PCB terminal block - PTSM 0,5/ 1-2,5-H SMD WH L R24 - 1840035

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

The figure shows the standard type

PCB terminal block, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of potentials: 1, Number of rows: 1, Number of positions per row: 1, product range: PTSM 0,5/..-H-SMD WH, pitch: 2.5 mm, connection method: Push-in spring connection, mounting: SMD soldering, conductor/PCB connection direction: 0 °, color: white, Pin layout: Linear pad geometry, type of packaging: 24 mm wide tape

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
- Designed for integration into the SMT soldering process
- Additional solder anchors reduce the mechanical strain on the soldering spots

Key Commercial Data

Packing unit	1 pc
Minimum order quantity	1000 pc
GTIN	4 046356 897617
GTIN	4046356897617
Weight per Piece (excluding packing)	0.740 g
Custom tariff number	85369010
Country of origin	India

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	PTSM 0,5/..-H-SMD WH

PCB terminal block - PTSM 0,5/ 1-2,5-H SMD WH L R24 - 1840035

Technical data

Item properties

Pitch	2.5 mm
Number of positions	1
Mounting type	SMD soldering
Pin layout	Linear pad geometry
Number of levels	1
Number of connections	1
Number of potentials	1

Electrical parameters

Nominal current	6 A
Nom. voltage	160 V
Rated voltage (III/3)	63 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
pluggable	no
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	26 ... 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

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 soldering area (top layer)	Tin (4 - 8 µm Sn)

Material data - housing

Housing color	white (9010)

PCB terminal block - PTSM 0,5/ 1-2,5-H SMD WH L R24 - 1840035

Technical data

Material data - housing

Insulating material	PA GF
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	9 mm
Width [w]	5.1 mm
Height [h]	5.12 mm
Pitch	2.5 mm
Height (without solder pin)	5.12 mm
Pin spacing	2.5 mm

Dimensions for PCB design

Pin spacing	2.5 mm
Pad geometry	1.4 x 3.4 mm

Packaging information

Type of packaging	24 mm wide tape
Pieces per package	1000
Denomination packing units	Pcs.
[W] tape width	24 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	30.4 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

PCB terminal block - PTSM 0,5/ 1-2,5-H SMD WH L R24 - 1840035

Technical data

Ambient conditions

Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)

Termination and connection method

Connection test	IEC 60998-2-2:2002-12
Test result	Test passed
Test for conductor damage and slackening	IEC 60998-2-2:2002-12
	Test passed

Pull-out test

Pull-out test	IEC 60998-2-2:2002-12
Conductor cross section / conductor type / tensile force	0.14 mm² / solid / > 10 N
	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 60998-2-2 (in parts)

Electrical tests

Rated current	6 A
Conductor cross section	0.5 mm²
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

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)	1.6 mm
Minimum creepage distance value (III/2)	1.5 mm
Minimum creepage distance value (II/2)	1.6 mm

Temperature-rise test

Specification	IEC 60998-2-1:2002-12
Requirement temperature-rise test	Increase in temperature ≤ 45 K

Current carrying capacity / derating curves

Caption	Type: PTSM 0,5/...-2,5-H SMD WH (L) R..

PCB terminal block - PTSM 0,5/ 1-2,5-H SMD WH L R24 - 1840035

Technical data

Current carrying capacity / derating curves

	Tested in accordance with DIN EN 60512-5-2:2003-01 Reduction factor = 1 Number of positions: 5

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

Insulation resistance

Specification	IEC 60998-1:2002-12
Result	Test passed
Insulation resistance, neighboring positions	> 5 MΩ

Glow-wire test

Specification	IEC 60998-1:2002-12
Temperature	850 °C
Time of exposure	5 s

Mechanical strength/tumbling barrel test

Specification	IEC 60998-1:2002-12
Number of drop cycles	50

Standards and Regulations

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

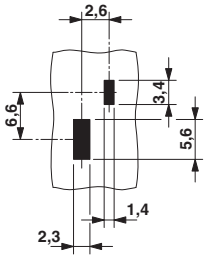
Environmental Product Compliance

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

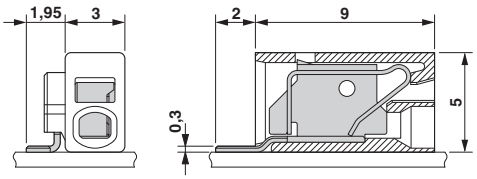
Drawings

PCB terminal block - PTSM 0,5/ 1-2,5-H SMD WH L R24 - 1840035

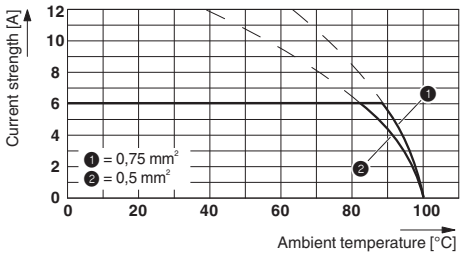
Drilling diagram



Dimensional drawing



Diagram



Type: PTSM 0,5/...-2,5-H SMD WH (L) R..
Tested in accordance with DIN EN 60512-5-2:2003-01
Reduction factor = 1
Number of positions: 5

Classifications

eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 11.0	27460101
eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 9.0	27440401

ETIM

ETIM 4.0	EC002637
ETIM 6.0	EC002643
ETIM 7.0	EC002643

UNSPSC

UNSPSC 13.2	39121432
UNSPSC 18.0	39121432

PCB terminal block - PTSM 0,5/ 1-2,5-H SMD WH L R24 - 1840035

Classifications

UNSPSC

UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

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	40048725

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

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20030527

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

PCB terminal block - PTSM 0,5/ 1-2,5-H SMD WH L R24 - 1840035

Accessories

Accessories

Cable end sleeve

Ferrule - AI 0,25- 6 BU - 3203040

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

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

PCB terminal block - PTSM 0,5/ 1-2,5-H SMD WH L R24 - 1840035

Accessories

Sample set - SAMPLE PTSM 0,5/1-2,5-H SMD WHL - 1833453

PCB terminal block, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of potentials: 1, Number of rows: 1, Number of positions per row: 1, product range: PTSM 0,5/..-H-SMD WH, pitch: 2.5 mm, connection method: Push-in spring connection, mounting: SMD soldering, conductor/PCB connection direction: 0 °, color: white, Pin layout: Linear pad geometry, Solder pin [P]: 2 mm, type of packaging: packed in cardboard. SAMPLE set with 5 items in belt section. When used as part of soldering process, please use items without SAMPLE marking