

IPC 5/ 7-GF-7,62 - PCB header

1708543

<https://www.phoenixcontact.com/us/products/1708543>



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: 6 mm², color: green, nominal current: 41 A, rated voltage (III/2): 630 V, contact surface: Tin, contact connection type: Socket, number of potentials: 7, number of rows: 1, number of positions: 7, number of connections: 7, product range: IPC 5/...-GF, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm, number of solder pins per potential: 3, plug-in system: COMBICON PC 5, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard

Your advantages

- Well-known mounting principle allows worldwide use
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Inverted header with socket contacts for touch-proof device outputs or PCB/PCB connections
- Screwable flange for superior mechanical stability
- Integrated double steel spring provides additional safety in the event of temperature and power fluctuations

Commercial data

Item number	1708543
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA04
Product key	AADSCB
Catalog page	Page 541 (C-1-2013)
GTIN	4046356089463
Weight per piece (including packing)	22.087 g
Weight per piece (excluding packing)	20.005 g
Customs tariff number	85366930
Country of origin	PL

IPC 5/ 7-GF-7,62 - PCB header

1708543

<https://www.phoenixcontact.com/us/products/1708543>



Technical data

Product properties

Product type	PCB headers
Product family	IPC 5/...-GF
Product line	COMBICON Connectors L
Type	Inverted
Number of positions	7
Pitch	7.62 mm
Number of connections	7
Number of rows	1
Number of potentials	7
Mounting flange	Threaded flange
Pin layout	Linear pinning
Solder pins per potential	3

Data management status

Article revision	06
------------------	----

Electrical properties

Nominal current I_N	41 A
Nominal voltage U_N	630 V
Contact resistance	0.4 mΩ
Rated voltage (III/3)	630 V
Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

Flange

Tightening torque	0.3 Nm ... 0.7 Nm
-------------------	-------------------

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	hot-dip tin-plated
Metal surface contact area (top layer)	Tin (4 - 8 μm Sn)

IPC 5/ 7-GF-7,62 - PCB header



1708543

<https://www.phoenixcontact.com/us/products/1708543>

Metal surface soldering area (top layer)	Tin (4 - 8 µm Sn)
--	-------------------

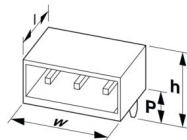
Material data - housing

Color (Housing)	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

Notes

Notes on operation	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.
--------------------	--

Dimensions

Dimensional drawing	
Pitch	7.62 mm
Width [w]	68.54 mm
Height [h]	17.8 mm
Length [l]	30.1 mm
Installed height	12.8 mm
Solder pin length [P]	5 mm
Pin dimensions	1.2 x 0.8 mm

PCB design

Pin spacing	7.62 mm
Hole diameter	1.3 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

IPC 5/ 7-GF-7,62 - PCB header

1708543

<https://www.phoenixcontact.com/us/products/1708543>



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

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	50
Insertion strength per pos. approx.	9 N
Withdraw strength per pos. approx.	9 N

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	12

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	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	630 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	8 mm
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
minimum clearance value - non-homogenous field (III/2)	5.5 mm
minimum creepage distance (III/2)	5.5 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 mm

Environmental and real-life conditions

IPC 5/ 7-GF-7,62 - PCB header

1708543

<https://www.phoenixcontact.com/us/products/1708543>



Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	9.8 kV
Contact resistance R_1	0.4 mΩ
Contact resistance R_2	0.5 mΩ
Insertion/withdrawal cycles	50
Insulation resistance, neighboring positions	> 5 MΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Thermal stress	105 °C/168 h
Power-frequency withstand voltage	4.26 kV

Shocks

Specification	IEC 60068-2-27:2008-02
Pulse shape	Semi-sinusoidal
Acceleration	30g
Shock duration	18 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)

Ambient conditions

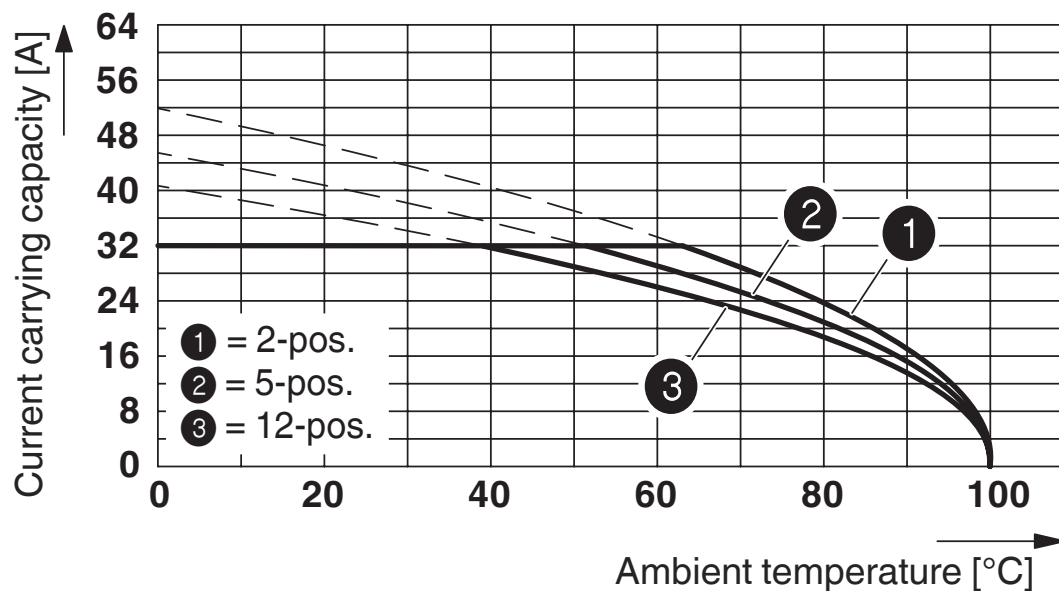
Ambient temperature (operation)	-40 °C ... 105 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard
-------------------	---------------------

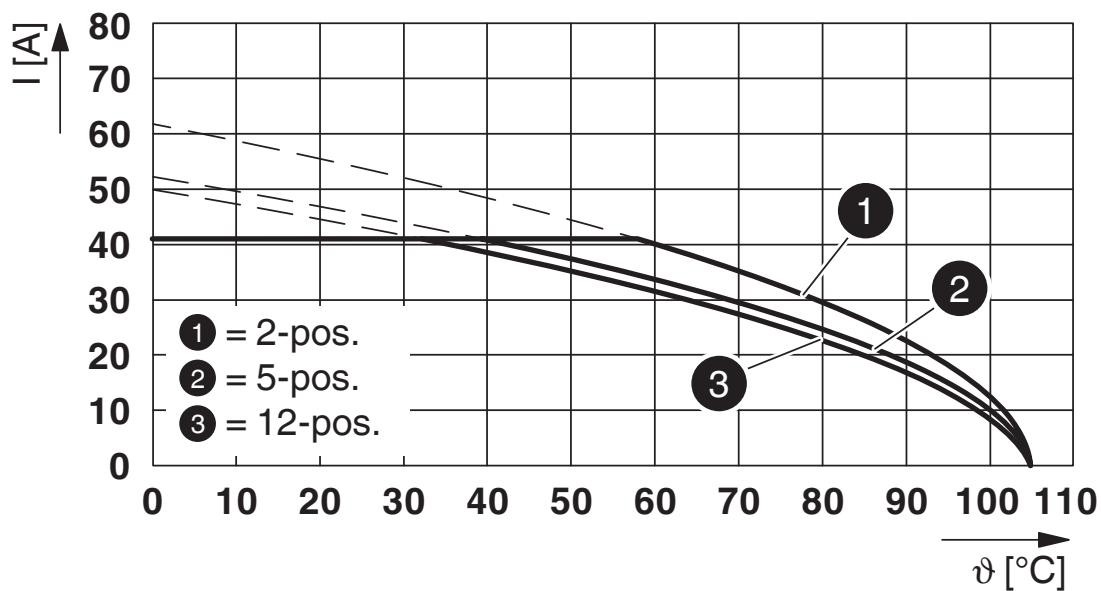
Drawings

Diagram



Type: ISPC 5/...-STF-7,62 with IPC 5/...-GF-7,62

Diagram



Type: IPC 5/...-STF-7,62 with IPC 5/...-GF-7,62

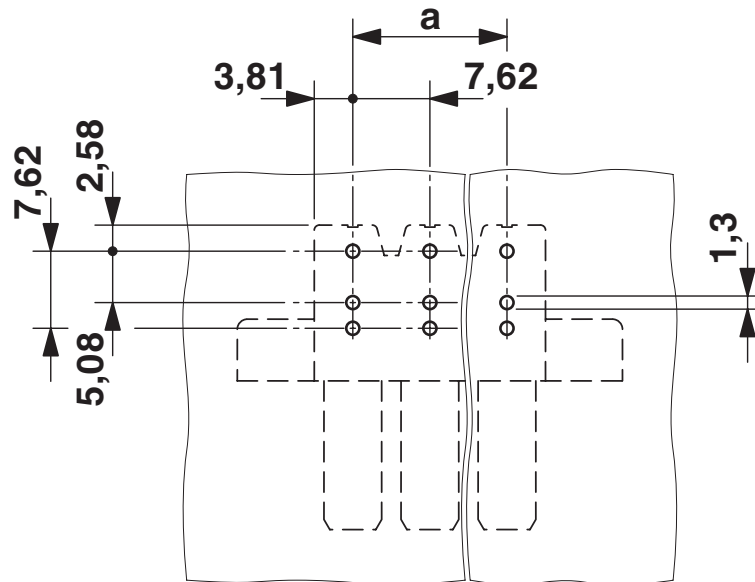
IPC 5/ 7-GF-7,62 - PCB header

1708543

<https://www.phoenixcontact.com/us/products/1708543>



Drilling plan/solder pad geometry



IPC 5/ 7-GF-7,62 - PCB header

1708543

<https://www.phoenixcontact.com/us/products/1708543>



Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1708543>

cULus Recognized Approval ID: E60425-19920722				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
For 600 V applications, additional insulation is required on the solder pins	300 V	41 A	-	-
Use group C				
For 600 V applications, additional insulation is required on the solder pins	300 V	41 A	-	-
Use group D				
Alternative 1	600 V	5 A	-	-

UL Recognized Approval ID: E60425-19920722				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group F				
	600 V	41 A	-	-

IPC 5/ 7-GF-7,62 - PCB header

1708543

<https://www.phoenixcontact.com/us/products/1708543>



Classifications

ECLASS

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

ETIM

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

UNSPSC

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

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%

IPC 5/ 7-GF-7,62 - PCB header

1708543

<https://www.phoenixcontact.com/us/products/1708543>

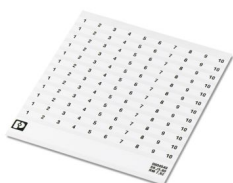


Accessories

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

0804549

<https://www.phoenixcontact.com/us/products/0804549>

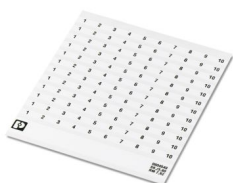


Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: 7.62 x 3.8 mm

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

0825128

<https://www.phoenixcontact.com/us/products/0825128>



Marker 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

IPC 5/ 7-GF-7,62 - PCB header

1708543

<https://www.phoenixcontact.com/us/products/1708543>



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

0803906

<https://www.phoenixcontact.com/us/products/0803906>



Marker card, Din A4, 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

SK 3,8 WH:REEL - Marker strip

0805218

<https://www.phoenixcontact.com/us/products/0805218>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: continuous x 3.8 mm, Number of individual labels: 12

IPC 5/ 7-GF-7,62 - PCB header

1708543

<https://www.phoenixcontact.com/us/products/1708543>



ISPC 5/ 7-STF-7,62 - PCB connector

1749023

<https://www.phoenixcontact.com/us/products/1749023>



PCB connector, nominal cross section: 6 mm², color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Tin, contact connection type: Pin, number of potentials: 7, number of rows: 1, number of positions: 7, number of connections: 7, product range: ISPC 5/...-STF, pitch: 7.62 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 5, locking: Screw locking mechanism, mounting: Screw flange, type of packaging: packed in cardboard

IPC 5/ 7-STF-7,62 - PCB connector

1709209

<https://www.phoenixcontact.com/us/products/1709209>



PCB connector, nominal cross section: 6 mm², color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Tin, contact connection type: Pin, number of potentials: 7, number of rows: 1, number of positions: 7, number of connections: 7, product range: IPC 5/...-STF, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: Z1L Slotted Pozidriv, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 5, locking: Screw locking mechanism, mounting: Screw flange, type of packaging: packed in cardboard

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com