PTCM 0,5/ 4-PL-2,5 BK - Printed-circuit board connector

1048118

https://www.phoenixcontact.com/us/products/1048118

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.
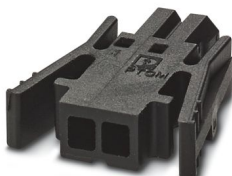
PCB connector, nominal cross section: 0.75 mm^2, color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, contact connection type: Socket, number of rows: 1, number of positions: 4, product range: PTCM 0,5/..-PL, pitch: 2.5 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PTSM, locking: Snap-in locking, mounting: Self-locking flange, type of packaging: packed in cardboard

Your advantages

- High current carrying capacity of 6 A in very compact dimensions
- Intuitive locking mechanism prevents accidental disconnection
- Cost-effective connection of crimped conductors in large quantities
- Tools for manual and automatic crimping available as an option

Commercial data

Item number	1048118
Packing unit	250 pc
Minimum order quantity	250 pc
Note	Made to order (non-returnable)
Sales key	AA01
Product key	AAACPC
GTIN	4055626650050
Weight per piece (including packing)	0.729 g
Weight per piece (excluding packing)	0.729 g
Customs tariff number	85389099
Country of origin	DE

PTCM 0,5/ 4-PL-2,5 BK - Printed-circuit board connector

1048118

https://www.phoenixcontact.com/us/products/1048118

Technical data

Product properties

Product line	COMBICON Connectors XS
Product type	PCB connector
Product family	PTCM 0,5/..-PL
Number of positions	4
Pitch	2.5 mm
Number of rows	1

Electrical properties

Nominal current I_N	6 A
Nominal voltage U_N	160 V
Degree of pollution	3
Rated voltage (III/3)	160 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	0.75 mm²
Contact connection type	Socket

Interlock

Locking type	Snap-in locking
Mounting flange	Self-locking flange

Conductor connection

Connection method	Crimp connection
Conductor/PCB connection direction	0 °
Conductor cross section flexible	0.14 mm² ... 0.75 mm² (Maximum external diameter of the insulation 1.9 mm)
Conductor cross section AWG	26 ... 18 (Maximum external diameter of the insulation 1.9 mm)
Stripping length	4.1 mm ... 4.5 mm

Material specifications

Material data - housing

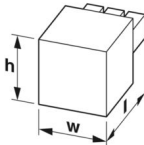|	
Color (Housing)	black (9005)
Insulating material	PA

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

Dimensional drawing	
Pitch	2.5 mm
Width [w]	19.46 mm
Height [h]	16.2 mm
Length [l]	3.9 mm

Environmental and real-life conditions

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

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)	160 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)	2 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

Packaging specifications

Type of packaging	packed in cardboard

PTCM 0,5/ 4-PL-2,5 BK - Printed-circuit board connector

1048118

https://www.phoenixcontact.com/us/products/1048118

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1048118

cULus Recognized
Approval ID: E60425-20101209

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	150 V	6 A	22 - 18	-
Use group D				
	150 V	6 A	22 - 18	-

VDE Zeichengenehmigung
Approval ID: 40048497

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	160 V	6 A	-	0.14 - 0.75

PTCM 0,5/ 4-PL-2,5 BK - Printed-circuit board connector

1048118

https://www.phoenixcontact.com/us/products/1048118

Classifications

ECLASS

ECLASS-11.0	27460202
ECLASS-12.0	27460202
ECLASS-13.0	27460202

ETIM

ETIM 9.0	EC002638

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

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

PTCM 0,5/ 4-PL-2,5 BK - Printed-circuit board connector

1048118

https://www.phoenixcontact.com/us/products/1048118

Accessories

PTCM-MP-P 0,34-0,75 R - Crimp contact

1013777

https://www.phoenixcontact.com/us/products/1013777

Crimp contact, nominal current: 6 A, contact connection type: Socket, connection method: Crimp connection, contact surface: Tin, type of packaging: Belt

PTCM-MP-P 0,14-0,5 R - Crimp contact

1013778

https://www.phoenixcontact.com/us/products/1013778

Crimp contact, nominal current: 6 A, contact connection type: Socket, connection method: Crimp connection, contact surface: Tin, type of packaging: Belt

PTCM 0,5/ 4-PL-2,5 BK - Printed-circuit board connector

1048118

https://www.phoenixcontact.com/us/products/1048118

PTCM-MP-P 0,34-0,75 - Crimp contact

1013780

https://www.phoenixcontact.com/us/products/1013780

Crimp contact, nominal current: 6 A, contact connection type: Socket, connection method: Crimp connection, contact surface: Tin, type of packaging: Bulk goods

PTCM-MP-P 0,14-0,5 - Crimp contact

1013781

https://www.phoenixcontact.com/us/products/1013781

Crimp contact, nominal current: 6 A, contact connection type: Socket, connection method: Crimp connection, contact surface: Tin, type of packaging: Bulk goods

PTCM 0,5/ 4-PL-2,5 BK - Printed-circuit board connector

1048118

https://www.phoenixcontact.com/us/products/1048118

PTSM 0,5/ 4-HH-2,5-SMD R32 - PCB header

1778780

https://www.phoenixcontact.com/us/products/1778780

PCB headers, nominal cross section: 0.5 mm^2, color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PTSM 0,5/..-HH-SMD, 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: 32 mm wide tape, Article with anti-rotation pin

PTSM 0,5/ 4-HH0-2,5-SMD R32 - PCB header

1808213

https://www.phoenixcontact.com/us/products/1808213

PCB headers, nominal cross section: 0.5 mm^2, color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PTSM 0,5/..-HH-SMD, 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: 32 mm wide tape

PTCM 0,5/ 4-PL-2,5 BK - Printed-circuit board connector

1048118

https://www.phoenixcontact.com/us/products/1048118

PTSM 0,5/ 4-HH1-2,5-THR R32 - PCB header

1814799

https://www.phoenixcontact.com/us/products/1814799

PCB headers, nominal cross section: 0.5 mm^2, color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PTSM 0,5/..-HH-THR, 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, Article with anti-rotation pin

PTSM 0,5/ 4-HH-2,5-THR R32 - PCB header

1778641

https://www.phoenixcontact.com/us/products/1778641

PCB headers, nominal cross section: 0.5 mm^2, color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PTSM 0,5/..-HH-THR, 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

PTCM 0,5/ 4-PL-2,5 BK - Printed-circuit board connector

1048118

https://www.phoenixcontact.com/us/products/1048118

PTSM 0,5/ 4-HV-2,5-THR R32 - PCB header

1778573

https://www.phoenixcontact.com/us/products/1778573

PCB headers, nominal cross section: 0.5 mm^2, color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PTSM 0,5/..-HV-THR, 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/ 4-PI-2,5 BK - Printed-circuit board connector

1709437

https://www.phoenixcontact.com/us/products/1709437

PCB connector, nominal cross section: 0.5 mm^2, color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PTSM 0,5/..-PI, 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

PTCM 0,5/ 4-PL-2,5 BK - Printed-circuit board connector

1048118

https://www.phoenixcontact.com/us/products/1048118

PTCM 0,5/ 4-PI-2,5 BK - Printed-circuit board connector

1047898

https://www.phoenixcontact.com/us/products/1047898

PCB connector, nominal cross section: 0.75 mm^2, color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: PTCM 0,5/..-PI, pitch: 2.5 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PTSM, locking: Snap-in locking, mounting: Engagement nose, type of packaging: packed in cardboard

CAC-PTCM1015462/D - Cable

1084513

https://www.phoenixcontact.com/us/products/1084513

Assembled PCB connector / Connecting cable with 2 printed circuit board connectors, rated current: 6 A, cable length: Free input (0.1 ... 3.0 m), Head 1: 4-position , pitch: 2.5 mm , Crimp connection , Socket, Color: white, Cable type:Individual litz wire, PVC, 22 AWG, white, Head 2: 4-position, pitch: 2.5 mm , Crimp connection , Socket, Color: white, Cable type:Individual litz wire, PVC, 20 AWG, white, Individual litz wire, PVC, 22 AWG, white

PTCM 0,5/ 4-PL-2,5 BK - Printed-circuit board connector

1048118

https://www.phoenixcontact.com/us/products/1048118

CAC-PTCM1015462/1015244 - Assembled PCB connectors

1084535

https://www.phoenixcontact.com/us/products/1084535

Assembled PCB connector / Connecting cable with 2 printed circuit board connectors, rated current: 6 A, cable length: Free input (0.1 ... 3.0 m), Head 1: 4-position , pitch: 2.5 mm , Crimp connection , Socket, Color: white, Cable type:Individual litz wire, PVC, 22 AWG, white, Head 2: 4-position, pitch: 2.5 mm , Crimp connection , Pin, Color: white, Cable type:Individual litz wire, PVC, 20 AWG, white, Individual litz wire, PVC, 22 AWG, white