

# Sample set - SAMPLE DMC 0,5/11-G1-2,54 THR - 1859589

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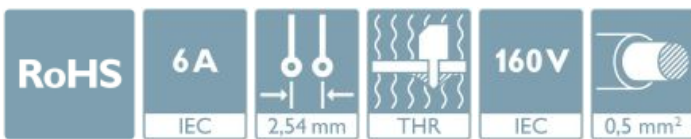


The figure shows a 10-pos. version with 20 contacts


PCB header, nominal cross section: 0.5 mm<sup>2</sup>, color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Gold, type of contact: Male connector, Number of potentials: 22, Number of rows: 2, Number of positions per row: 11, number of connections: 22, 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	 4 055626 111988
GTIN	4055626111988
Weight per Piece (excluding packing)	2.220 g
Custom tariff number	85366990
Country of origin	Germany
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

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### Technical data

#### Item properties

Number of positions	11
Mounting type	THR soldering
Locking	without
Number of levels	2
Number of connections	22
Number of potentials	22
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 ]	28.44 mm
Height [ h ]	7.39 mm
Pitch	2.54 mm
Solder pin [P]	2 mm
Pin spacing	2.54 mm

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## Technical data

### Dimensions for the product

Pin dimensions	0.64 x 0.64 mm
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### 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 <sub>c</sub>	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 <sub>1</sub>	2.7 mΩ

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### Technical data

#### Durability tests (B)

Insertion/withdrawal cycles	100
Contact resistance R <sub>2</sub>	2.9 mΩ
Contact resistance R <sub>2</sub> 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 <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /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

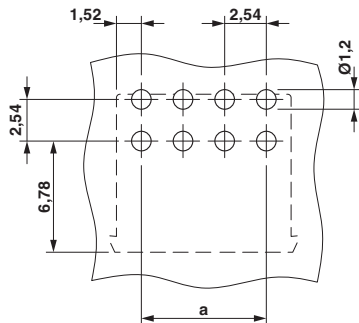
#### Environmental Product Compliance

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

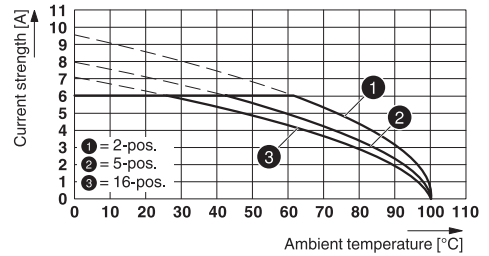
### Drawings

# Sample set - SAMPLE DMC 0,5/11-G1-2,54 THR - 1859589

Drilling diagram

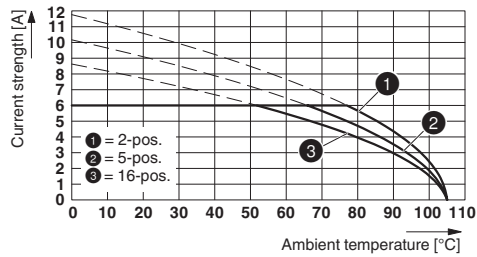


Diagram



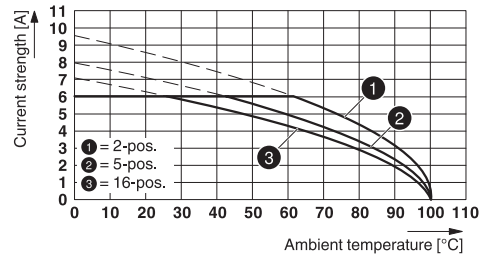
Type: DFMC 0,5/...-ST-2,54 with DMC 0,5/...-G1-2,54 P...THR R...

Diagram



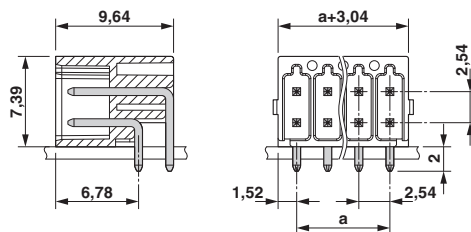
Type: DMCC 0,5/...-ST-2,54 with DMC 0,5/...-G1-2,54 P...THR R...

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

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## 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

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Approvals

EAC

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Ex Approvals

### Approval details

EAC		B.01742
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## 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

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### Additional products

## Sample set - SAMPLE DMC 0,5/11-G1-2,54 THR - 1859589

### Accessories

Printed-circuit board connector - DFMC 0,5/11-ST-2,54 - 1844662



Plug, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 11 with 22 contacts, pitch: 2.54 mm, connection method: spring connection, color: black, contact surface: gold