

# Printed-circuit board connector - PC 5/ 6-G-7,62 - 1720505

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PCB headers, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm


The figure shows a 5-pos. version of the product

## Your advantages

- ✓ Well-known mounting principle allows worldwide use
- ✓ Standard header – also suitable for connectors with automatically locking Click and Lock system
- ✓ Maximum flexibility when it comes to device design – one header for connectors with different connection technologies



## Key Commercial Data

Packing unit	50 pc
GTIN	 4 046356 113694
GTIN	4046356113694

## Technical data

### Item properties

Brief article description	Feed-through header
Plug-in system	POWER COMBICON 5
Type of contact	Male connector
Range of articles	PC 5/..-G
Pitch	7.62 mm
Number of positions	6
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without
Number of levels	1
Number of connections	6
Number of potentials	6

# Printed-circuit board connector - PC 5/ 6-G-7,62 - 1720505

## Technical data

### Electrical parameters

Nominal current	41 A
Nom. voltage	630 V
Rated voltage	630 V
Rated voltage (III/2)	630 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	6 kV
Rated surge voltage (III/2)	6 kV
Rated surge voltage (II/2)	6 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	hot-dip tin-plated
Metal surface contact area (top layer)	Tin (4 - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 µm Sn)

### Material data - housing

Housing color	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

### Dimensions for the product

Length [ l ]	29.25 mm
Width [ w ]	48.52 mm
Height [ h ]	19.29 mm
Pitch	7.62 mm
Height (without solder pin)	14.29 mm
Solder pin [P]	5 mm
Pin spacing	7.62 mm
Pin dimensions	0.8 x 1 mm

### Dimensions for PCB design

Hole diameter	1.3 mm
Pin spacing	7.62 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	50

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## Technical data

### Packaging information

Denomination packing units	Pcs.
Outer packaging type	Carton

### General product information

Note	In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load.
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### 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)	5.5 mm
Minimum clearance - inhomogeneous field (III/2)	5.5 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	8 mm
Minimum creepage distance value (III/2)	5.5 mm
Minimum creepage distance value (II/2)	5.5 mm

### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6.5 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

### Durability tests (B)

Specification	IEC 60512-5:1992-08
Contact resistance R <sub>1</sub>	0.4 mΩ
Insertion/withdrawal cycles	50
Contact resistance R <sub>2</sub>	0.5 mΩ
Impulse withstand voltage at sea level	7.3 kV
Power-frequency withstand voltage	3.31 kV
Insulation resistance, neighboring positions	>10 <sup>12</sup> Ω

### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	12
Conductor cross section	10 mm <sup>2</sup>
Test current	41 A
Upper limiting temperature requirements <100 °C	Test passed

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## Technical data

### Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Impulse withstand voltage at sea level	7.3 kV
Power-frequency withstand voltage	3.31 kV

### Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Back of hand safety with IP10 access probe

### Vibration test

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

### Standards and Regulations

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

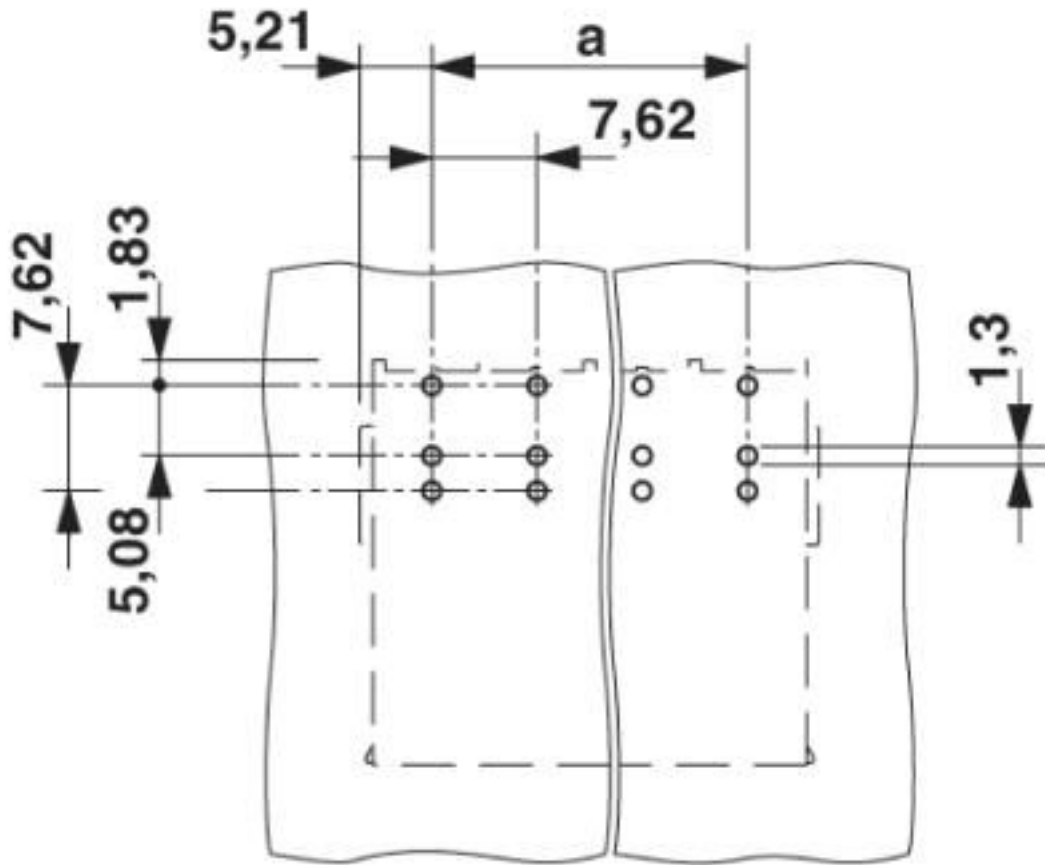
### Environmental Product Compliance

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

## Drawings

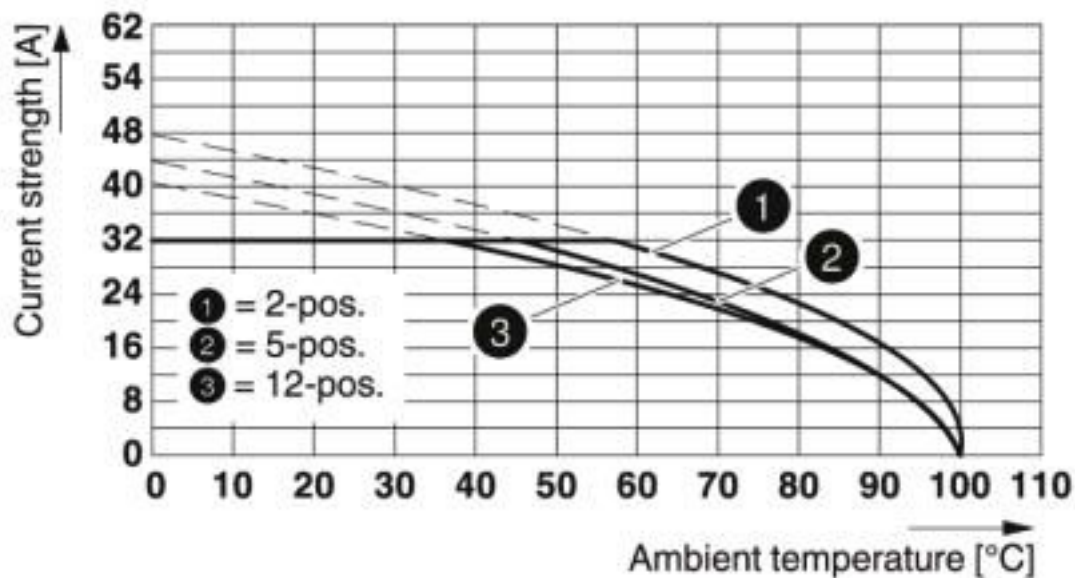
# Printed-circuit board connector - PC 5/ 6-G-7,62 - 1720505

Drilling diagram



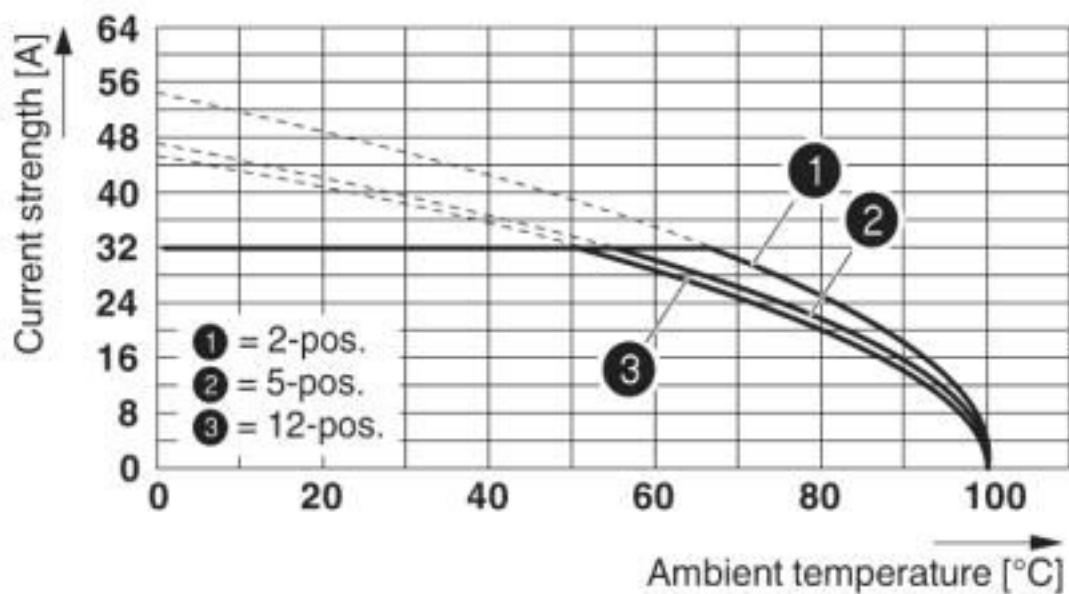
# Printed-circuit board connector - PC 5/ 6-G-7,62 - 1720505

Diagram



Derating curve for: SPC 5/...-ST-7,62 with PC 5/...-G-7,62

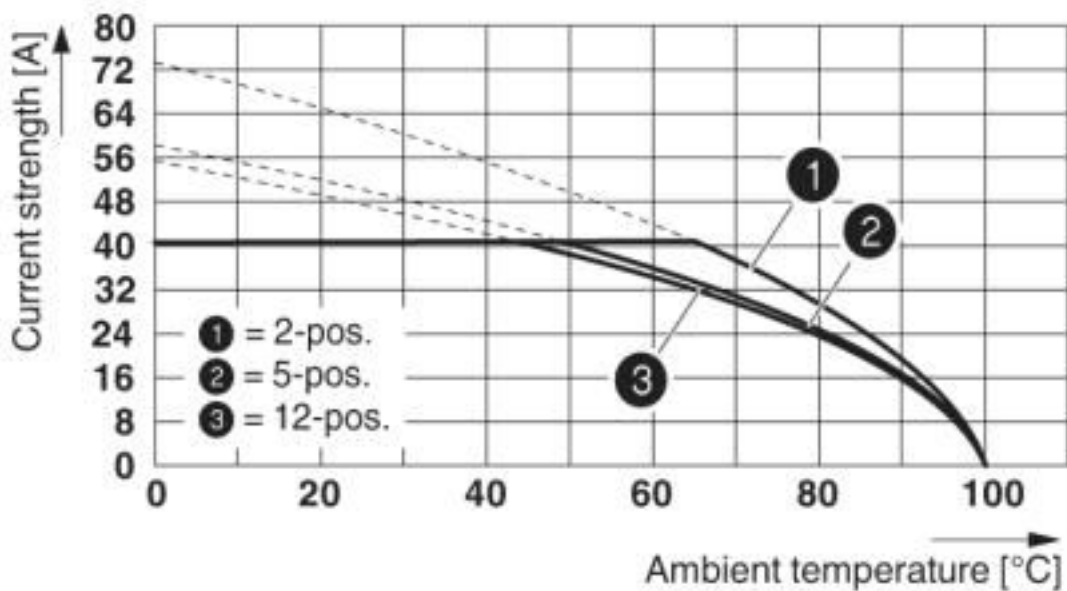
Diagram



Derating curve for: PC 5/...-ST1-7,62 with PC 5/...-G-7,62  
Conductor cross section: 6 mm<sup>2</sup>

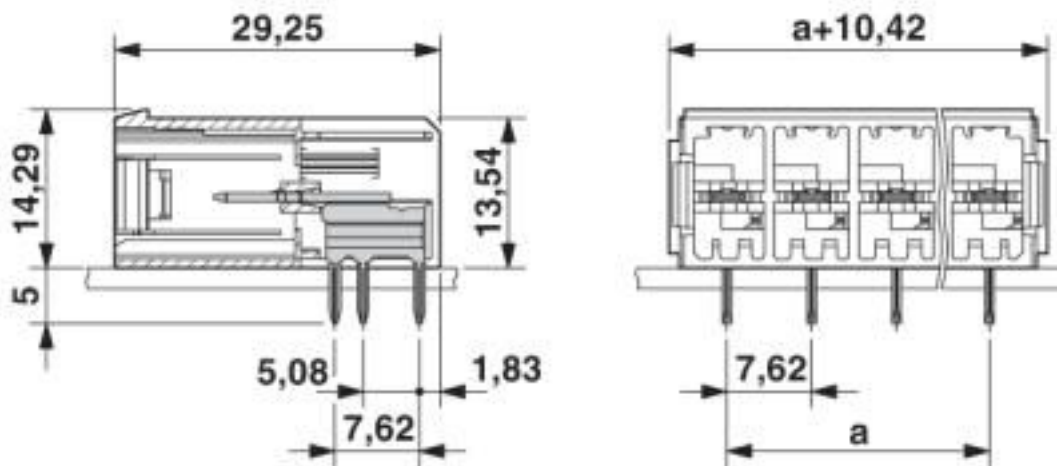
# Printed-circuit board connector - PC 5/ 6-G-7,62 - 1720505

Diagram



Derating curve for: PC 5/...-ST1-7,62 with PC 5/...-G-7,62  
 Conductor cross section: 10 mm<sup>2</sup>

Dimensional drawing



## Classifications

eCl@ss

eCl@ss 10.0.1	27440402
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

# Printed-circuit board connector - PC 5/ 6-G-7,62 - 1720505

## Classifications

### eCl@ss

eCl@ss 7.0	27440402
eCl@ss 8.0	27440402
eCl@ss 9.0	27440402

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002637
ETIM 5.0	EC002637
ETIM 6.0	EC002637
ETIM 7.0	EC002637

### UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
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 / cULus Recognized

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Ex Approvals

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### Approval details

EAC		B.01687
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# Printed-circuit board connector - PC 5/ 6-G-7,62 - 1720505

## Approvals

cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> E60425-19920722	
	B	C	D
Nominal voltage UN	300 V	150 V	300 V
Nominal current IN	41 A	41 A	10 A

## Accessories

### Accessories

#### Coding element

Coding profile - CP-PC RD - 1701967



Coding profile, for plugging into the coding ribs of the plug at a later date, insulating material, color: Red

#### Labeled terminal marker

Marker card - SK 7,62/3,8:FORTL.ZAHLEN - 0804549



Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: 7.62 x 3.8 mm

Marker card - SK 3,8 REEL P7,62 WH CUS - 0825128



Marker card, Card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: continuous x 3.8#mm

## Shroud

Accessories - POWERCOMBICON PCB-SHIELD - 1968387



Accessories, number of positions: 1, pitch: 0 mm, contact surface: Tin

## Printed-circuit board connector - PC 5/ 6-G-7,62 - 1720505

### Accessories

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#### Terminal marking

Marker card - SK U/3,8 WH:UNBEDRUCKT - 0803906



Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 3.8 mm, Number of individual labels: 1440

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Marker strip - SK 3,8 WH:REEL - 0805218



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 90000 mm, lettering field size: continuous x 3.8#mm, Number of individual labels: 210000

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#### Additional products

Printed-circuit board connector - TSPC 5/ 6-ST-7,62 - 1728497



PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

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Printed-circuit board connector - PC 5/ 6-ST1-7,62 - 1777765



PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

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Printed-circuit board connector - SPC 5/ 6-ST-7,62 - 1996058



PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

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## Printed-circuit board connector - PC 5/ 6-G-7,62 - 1720505

### Accessories

#### Printed-circuit board connector - TSPC 5/ 6-STCL-7,62 - 1765450



PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

#### Printed-circuit board connector - SPC 5/ 6-STCL-7,62 - 1718520



PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

#### Printed-circuit board connector - PC 5/ 6-STCL1-7,62 - 1778104



PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

#### Printed-circuit board connector - IPC 5/ 6-G-7,62 - 1708420



PCB headers, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm

#### Printed-circuit board connector - IPC 5/ 6-GU-7,62 - 1708640



PCB headers, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm

## Printed-circuit board connector - PC 5/ 6-G-7,62 - 1720505

### Accessories

Printed-circuit board connector - IPCV 5/ 6-G-7,62 - 1708860



PCB headers, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm

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