

DMC 0,5/15-G1-2,54 P20THR R56 - PCB header



1844853

<https://www.phoenixcontact.com/in/products/1844853>

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 documentation. Our general terms of use for downloads are valid.



PCB headers, nominal cross section: 0.5 mm², color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Au, contact connection type: Pin, number of potentials: 30, number of rows: 2, number of positions: 15, number of connections: 30, product range: DMC 0,5/..-G1-THR, pitch: 2.54 mm, mounting: THR soldering / wave soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, number of solder pins per potential: 1, plug-in system: COMBICON DFMC 0,5, Pin connector pattern alignment: Standard, locking: without, mounting method: without, type of packaging: 56 mm wide tape

Your advantages

- Gold-plated contacts ensure transfer quality remains stable over the long term
- Designed for integration into the SMT process
- Conductor connection on several levels enables higher contact density

Commercial data

Item number	1844853
Packing unit	300 pc
Minimum order quantity	300 pc
Note	Made to order (non-returnable)
Sales key	AAA
Product key	AAATDA
GTIN	4046356964227
Weight per piece (including packing)	5.376 g
Weight per piece (excluding packing)	2.22 g
Customs tariff number	85366930
Country of origin	PL

DMC 0,5/15-G1-2,54 P20THR R56 - PCB header



1844853

<https://www.phoenixcontact.com/in/products/1844853>

Technical data

Product properties

Product type	PCB headers
Product family	DMC 0,5/...-G1-THR
Product line	COMBICON Connectors XS
Type	Component suitable for through hole reflow
Number of positions	15
Pitch	2.54 mm
Number of connections	30
Number of rows	2
Number of potentials	30
Mounting flange	without
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Nominal current I_N	6 A
Nominal voltage U_N	160 V
Contact resistance	2.7 mΩ
Rated voltage (III/3)	32 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	160 V
Rated surge voltage (II/2)	2.5 kV

Mounting

Mounting type	THR soldering / wave soldering
Pin layout	Linear pinning

Processing notes

Process	Reflow/wave soldering
Moisture Sensitive Level	MSL 1
Classification temperature T_c	260 °C
Solder cycles in the reflow	3

Material specifications

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)

DMC 0,5/15-G1-2,54 P20THR R56 - PCB header



1844853

<https://www.phoenixcontact.com/in/products/1844853>

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

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

Dimensions

Dimensional drawing	
Pitch	2.54 mm
Width [w]	39.4 mm
Height [h]	9.39 mm
Length [l]	9.64 mm
Installed height	7.39 mm
Solder pin length [P]	2 mm
Pin dimensions	0.64 x 0.64 mm

PCB design

Pin spacing	2.54 mm
Hole diameter	1.2 mm

Mechanical tests

Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

Resistance of inscriptions

Specification	IEC 60068-2-70:1995-12
Result	Test passed

Polarization and coding

Specification	IEC 60512-13-5:2006-02
Result	Test passed

DMC 0,5/15-G1-2,54 P20THR R56 - PCB header



1844853

<https://www.phoenixcontact.com/in/products/1844853>

Contact holder in insert

Specification	IEC 60512-15-1:2008-05
Contact holder in insert Requirements >20 N	Test passed

Insertion and withdrawal forces

Result	Test passed
No. of cycles	100
Insertion strength per pos. approx.	2 N
Withdraw strength per pos. approx.	1 N

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	16

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	IIIa
Comparative tracking index (IEC 60112)	CTI 175
Rated insulation voltage (III/3)	32 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	1.3 mm
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	1.6 mm
Rated insulation voltage (II/2)	160 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	1.6 mm

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 500 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 500 Hz)

DMC 0,5/15-G1-2,54 P20THR R56 - PCB header



1844853

<https://www.phoenixcontact.com/in/products/1844853>

Test duration per axis	2 h
Test directions	X-, Y- and Z-axis

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R_1	2.7 mΩ
Contact resistance R_2	2.9 mΩ
Contact resistance R_2 2nd level	3.1 mΩ
Insertion/withdrawal cycles	100
Insulation resistance, neighboring positions	> 5 MΩ

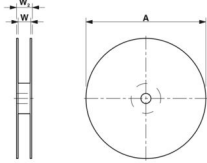
Climatic test

Specification	DIN 50018:2013-05
Corrosive stress	1.0 dm ³ SO ₂ on 300 dm ³ /40 °C/3 cycles
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	1.39 kV

Ambient conditions

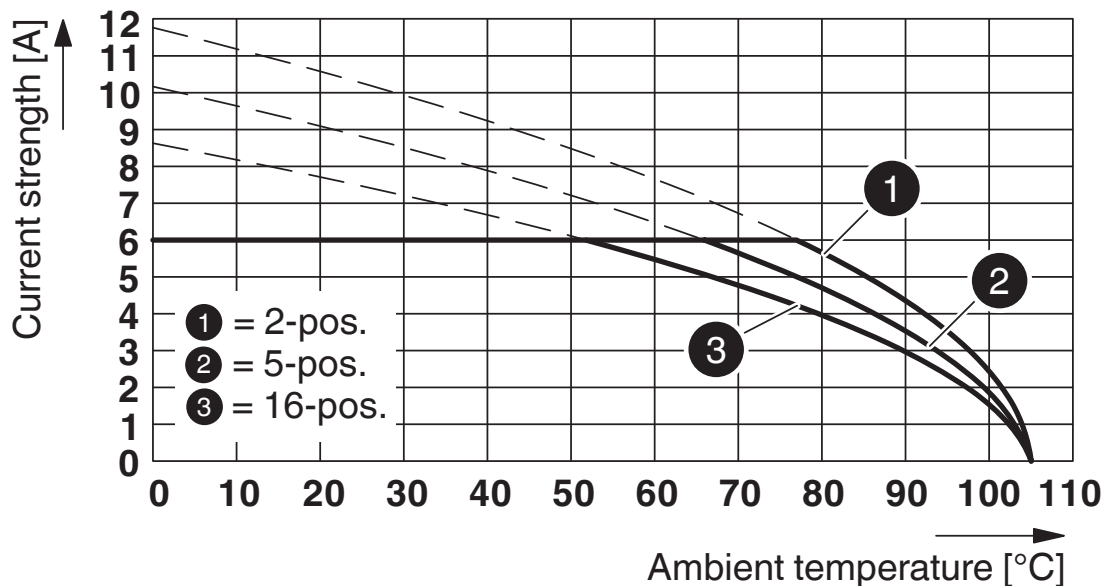
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Dimensional drawing	
Type of packaging	56 mm wide tape
[W] tape width	56 mm
[W2] coil overall dimension	62.4 mm
[A] coil diameter	330 mm
Outer packaging type	Transparent-Bag
ESD level	(D) electrostatically conductive
Specification	DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07

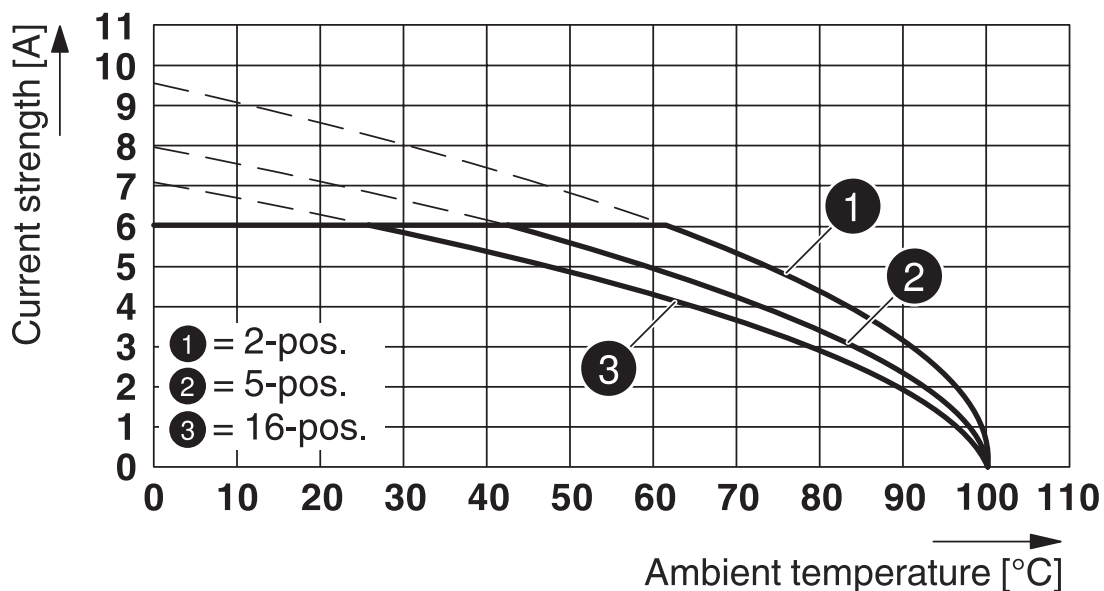
Drawings

Diagram

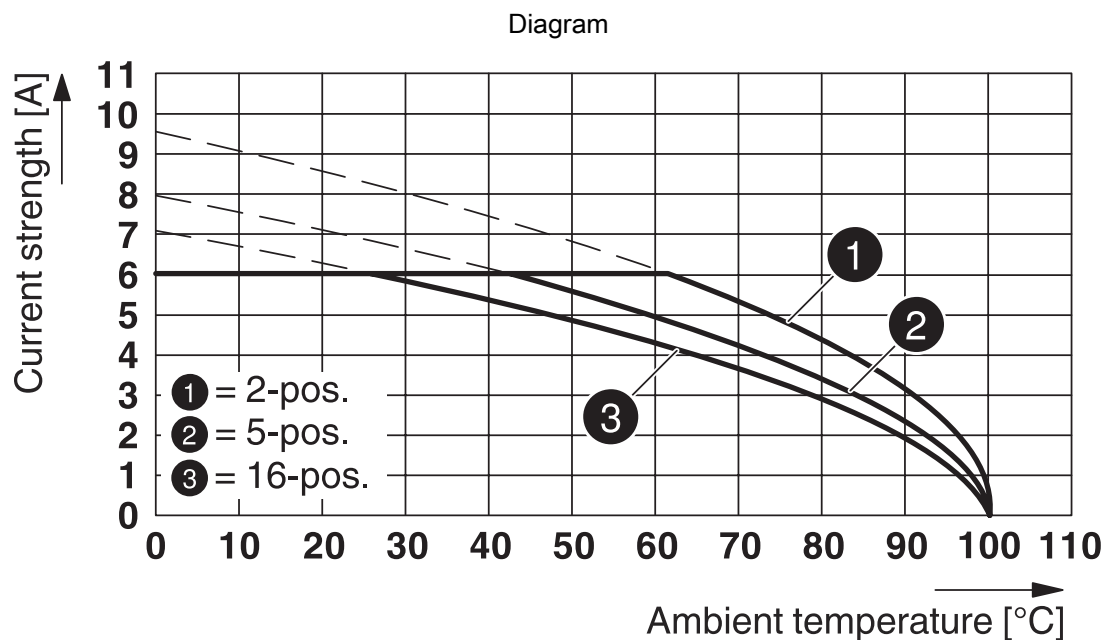


Type: DMCC 0,5/...-ST-2,54 with DMC 0,5/...-G1-2,54 P...THR R...

Diagram

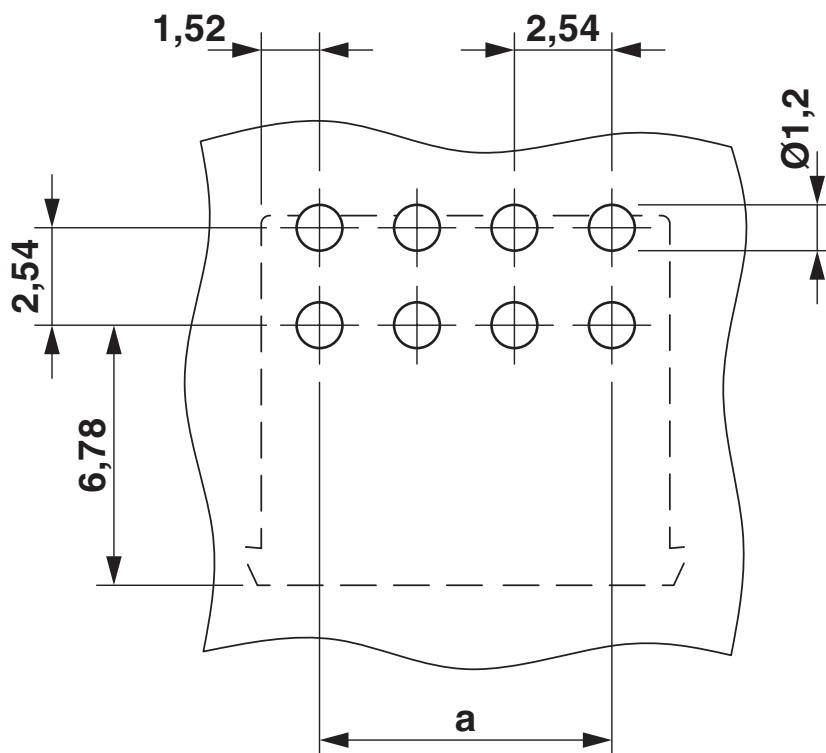


Type: DFMC 0,5/...-ST-2,54-RF with DMC 1,5/...-G1-2,54 P...THR R...



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

Drilling plan/solder pad geometry

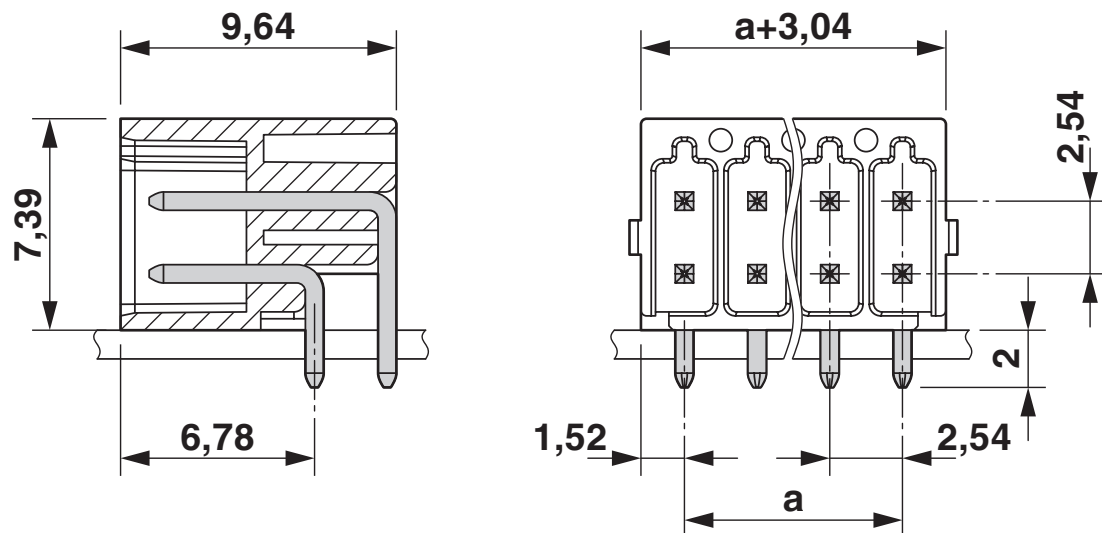


DMC 0,5/15-G1-2,54 P20THR R56 - PCB header

1844853

<https://www.phoenixcontact.com/in/products/1844853>

Dimensional drawing



DMC 0,5/15-G1-2,54 P20THR R56 - PCB header



1844853

<https://www.phoenixcontact.com/in/products/1844853>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/in/products/1844853>

 cULus Recognized Approval ID: E60425-19920306				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	150 V	6 A	-	-
Use group C	50 V	6 A	-	-

 VDE report with production monitoring Approval ID: 40042389				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	160 V	6 A	-	-

DMC 0,5/15-G1-2,54 P20THR R56 - PCB header



1844853

<https://www.phoenixcontact.com/in/products/1844853>

Classifications

ECLASS

ECLASS-11.0	27460201
ECLASS-12.0	27460201
ECLASS-13.0	27460201

ETIM

ETIM 9.0	EC002637
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

DMC 0,5/15-G1-2,54 P20THR R56 - PCB header



1844853

<https://www.phoenixcontact.com/in/products/1844853>

Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

DMC 0,5/15-G1-2,54 P20THR R56 - PCB header



1844853

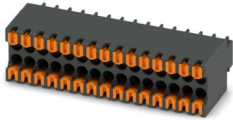
<https://www.phoenixcontact.com/in/products/1844853>

Accessories

DFMC 0,5/15-ST-2,54 - PCB connector

1844701

<https://www.phoenixcontact.com/in/products/1844701>



PCB connector, nominal cross section: 0.5 mm², color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Au, contact connection type: Socket, number of potentials: 30, number of rows: 2, number of positions: 15, number of connections: 30, product range: DFMC 0,5/..-ST, pitch: 2.54 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON DFMC 0,5, locking: without, mounting method: without, type of packaging: packed in cardboard

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.

A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420

info@phoenixcontact.co.in