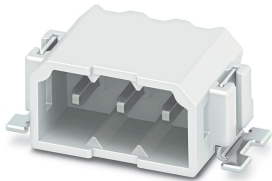


Feed-through header - PTSM 0,5/ 4-HH-2,5-SMD WH R32 - 1708007

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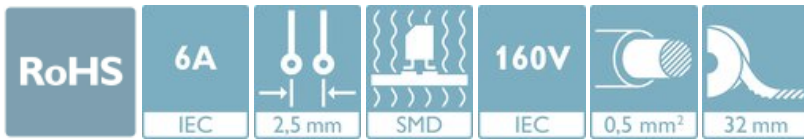


The figure shows a 3-position version

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: 4, Number of rows: 1, Number of positions per row: 4, number of connections: 4, 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

Your advantages

- ✓ White design: Stable color when welding and during use
- ✓ Designed for integration into the SMT soldering process
- ✓ Supplied in tape-on-reel packing according to IEC 60286-3 for automated mounting
- ✓ Additional solder anchors reduce the mechanical strain on the soldering spots



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	600 pc
GTIN	
GTIN	4046356960632
Weight per Piece (excluding packing)	1.367 g
Custom tariff number	85366930
Country of origin	India

Technical data

Item properties

Brief article description	Feed-through header
Connector system	COMBICON COMPACT PTSM
Type of contact	Male connector

Feed-through header - PTSM 0,5/ 4-HH-2,5-SMD WH R32 - 1708007

Technical data

Item properties

Range of articles	PTSM 0,5/..-HH-SMD WH
Pitch	2.5 mm
Number of positions	4
Mounting type	SMD soldering
Pin layout	Linear pad geometry
Locking	without
Number of levels	1
Number of connections	4
Number of potentials	4
Pin connector pattern alignment	Standard

Electrical parameters

Nominal current	6 A
Nom. voltage	160 V
Rated voltage (III/3)	125 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

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 contact area (top layer)	Tin (3 - 5 µm Sn)
Metal surface contact area (middle layer)	Nickel (1.3 - 3 µm Ni)
Metal surface soldering area (top layer)	Tin (3 - 5 µm Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 - 3 µm Ni)

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

Flange specifications

Type of locking	without
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Feed-through header - PTSM 0,5/ 4-HH-2,5-SMD WH R32 - 1708007

Technical data

Flange specifications

Mounting flange	without
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Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	9.5 mm
Width [w]	13.8 mm
Height [h]	7 mm
Pitch	2.5 mm
Height (without solder pin)	5 mm
Solder pin [P]	2 mm
Pin spacing	2.50 mm

Dimensions for PCB design

Hole diameter	1.1 mm
Pin spacing	2.50 mm
Pad geometry	1.2 x 3.2 mm

Packaging information

Type of packaging	32 mm wide tape
Pieces per package	600
Denomination packing units	Pcs.
[W] tape width	32 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	38.4 mm
Outer packaging type	Transparent-Bag
ESD level	(D) electrostatically conductive
Specification	DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07

Processing notes

Process	Reflow soldering
Specification	Following IPC/JEDEC J-STD-020D.1:2008-03
	Following IEC 60068-2-58:2005-02
Moisture Sensitive Level	MSL 1
Classification temperature T _c	260 °C
Solder cycles in the reflow	3

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C

Feed-through header - PTSM 0,5/ 4-HH-2,5-SMD WH R32 - 1708007

Technical data

Ambient conditions

Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)
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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)	1.9 mm
Minimum creepage distance value (III/2)	1.5 mm
Minimum creepage distance value (II/2)	1.6 mm

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	4 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R ₁	3 mΩ
Insertion/withdrawal cycles	10
Contact resistance R ₂	4 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)

Feed-through header - PTSM 0,5/ 4-HH-2,5-SMD WH R32 - 1708007

Technical data

Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Back of hand safety with IP10 access probe

Vibration test

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

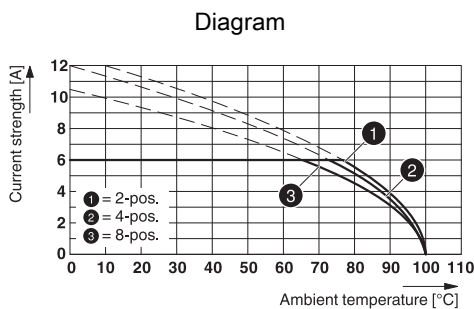
Standards and Regulations

Connection in acc. with standard	EN-VDE
	UL
Flammability rating according to UL 94	V0

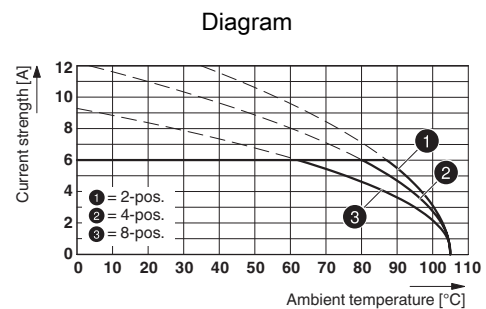
Environmental Product Compliance

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

Drawings



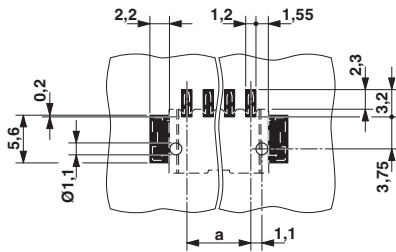
Type: PTSM 0,5/...-PL-2,5 ... with PTSM 0,5/...-HH-2,5-SMD... R...



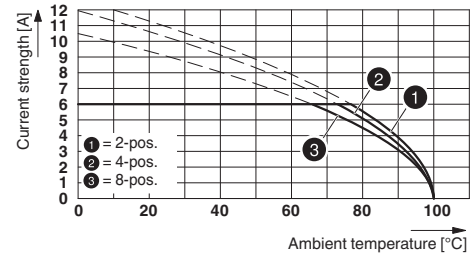
Type: PTCM 0,5/...-PL-2,5 WH with PTSM 0,5/...-HH(0)-2,5-SMD WH R...

Feed-through header - PTSM 0,5/ 4-HH-2,5-SMD WH R32 - 1708007

Drilling diagram

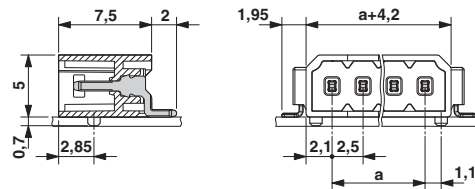


Diagram



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

Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 11.0	27460201
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440402
eCl@ss 9.0	27440402

ETIM

ETIM 4.0	EC002637
ETIM 6.0	EC002637
ETIM 7.0	EC002637

UNSPSC

UNSPSC 13.2	39121409
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Feed-through header - PTSM 0,5/ 4-HH-2,5-SMD WH R32 - 1708007

Classifications

UNSPSC

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

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		
mm ² /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		

EAC		B.01687
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Feed-through header - PTSM 0,5/ 4-HH-2,5-SMD WH R32 - 1708007

Approvals

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20110108
		B	
Nominal voltage UN			150 V
Nominal current IN			6 A

Accessories

Additional products

Sample set - SAMPLE PTSM 0,5/ 4-HH-2,5-SMD - 1786060



PCB header, nominal cross section: 0.5 mm², color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 4, Number of rows: 1, Number of positions per row: 4, number of connections: 4, product range: PTSM 0,5/..-HH-SMD, 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: packed in cardboard, Article with anti-rotation pin

Printed-circuit board connector - PTSM 0,5/ 4-P-2,5 WH - 1704857



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: 4, Number of rows: 1, Number of positions per row: 4, number of connections: 4, 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

Feed-through header - PTSM 0,5/ 4-HHI-2,5-SMD WHR44 - 1707993



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: Female connector, number of potentials: 4, Number of rows: 1, Number of positions per row: 4, number of connections: 4, product range: PTSM 0,5/..-HHI-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/ 4-HH-2,5-SMD WH R32 - 1708007

Accessories

Feed-through header - PTSM 0,5/ 4-HHI0-2,5-SMD WHR44 - 1815219



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: Female connector, number of potentials: 4, Number of rows: 1, Number of positions per row: 4, number of connections: 4, product range: PTSM 0,5/..-HHI-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/ 4-HHI-2,5-THR WH R32 - 1815002



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: Female connector, number of potentials: 4, Number of rows: 1, Number of positions per row: 4, number of connections: 4, product range: PTSM 0,5/..-HHI-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

Printed-circuit board connector - PTSM 0,5/ 4-PL-2,5 WH - 1709460



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: 4, Number of rows: 1, Number of positions per row: 4, number of connections: 4, product range: PTSM 0,5/..-PL WH, pitch: 2.5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON COMPACT PTSM, Locking: Snap-in locking, mounting: Self-locking flange, type of packaging: packed in cardboard