | |
| Nominal current IN | 6 A | 6 A | |

Accessories

Accessories

Labeled terminal marker

Marker card - SK 2,54/2,8:FORTL.ZAHLEN - 0804853



Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 99, mounting type: adhesive, for terminal block width: 2.54 mm, lettering field size: 2.54 x 2.8 mm

PCB headers

Sample set - SAMPLE DMCV 0,5/ 5-G1-2,54 SMD - 1859974



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 5, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: SMD soldering, pin layout: Linear pad geometry

Additional products

Printed-circuit board connector - DMCV 0,5/ 5-G1-2,54 SMD R44 - 1845205

Accessories

Printed-circuit board connector - DFMC 0,5/ 5-ST-2,54 - 1844604



Plug, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 5 with 10 contacts, pitch: 2.54 mm, connection method: spring connection, color: black, contact surface: gold

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