

Sample set - SAMPLE DMC 0,5/ 5-G1-2,54 THR - 1859521

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)

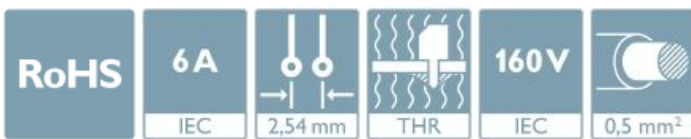


The figure shows a 10-pos. version with 20 contacts

PCB header, nominal cross section: 0.5 mm², color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Gold, type of contact: Male connector, Number of potentials: 10, Number of rows: 2, Number of positions per row: 5, number of connections: 10, product range: DMC 0,5/...-G1-THR, pitch: 2.54 mm, mounting: THR soldering, solder pin [P]: 2 mm, plug-in system: MICRO COMBICON - DFMC 0,5, Locking: without, type of packaging: packed in cardboard

Your advantages

- Gold-plated contacts ensure transfer quality remains stable over the long term
- Designed for integration into the SMT soldering process
- Conductor connection on several levels enables higher contact density
- 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 | 5 pc |
| Minimum order quantity | 5 pc |
| GTIN | |
| GTIN | 4055626111926 |
| Weight per Piece (excluding packing) | 2.000 g |
| Custom tariff number | 85366930 |
| Country of origin | Poland |
| Sales Key | AAADGB |

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 | DMC 0,5/...-G1-THR |
| Pitch | 2.54 mm |

Sample set - SAMPLE DMC 0,5/ 5-G1-2,54 THR - 1859521

Technical data

Item properties

| | |
|---------------------------------|---------------|
| Number of positions | 5 |
| Mounting type | THR soldering |
| Locking | without |
| Number of levels | 2 |
| Number of connections | 10 |
| Number of potentials | 10 |
| Pin connector pattern alignment | Standard |

Electrical parameters

| | |
|-----------------------------|--------|
| Nominal current | 6 A |
| Nom. voltage | 160 V |
| Rated voltage (III/3) | 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

| | |
|----------------|--|
| Caption | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
| Length [l] | 9.64 mm |
| Width [w] | 13.2 mm |
| Height [h] | 7.39 mm |
| Pitch | 2.54 mm |
| Solder pin [P] | 2 mm |
| Pin spacing | 2.54 mm |

Sample set - SAMPLE DMC 0,5/ 5-G1-2,54 THR - 1859521

Technical data

Dimensions for the product

| | |
|----------------|----------------|
| Pin dimensions | 0.64 x 0.64 mm |
|----------------|----------------|

Dimensions for PCB design

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

Packaging information

| | |
|----------------------------|---------------------|
| Type of packaging | packed in cardboard |
| Pieces per package | 5 |
| Denomination packing units | Pcs. |

Processing notes

| | |
|---|--|
| Process | Reflow/wave soldering |
| Specification | Following IPC/JEDEC J-STD-020D.1:2008-03 |
| | Following IEC 61760-1:2006-04 |
| | 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 ... 100 °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) | 1.3 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 |
| Contact holder in insert requirements >20 N | Test passed |

Durability tests (B)

| | |
|-----------------------------------|-----------------------|
| Specification | IEC 60512-9-1:2010-03 |
| Contact resistance R ₁ | 2.7 mΩ |

Sample set - SAMPLE DMC 0,5/ 5-G1-2,54 THR - 1859521

Technical data

Durability tests (B)

| | |
|---|---------|
| Insertion/withdrawal cycles | 100 |
| Contact resistance R ₂ | 2.9 mΩ |
| Contact resistance R ₂ 2nd level | 3.1 mΩ |
| Impulse withstand voltage at sea level | 2.95 kV |

Thermal tests (C)

| | |
|---|-----------------------|
| Specification | IEC 60512-5-1:2002-02 |
| Number of positions | 16 |
| Upper limiting temperature requirements <100 °C | Test passed |

Climatic tests (D)

| | |
|--|--|
| Specification | DIN 50018:2013-05 |
| Cold stress | -40 °C/2 h |
| Thermal stress | 100 °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 |
| 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 |

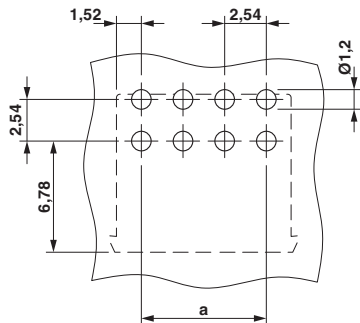
Environmental Product Compliance

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

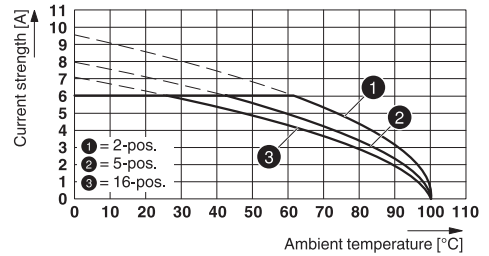
Drawings

Sample set - SAMPLE DMC 0,5/ 5-G1-2,54 THR - 1859521

Drilling diagram

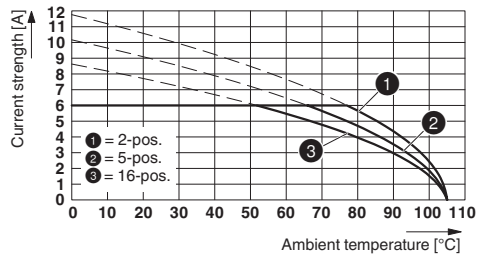


Diagram



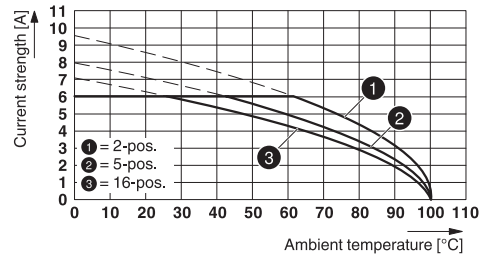
Type: DFMC 0,5/...-ST-2,54 with DMC 0,5/...-G1-2,54 P...THR R...

Diagram



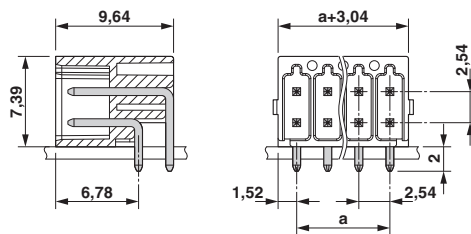
Type: DMCC 0,5/...-ST-2,54 with DMC 0,5/...-G1-2,54 P...THR R...

Diagram



Type: DFMC 0,5/...-ST-2,54-RF with DMC 1,5/...-G1-2,54 P...THR R...

Dimensional drawing



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440402 |
| eCl@ss 11.0 | 27460201 |
| eCl@ss 4.0 | 27260700 |
| eCl@ss 4.1 | 27260700 |
| eCl@ss 5.0 | 27260700 |
| eCl@ss 5.1 | 27260700 |
| eCl@ss 6.0 | 27260700 |
| eCl@ss 7.0 | 27440402 |
| eCl@ss 9.0 | 27440402 |

Sample set - SAMPLE DMC 0,5/ 5-G1-2,54 THR - 1859521

Classifications

ETIM

| | |
|----------|----------|
| 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

EAC

Ex Approvals

Approval details

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

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

Additional products

Sample set - SAMPLE DMC 0,5/ 5-G1-2,54 THR - 1859521

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