HSCH-S 1,5-6 POWER-9005 - PCB header

1633999

https://www.phoenixcontact.com/us/products/1633999

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PCB headers, nominal cross section: 1.5 mm^2, color: black, nominal current: 8 A, rated voltage (III/2): 300 V, contact surface: Sn, contact connection type: Pin, number of potentials: 6, number of rows: 2, number of positions: 6, number of connections: 6, pitch: 5.08 mm, mounting: THR soldering / wave soldering, pin layout: Linear pinning, number of solder pins per potential: 1, plug-in system: HSCH-S 1,5, Pin connector pattern alignment: Standard, locking: without, mounting method: without, type of packaging: packed in cardboard

Your advantages

- For front connection plugs with tool-free, time saving Push-in connection
- Suitable for mounting using wave soldering processes and through-hole reflow soldering technology (THR)

Commercial data

Item number	1633999
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AC15
Product key	ACHEBF
GTIN	4067923155664
Weight per piece (including packing)	2.75 g
Weight per piece (excluding packing)	2 g
Customs tariff number	85366930
Country of origin	CN

Technical data

Product properties

Product type	PCB headers
Product family	HSCH-S 1,5/..-G
Number of positions	6
Pitch	5.08 mm
Number of connections	6
Number of rows	2
Number of potentials	6
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Properties

Nominal current I_N	8 A
Nominal voltage U_N	200 V
Contact resistance	2.39 mΩ
Rated surge voltage (III/3)	2 kV
Rated voltage (III/2)	300 V
Rated surge voltage (III/2)	2 kV

Mounting

Mounting type	THR soldering / wave soldering
Pin layout	Linear pinning

Processing notes

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	Tin-plated
Metal surface soldering area (top layer)	Tin (4 µm - 8 µm Sn)
Metal surface soldering area (middle layer)	Nickel (1.5 µm - 4 µm Ni)

Material data - housing

Color (Housing)	black (9005)
Insulating material	PA
Flammability rating according to UL 94	V0

Notes

Recommendation	Further information and detailed dimensions are available in the download area.

Safety note

Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	• WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	• The item is intended to be an unencapsulated plug for installation in a housing.
	• Operate the connector only when it is fully plugged in.

Dimensions

Pitch	5.08 mm
Width [w]	15.46 mm
Height [h]	13.55 mm
Length [l]	13.3 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

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

Specification	IEC 60512-13-2:2006-02

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	6 N
Withdraw strength per pos. approx.	3 N

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	6

Insulation resistance

Specification	IEC 61984:2008-10
Insulation resistance, neighboring positions	>1 GΩ

Air clearances and creepage distances |

Rated surge voltage (III/3)	2 kV
Rated insulation voltage (III/2)	300 V
Rated surge voltage (III/2)	2 kV

Environmental and real-life conditions

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	4.8 kV
Contact resistance R_1	2.39 mΩ
Contact resistance R_2	2.43 mΩ
Insertion/withdrawal cycles	25

Climatic test

Specification	EN ISO 22479:2022-06
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	2.21 kV

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

Glow-wire test

Specification	IEC 60695-2-11:2021-10
Temperature	650 °C

Time of exposure	30 s

Ambient conditions

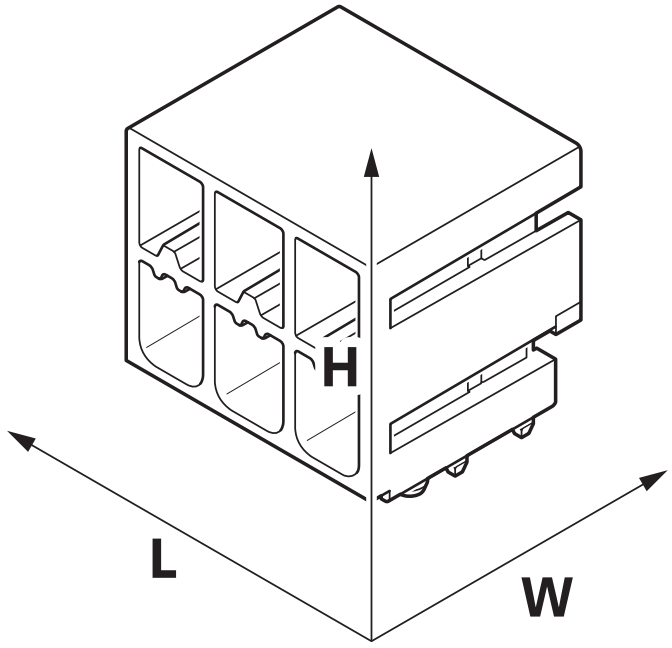
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 70 °C (dependent on the derating curve)

Packaging specifications

Type of packaging	packed in cardboard
Outer packaging type	Carton

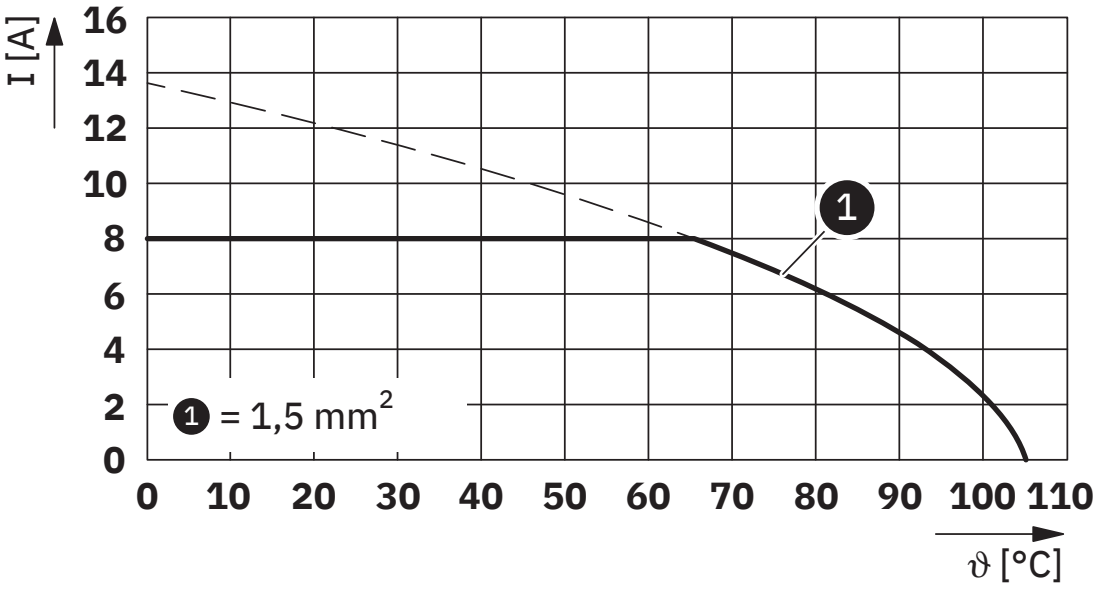
Drawings

Schematic diagram



Schematic figure for illustrating the item dimensions. The figure is not of the desired product. For further details, refer to the product drawings in the “Downloads” tab.

Diagram



Type: HSCP-SP 1,5-6 POWER-9005 with HSCH-S 1,5-6 POWER-9005

Classifications

ECLASS

ECLASS-13.0	27460201
ECLASS-15.0	27460201

ETIM

ETIM 10.0	EC002637

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%

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