

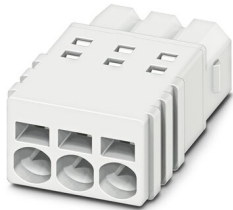
PTSM 0,5/ 6-P-2,5 WH - PCB connector



1704859

<https://www.phoenixcontact.com/in/products/1704859>

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 connector, nominal cross section: 0.5 mm², color: white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: PTSM 0,5/..-P WH, pitch: 2.5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PTSM, locking: without, mounting: without, type of packaging: packed in cardboard

Your advantages

- White design: Stable color when welding and during use
- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- High current carrying capacity of 6 A in very compact dimensions

Commercial Data

Item number	1704859
Packing unit	100 pc
Minimum order quantity	100 pc
Sales Key	AAA
Product Key	AAAFPA
Catalog Page	Page 395 (C-1-2013)
GTIN	4046356740845
Weight per Piece (including packing)	1.694 g
Weight per Piece (excluding packing)	1.694 g
Customs tariff number	85366990
Country of origin	IN

PTSM 0,5/ 6-P-2,5 WH - PCB connector



1704859

<https://www.phoenixcontact.com/in/products/1704859>

Technical Data

Product properties

Type	Standard
Product line	COMBICON Connectors XS
Product type	PCB plug
Product family	PTSM 0,5/...-P WH
Number of positions	6
Pitch	2.5 mm
Number of connections	6
Number of rows	1
Mounting flange	without
Number of potentials	6

Electrical properties

Nominal current I_N	6 A
Nominal voltage U_N	160 V
Degree of pollution	3
Contact resistance	2.4 m Ω
Rated voltage (III/3)	100 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)	320 V
Rated surge voltage (II/2)	2.5 kV

Connection data

Connection technology

Type	Standard
Connector system	COMBICON PTSM
Nominal cross section	0.5 mm ²
Type of contact	Female connector

Interlock

Locking type	without
Mounting flange	without

Conductor connection

Connection method	Push-in spring connection
Conductor/PCB connection direction	0 °
Conductor cross section solid	0.14 mm ² ... 0.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 0.5 mm ² (up to 0.75 mm ² supported, with a stripping length of 7.5 mm and a rated insulation voltage of 32 V at III/2)
Conductor cross section AWG	24 ... 20

PTSM 0,5/ 6-P-2,5 WH - PCB connector



1704859

<https://www.phoenixcontact.com/in/products/1704859>

Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 0.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 0.34 mm ²
Cylindrical gauge a x b / diameter	- / 1.2 mm
Stripping length	6 mm

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 terminal point (top layer)	Tin (4 - 8 µm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 µm Sn)

Material data - housing

Color (Housing)	white (9010)
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

Material data – actuating element

Color ()	()
----------	----

Mounting

Processing notes

Process	Reflow soldering
Moisture Sensitive Level	MSL 1
Classification temperature T _c	260 °C
Solder cycles in the reflow	3

Mechanical tests

Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
Result	Test passed

Repeated connection and disconnection

Specification	IEC 60999-1:1999-11
Result	Test passed

PTSM 0,5/ 6-P-2,5 WH - PCB connector



1704859

<https://www.phoenixcontact.com/in/products/1704859>

Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	0.14 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	0.5 mm ² / solid / > 20 N
	0.75 mm ² / flexible / > 30 N

Insertion and withdrawal forces

Result	Test passed
No. of cycles	10
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	3 N

Contact holder in insert

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

Visual inspection

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

Dimension check

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

Environmental and real-life conditions

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)
Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R ₁	2.4 mΩ

PTSM 0,5/ 6-P-2,5 WH - PCB connector



1704859

<https://www.phoenixcontact.com/in/products/1704859>

Contact resistance R_2	2.3 m Ω
Insertion/withdrawal cycles	10
Insulation resistance, neighboring positions	> 5 M Ω

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	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

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	8

Insulation resistance

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

Temperature cycles

Specification	IEC 60999-1:1999-11
Result	Test passed

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)	100 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)	1.8 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)	1.5 mm
Rated insulation voltage (II/2)	320 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

PTSM 0,5/ 6-P-2,5 WH - PCB connector



1704859

<https://www.phoenixcontact.com/in/products/1704859>

Packaging specifications

Type of packaging	packed in cardboard
Outer packaging type	Carton

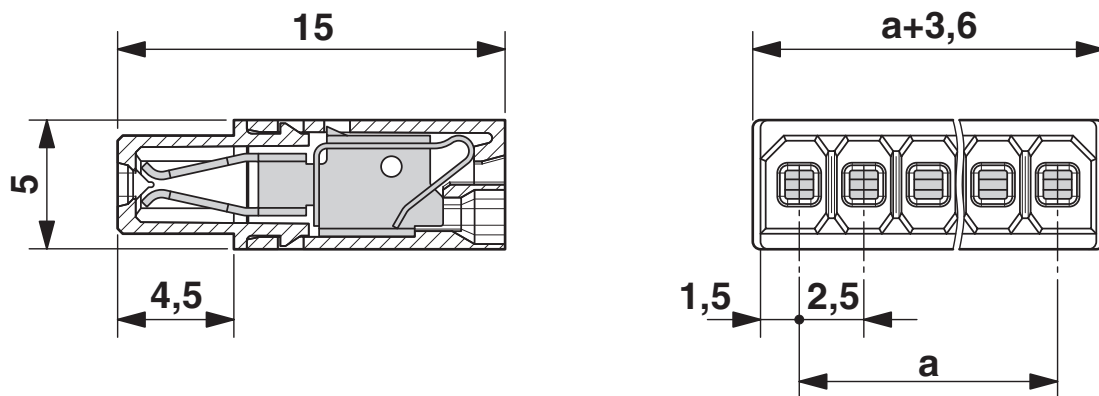
PTSM 0,5/ 6-P-2,5 WH - PCB connector

1704859

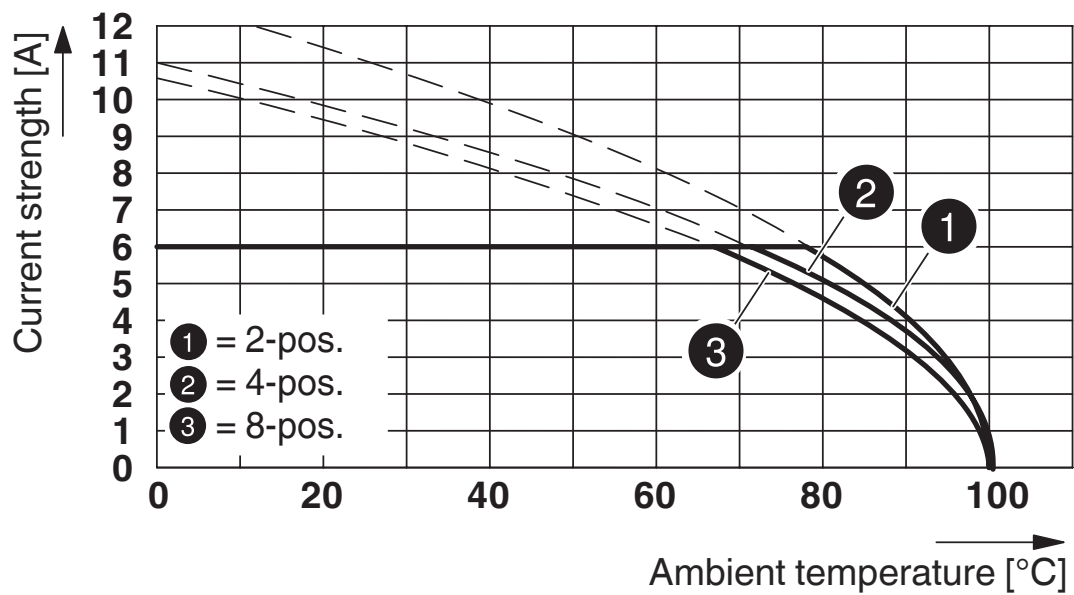
<https://www.phoenixcontact.com/in/products/1704859>

Drawings

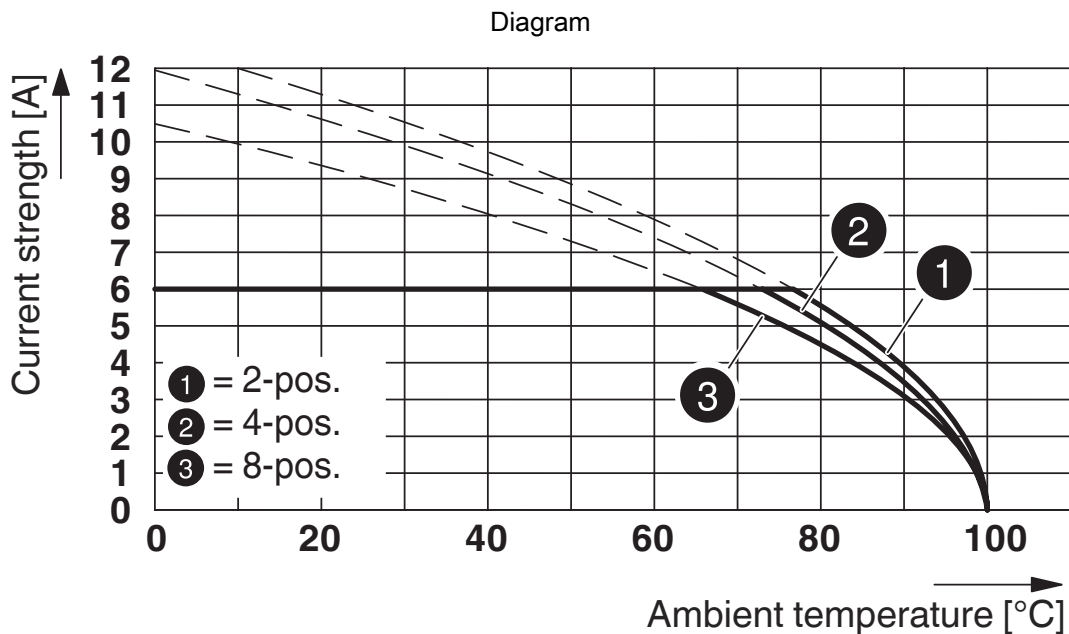
Dimensional drawing



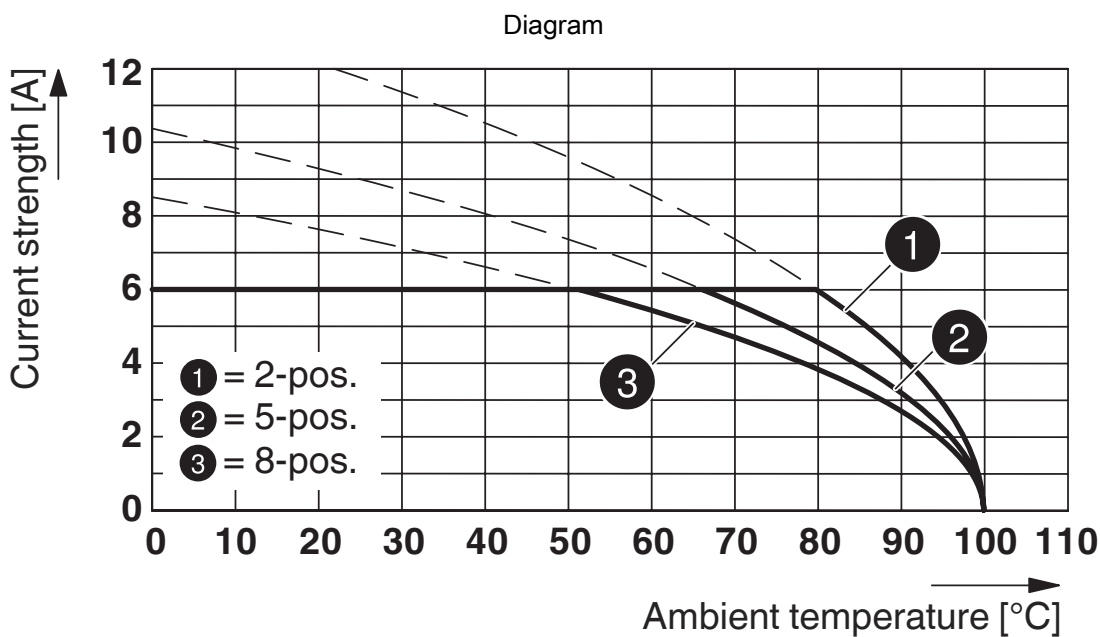
Diagram



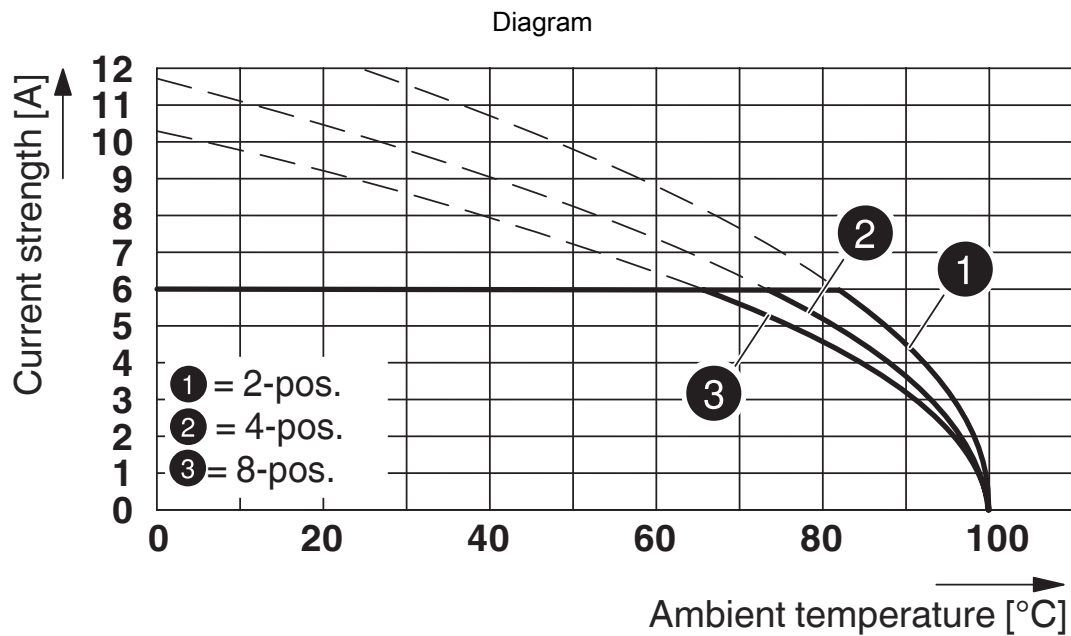
Type: PTSM 0,5/...-P-2,5 WH... with PTSM 0,5/...-HH-2,5-THR WH R...



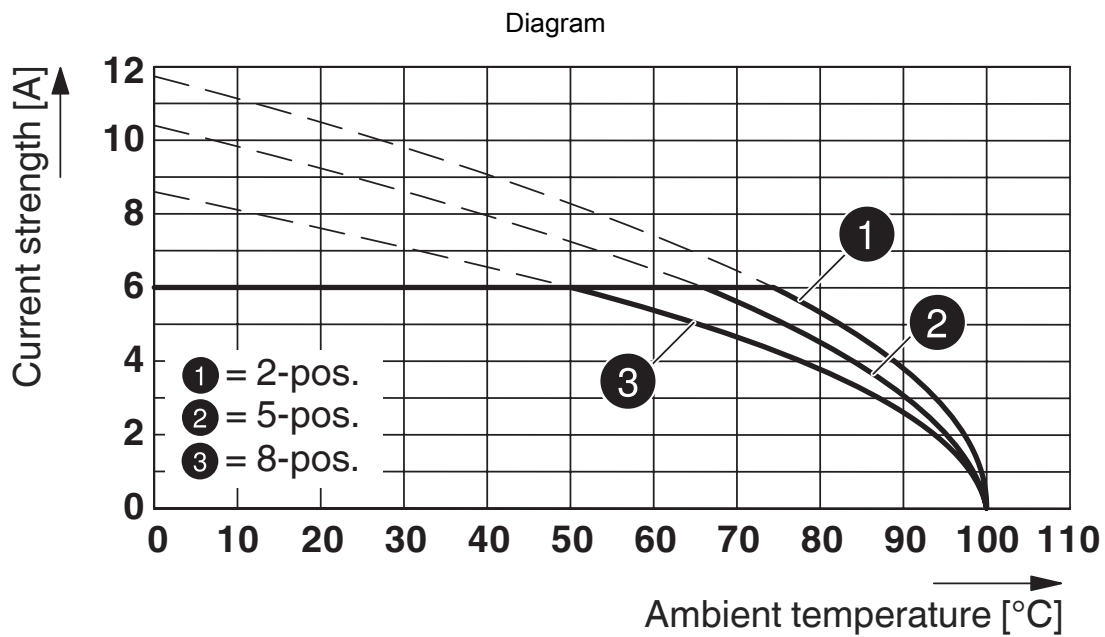
Type: PTSM 0,5/...-P-2,5 WH... with PTSM 0,5/...-HH0-2,5-SMD WH R...



Type: PTSM 0,5/...-P-2,5 WH... with PTSM 0,5/...-HV-2,5-SMD WH R...



Type: PTSM 0,5/...-P-2,5 WH... with PTSM 0,5/...-HV-2,5-THR WH R...



Type: PTSM 0,5/...-P-2,5 WH with PTSM 0,5/...-HTB-2,5-SMD WH R...

PTSM 0,5/ 6-P-2,5 WH - PCB connector



1704859

<https://www.phoenixcontact.com/in/products/1704859>

Approvals



UL Recognized

Approval ID: E118976-20130619



EAC

Approval ID: B.01687



cULus Recognized

Approval ID: E60425-20101209



VDE Zeichengenehmigung

Approval ID: 40048497

PTSM 0,5/ 6-P-2,5 WH - PCB connector



1704859

<https://www.phoenixcontact.com/in/products/1704859>

Classifications

ECLASS

ECLASS-10.0.1	27440309
ECLASS-11.0	27460202

ETIM

ETIM 8.0	EC002638
----------	----------

UNSPSC

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

PTSM 0,5/ 6-P-2,5 WH - PCB connector



1704859

<https://www.phoenixcontact.com/in/products/1704859>

Environmental Product Compliance

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

PTSM 0,5/ 6-P-2,5 WH - PCB connector



1704859

<https://www.phoenixcontact.com/in/products/1704859>

Accessories

SZS 0,4X2,0 - Screwdriver

1205202

<https://www.phoenixcontact.com/in/products/1205202>



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

AI 0,25- 6 BU - Ferrule

3203040

<https://www.phoenixcontact.com/in/products/3203040>



Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: blue

PTSM 0,5/ 6-P-2,5 WH - PCB connector

1704859

<https://www.phoenixcontact.com/in/products/1704859>

AI 0,25- 6 YE - Ferrule

3203024

<https://www.phoenixcontact.com/in/products/3203024>



Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: yellow

AI 0,34- 6 TQ - Ferrule

3203053

<https://www.phoenixcontact.com/in/products/3203053>



Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: turquoise

PTSM 0,5/ 6-P-2,5 WH - PCB connector

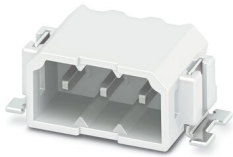
1704859

<https://www.phoenixcontact.com/in/products/1704859>

PTSM 0,5/ 6-HH-2,5-SMD WH R44 - PCB header

1708015

<https://www.phoenixcontact.com/in/products/1708015>

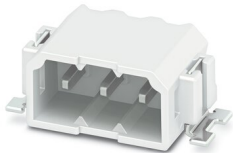


PCB headers, nominal cross section: 0.5 mm², color: signal white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: PTSM 0,5/...-HH-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pad geometry, solder pin [P]: 2 mm, number of solder pins per potential: 1, plug-in system: COMBICON PTSM, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, Article with anti-rotation pin

PTSM 0,5/ 6-HH0-2,5-SMD WH R44 - PCB header

1814951

<https://www.phoenixcontact.com/in/products/1814951>



PCB headers, nominal cross section: 0.5 mm², color: signal white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: PTSM 0,5/...-HH-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pinning, number of solder pins per potential: 1, plug-in system: COMBICON PTSM, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: 44 mm wide tape

PTSM 0,5/ 6-P-2,5 WH - PCB connector

1704859

<https://www.phoenixcontact.com/in/products/1704859>

PTSM 0,5/ 6-HV-2,5-SMD WH R44 - PCB header

1778735

<https://www.phoenixcontact.com/in/products/1778735>



PCB headers, nominal cross section: 0.5 mm², color: signal white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: PTSM 0,5/..-HV-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, number of solder pins per potential: 1, plug-in system: COMBICON PTSM, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: 44 mm wide tape, Article with anti-rotation pin

PTSM 0,5/ 6-HV0-2,5-SMD WH R44 - PCB header

1839237

<https://www.phoenixcontact.com/in/products/1839237>



PCB headers, nominal cross section: 0.5 mm², color: signal white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: PTSM 0,5/..-HV-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pad geometry, number of solder pins per potential: 1, plug-in system: COMBICON PTSM, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

PTSM 0,5/ 6-P-2,5 WH - PCB connector

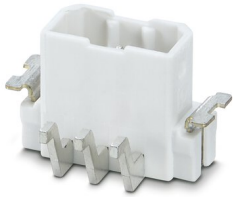
1704859

<https://www.phoenixcontact.com/in/products/1704859>

PTSM 0,5/ 6-HTB-2,5-SMD WH R44 - PCB header

1830168

<https://www.phoenixcontact.com/in/products/1830168>

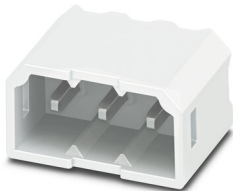


PCB headers, nominal cross section: 0.5 mm², color: signal white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: PTSM 0,5/..-HTB-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pinning, number of solder pins per potential: 1, plug-in system: COMBICON PTSM, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: 44 mm wide tape

PTSM 0,5/ 6-HH-2,5-THR WH R32 - PCB header

1814883

<https://www.phoenixcontact.com/in/products/1814883>



PCB headers, nominal cross section: 0.5 mm², color: signal white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: PTSM 0,5/..-HH-THR WH, pitch: 2.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.1 mm, number of solder pins per potential: 1, plug-in system: COMBICON PTSM, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: 32 mm wide tape

PTSM 0,5/ 6-P-2,5 WH - PCB connector



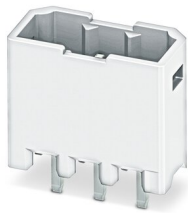
1704859

<https://www.phoenixcontact.com/in/products/1704859>

PTSM 0,5/ 6-HV-2,5-THR WH R32 - PCB header

1815303

<https://www.phoenixcontact.com/in/products/1815303>



PCB headers, nominal cross section: 0.5 mm², color: signal white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: PTSM 0,5/..-HV-THR WH, pitch: 2.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, number of solder pins per potential: 1, plug-in system: COMBICON PTSM, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: 32 mm wide tape

PTSM 0,5/ 6-PI-2,5 WH - Printed-circuit board connector

1709454

<https://www.phoenixcontact.com/in/products/1709454>



PCB connector, nominal cross section: 0.5 mm², color: white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: PTSM 0,5/..-PI WH, pitch: 2.5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PTSM, locking: without, mounting: without, type of packaging: packed in cardboard

Phoenix Contact 2023 © - 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