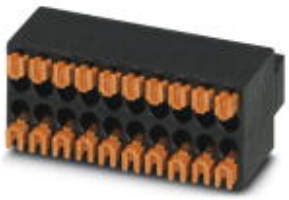
Printed-circuit board connector - DFMC 0,5/ 6-ST-2,54 - 1844617

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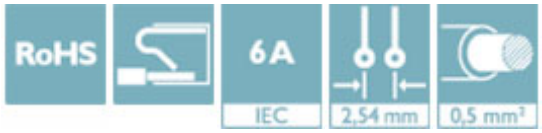


The figure shows a 10-pos. version with 20 contacts

Plug, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 6 with 12 contacts, pitch: 2.54 mm, connection method: spring connection, color: black, contact surface: gold

Your advantages

- Gold-plated contacts ensure transfer quality remains stable over the long term
- 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
- Optimized for tight installation situations: operation and conductor connection from one direction



Key Commercial Data

Packing unit	100 pc
GTIN	4 046356 964289
GTIN	4046356964289

Technical data

Item properties

Brief article description	PCB connector
Plug-in system	MICRO COMBICON - DFMC 0,5
Type of contact	Female connector
Range of articles	DFMC 0,5/..-ST
Pitch	2.54 mm
Number of positions	6
Connection method	Push-in spring connection
Locking	without
Number of levels	2
Number of connections	12

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Technical data

Item properties

Number of potentials	12

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

Connection capacity

Connection method	Push-in spring connection
Conductor cross section solid	0.14 mm² ... 0.5 mm²
Conductor cross section flexible	0.14 mm² ... 0.5 mm²
Conductor cross section AWG / kcmil	26 ... 20
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 0.34 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.14 mm² ... 0.25 mm²
Cylindrical gauge a x b / diameter	- / 1.2 mm
Stripping length	7 mm

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	Selective coating
Metal surface terminal point (top layer)	Tin (5 - 7 µm Sn)
Metal surface terminal point (middle layer)	Nickel (1 - 3 µm Ni)
Metal surface contact area (top layer)	Gold (0.25 Au)
Metal surface contact area (middle layer)	Nickel (2 - 3 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

Material data – actuating element

Insulating material	LCP
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

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Technical data

Dimensions for the product

Length [l]	15.85 mm
Width [w]	15.74 mm
Height [h]	10.5 mm
Pitch	2.54 mm
Height (without solder pin)	10.5 mm
Dimension a	12.7 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	100
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 (dependent on the derating curve)

Termination and connection method

Conductor connection test	The stripped-off ends of the largest conductor can be completely inserted in the opening of the terminal point without using excessive force.
Test result	Test passed
Test – repeated connection and release	IEC 60999-1:1999-11
	Test passed
Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed
Conductor cross section / conductor type / tensile force	0.14 mm² / solid / > 10 N
	0.14 mm² / flexible / > 10 N
	0.5 mm² / solid / > 20 N
	0.5 mm² / flexible / > 20 N

Mechanical tests according to standard

Visual examination	Test passed IEC 60512-1-1:2002-02
Dimensional test	Test passed IEC 60512-1-2:2002-02
Resistance of marking	Test passed IEC 60068-2-70:1995-12
Result	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	100
Insertion strength per pos. approx.	2 N
Withdraw strength per pos. approx.	1 N

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Technical data

Mechanical tests according to standard

Polarization and coding	Test passed IEC 60512-13-5:2006-02
Result	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	20 N

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

Electrical tests - Function

Specification	IEC 60999-1:1999-11

Temperature cycles

Specification	IEC 60999-1:1999-11
Test current (minimum cross section)	4 A AC
Test current (maximum cross section)	6 A AC
Temperature cycles	192

Current carrying capacity / derating curves

Mechanical tests (A)

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
Insertion/withdrawal cycles	100
Contact resistance R_2 1st level	2.9 mΩ
Contact resistance R_2 2nd level	3.1 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV
Insulation resistance, neighboring positions	> 2 GΩ

Climatic tests (D)

Specification	DIN 50018:2013-05
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h

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Technical data

Climatic tests (D)

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)

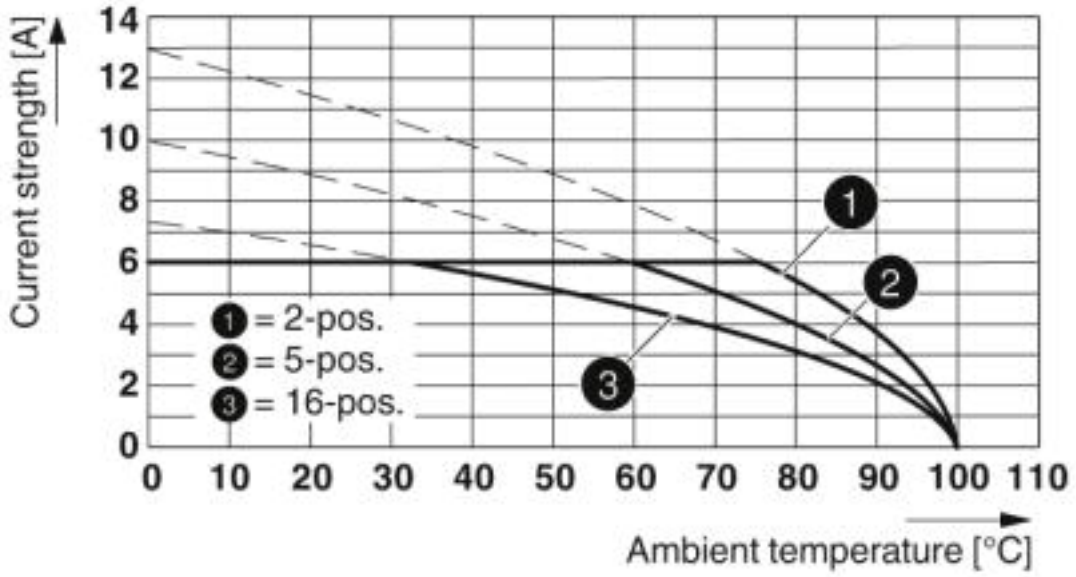
Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

Environmental Product Compliance

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

Drawings

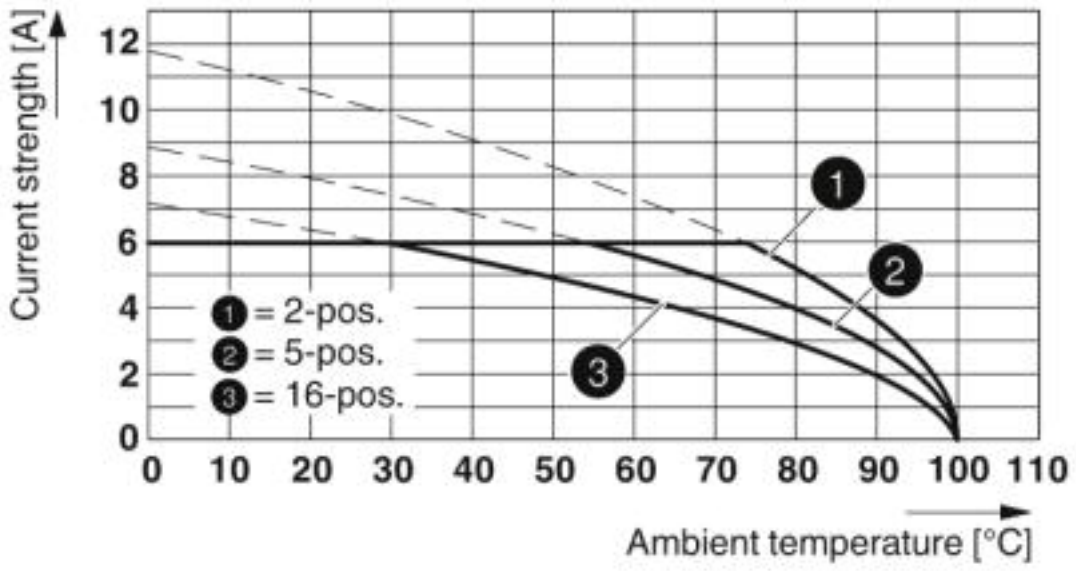
Diagram



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

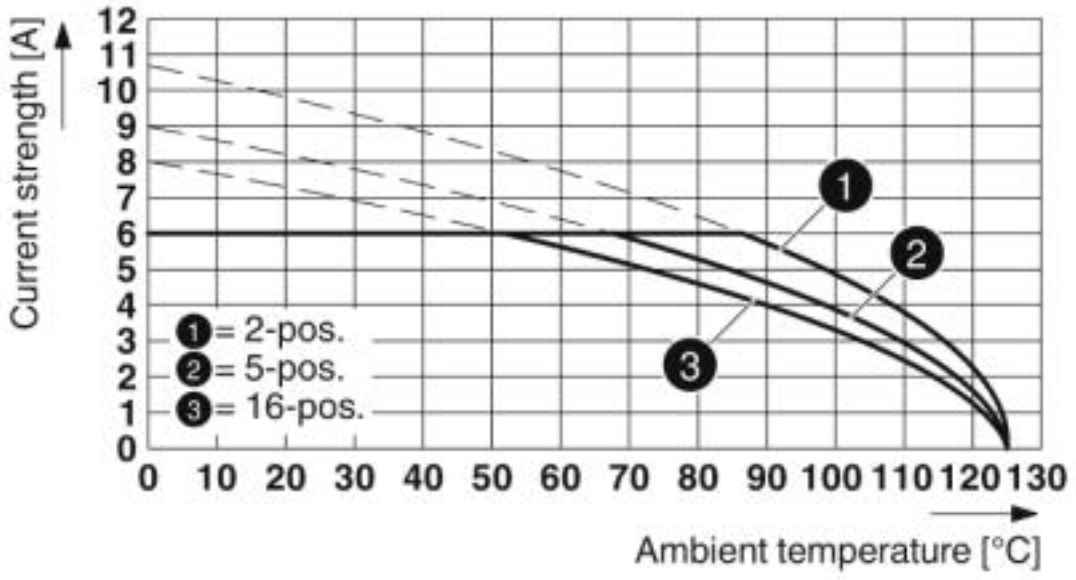
Printed-circuit board connector - DFMC 0,5/ 6-ST-2,54 - 1844617

Diagram



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

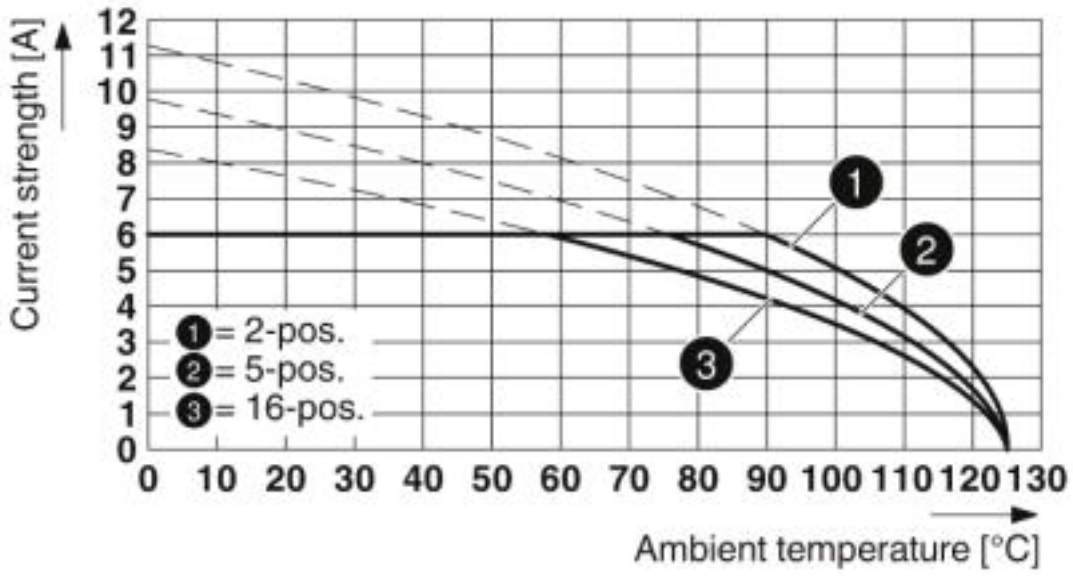
Diagram



Type: DFMC 0,5/...-ST-2,54 with DMC 0,5/...-G1-2,54 P20THR R...

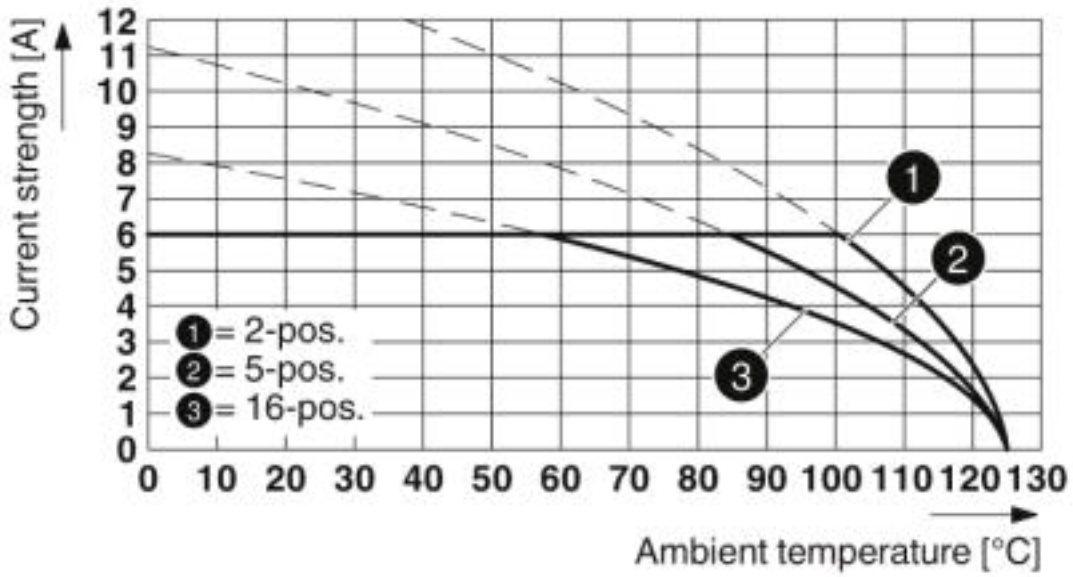
Printed-circuit board connector - DFMC 0,5/ 6-ST-2,54 - 1844617

Diagram



Type: DFMC 0,5/...-ST-2,54 with DMCV 0,5/...-G1-2,54 P20THR R...

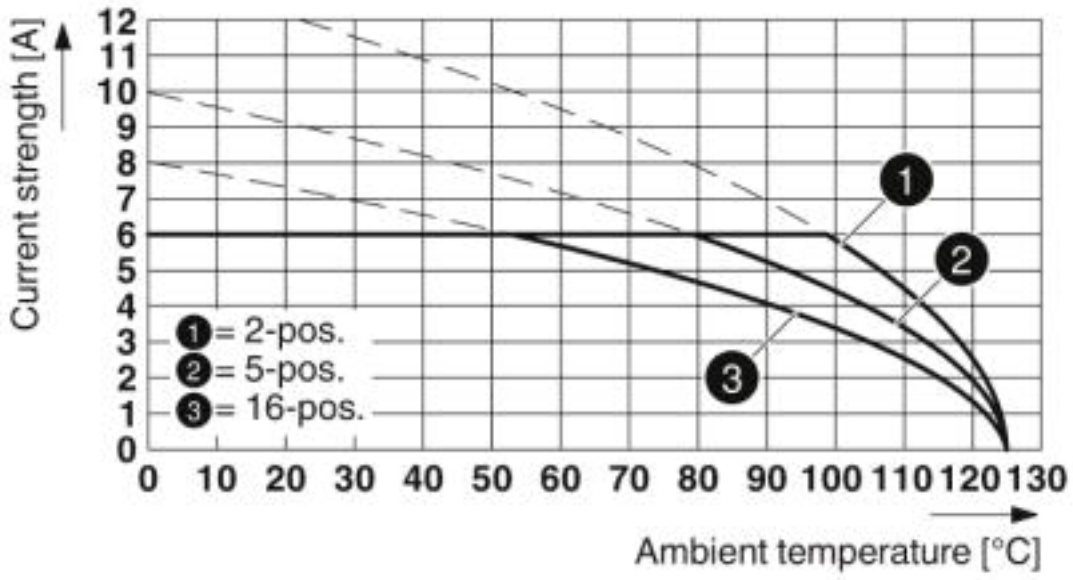
Diagram



Type: DFMC 0,5/...-ST-2,54 with DMC 0,5/...-G-2,54 SMD R...

Printed-circuit board connector - DFMC 0,5/ 6-ST-2,54 - 1844617

Diagram



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

Classifications

eCl@ss

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	27440309
eCl@ss 8.0	27440309
eCl@ss 9.0	27440309

ETIM

ETIM 4.0	EC002643
ETIM 5.0	EC002643
ETIM 6.0	EC002638
ETIM 7.0	EC002638

UNSPSC

UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

Printed-circuit board connector - DFMC 0,5/ 6-ST-2,54 - 1844617

Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

IECEE CB Scheme		http://www.iecee.org/	DE1-55740

Nominal voltage UN	160 V
Nominal current IN	6 A
mm²/AWG/kcmil	0.14-.5

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
mm²/AWG/kcmil	0.14-.5

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
mm²/AWG/kcmil	26-20	26-20

Accessories

Accessories

Cable end sleeve

Printed-circuit board connector - DFMC 0,5/ 6-ST-2,54 - 1844617

Accessories

Ferrule - A 0,25- 7 - 3202478



Ferrule, length: 7 mm, color: silver

Ferrule - A 0,34- 7 - 3009202



Ferrule, length: 7 mm, color: silver

Crimping tool

Crimping pliers - CRIMPFOX 6 - 1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

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

Screwdriver tools

Screwdriver - SZS 0,4X2,0 - 1205202



Micro screwdriver, bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip and twist cap

Additional products

Printed-circuit board connector - DFMC 0,5/ 6-ST-2,54 - 1844617

Accessories

Printed-circuit board connector - DMC 0,5/ 6-G1-2,54 P20THR R44 - 1844769



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

Printed-circuit board connector - DMCV 0,5/ 6-G1-2,54 P20THR R44 - 1844918



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

Printed-circuit board connector - DMC 0,5/ 6-G1-2,54 SMD R44 - 1845069



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 6, 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...

Printed-circuit board connector - DMCV 0,5/ 6-G1-2,54 SMD R44 - 1845218



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

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