Printed-circuit board connector - PTSM 0,5/ 5-P-2,5 WH - 1704858

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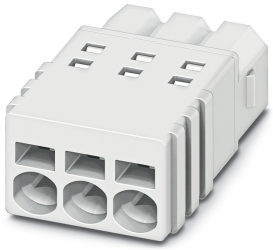
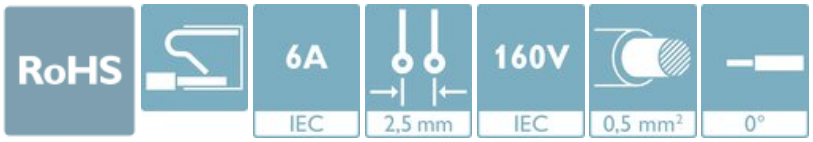


The figure shows a 3-position version

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: 5, Number of rows: 1, Number of positions per row: 5, number of connections: 5, 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 COMPACT 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



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	100 pc
GTIN	4 046356 740838
GTIN	4046356740838
Weight per Piece (excluding packing)	1.400 g
Custom tariff number	85366990
Country of origin	Poland

Technical data

Item properties

Brief article description	PCB connector
Connector system	COMBICON COMPACT PTSM
Type of contact	Female connector

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Technical data

Item properties

Range of articles	PTSM 0,5/..-P WH
Pitch	2.5 mm
Number of positions	5
Locking	without
Number of levels	1
Number of connections	5
Number of potentials	5

Electrical parameters

Nominal current	6 A
Nom. voltage	160 V
Rated voltage (III/3)	100 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	320 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	0.2 mm² ... 0.5 mm² (up to 0.75 mm² supported, at a rated insulation voltage of 32 V at III/2)
Conductor cross section AWG / kcmil	24 ... 20
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 0.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 0.34 mm²
Cylindrical gauge a x b / diameter	- / 1.2 mm
Stripping length	6 mm

Flange specifications

Type of locking	without
Mounting flange	without

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)

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Material data - housing

Housing color	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

Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	15 mm
Width [w]	13.6 mm
Height [h]	5 mm
Pitch	2.5 mm
Height (without solder pin)	5 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	100
Denomination packing units	Pcs.
Outer packaging type	Carton

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
Conductor cross section / conductor type / tensile force	0.14 mm² / solid / > 10 N

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Pull-out test

	0.2 mm² / flexible / > 10 N
	0.5 mm² / solid / > 20 N
	0.75 mm² / flexible / > 30 N

Mechanical tests according to standard

Test specification	IEC 61984
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Resistance of inscriptions	IEC 60068-2-70:1995-12
Insertion and withdrawal force	IEC 60512-13-2:2006-02
No. of cycles	10
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	3 N
Polarization and coding	IEC 60512-13-5:2006-02
Contact holder in insert	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)	1.8 mm
Minimum creepage distance value (III/2)	1.5 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

Current carrying capacity / derating curves

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

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	3 N
Polarization when inserted requirement >20 N	Test passed

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Technical data

Mechanical tests (A)

Contact holder in insert requirements >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R_1	2.4 mΩ
Insertion/withdrawal cycles	10
Contact resistance R_2	2.3 mΩ
Impulse withstand voltage at sea level	2.95 kV

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	8
Upper limiting temperature requirements <100 °C	Test passed

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^3 SO_2 on 300 dm^3/40 °C/1 cycle
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

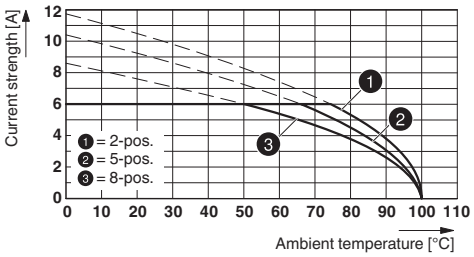
Environmental Product Compliance

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

Drawings

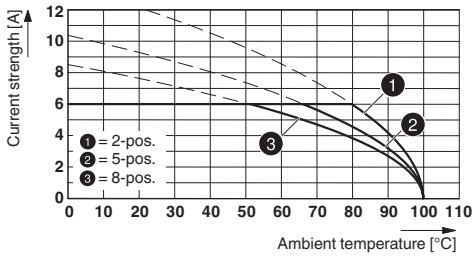
Printed-circuit board connector - PTSM 0,5/ 5-P-2,5 WH - 1704858

Diagram



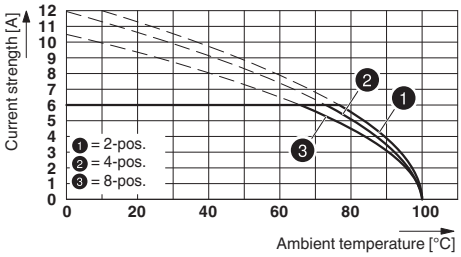
Type: PTSM 0,5/...-P-2,5 WH with PTSM 0,5/...-HTB-2,5-SMD WH R...

Diagram



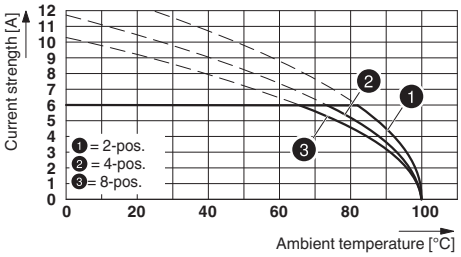
Type: PTSM 0,5/...-P-2,5 WH... with PTSM 0,5/...-HV-2,5-SMD WH R...

Diagram



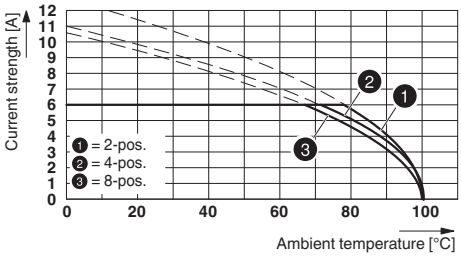
Type: PTSM 0,5/...-P-2,5 WH... with PTSM 0,5/...-HH0-2,5-SMD WH R...

Diagram



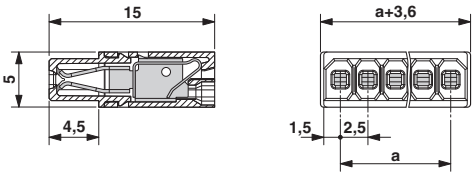
Type: PTSM 0,5/...-P-2,5 WH... with PTSM 0,5/...-HV-2,5-THR WH R...

Diagram



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

Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 11.0	27460202
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700

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Classifications

eCl@ss

eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440309
eCl@ss 9.0	27440309

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002638
ETIM 6.0	EC002638
ETIM 7.0	EC002638

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

Approvals

VDE Zeichengenehmigung / UL Recognized / EAC / cULus Recognized

Ex Approvals

Approval details

Printed-circuit board connector - PTSM 0,5/ 5-P-2,5 WH - 1704858

Approvals

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40048497

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

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E118976-20130619

	B
Nominal voltage UN	150 V
Nominal current IN	5 A
mm²/AWG/kcmil	26-18

EAC		B.01687

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20101209

	B
Nominal voltage UN	150 V
Nominal current IN	5 A
mm²/AWG/kcmil	26-20

Accessories

Accessories

Cable end sleeve

Ferrule - AI 0,25- 6 BU - 3203040

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

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Accessories

Ferrule - AI 0,25- 6 YE - 3203024

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

Ferrule - AI 0,34- 6 TQ - 3203053

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

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

Feed-through header - PTSM 0,5/ 5-HH-2,5-SMD WH R32 - 1708008

PCB header, 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: 5, Number of rows: 1, Number of positions per row: 5, number of connections: 5, 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, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 32 mm wide tape, Article with anti-rotation pin

Printed-circuit board connector - PTSM 0,5/ 5-P-2,5 WH - 1704858

Accessories

Feed-through header - PTSM 0,5/ 5-HH0-2,5-SMD WH R32 - 1814948

PCB header, 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: 5, Number of rows: 1, Number of positions per row: 5, number of connections: 5, product range: PTSM 0,5/..-HH-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pad geometry, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 32 mm wide tape

Feed-through header - PTSM 0,5/ 5-HV-2,5-SMD WH R44 - 1778722

PCB header, 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: 5, Number of rows: 1, Number of positions per row: 5, number of connections: 5, product range: PTSM 0,5/..-HV-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pad geometry, solder pin [P]: 2 mm, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 44 mm wide tape, Article with anti-rotation pin

Feed-through header - PTSM 0,5/ 5-HV0-2,5-SMD WH R44 - 1839224

PCB header, 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: 5, Number of rows: 1, Number of positions per row: 5, number of connections: 5, product range: PTSM 0,5/..-HV-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pad geometry, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 44 mm wide tape

Feed-through header - PTSM 0,5/ 5-HTB-2,5-SMD WH R44 - 1830155

PCB header, 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: 5, Number of rows: 1, Number of positions per row: 5, number of connections: 5, product range: PTSM 0,5/..-HTB-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pad geometry, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 44 mm wide tape

Feed-through header - PTSM 0,5/ 5-HH-2,5-THR WH R32 - 1814870

PCB header, 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: 5, Number of rows: 1, Number of positions per row: 5, number of connections: 5, 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, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 32 mm wide tape

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Accessories

Feed-through header - PTSM 0,5/ 5-HV-2,5-THR WH R32 - 1815293

PCB header, 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: 5, Number of rows: 1, Number of positions per row: 5, number of connections: 5, product range: PTSM 0,5/..-HV-THR WH, pitch: 2.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 32 mm wide tape

Printed-circuit board connector - PTSM 0,5/ 5-PI-2,5 WH - 1709453

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: 5, Number of rows: 1, Number of positions per row: 5, number of connections: 5, 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 COMPACT PTSM, Locking: without, mounting: without, type of packaging: packed in cardboard