PTSM 0,5/ 7-2,5-V THR WH R44 - PCB terminal block

1814618

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PCB terminal block, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm^2, number of potentials: 7, number of rows: 1, number of positions per row: 7, product range: PTSM 0,5/..-V-THR WH, pitch: 2.5 mm, connection method: Push-in spring connection, mounting: THR soldering, conductor/PCB connection direction: 90 °, color: signal white, Pin layout: Linear pinning, Solder pin [P]: 2.1 mm, number of solder pins per potential: 2, type of packaging: 44 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
- Vertical connection enables multi-row arrangement on the PCB

Commercial data

Item number	1814618
Packing unit	310 pc
Minimum order quantity	310 pc
Sales key	AA11
Product key	AAKCAD
Catalog page	Page 391 (C-1-2013)
GTIN	4046356760362
Weight per piece (including packing)	3.3 g
Weight per piece (excluding packing)	3.2 g
Customs tariff number	85369010
Country of origin	IN

Technical data

Product properties

Type	Component suitable for through hole reflow
Product line	COMBICON Terminals XS
Product type	Printed circuit board terminal
Product family	PTSM 0,5/..-V-THR WH
Number of positions	7
Pitch	2.5 mm
Number of connections	7
Number of rows	1
Number of potentials	7
Pin layout	Linear pinning
Solder pins per potential	2

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)	400 V
Rated surge voltage (II/2)	2.5 kV

Connection data

Connection technology

Type	Component suitable for through hole reflow
Nominal cross section	0.5 mm²

Conductor connection

Connection method	Push-in spring connection
Conductor cross section rigid	0.14 mm² ... 0.5 mm²
Conductor cross section flexible	0.2 mm² ... 0.5 mm² (up to 0.75 mm² supported, with a stripping length of 7.5 mm and a rated insulation voltage of 32 V at III/2)
Conductor cross section AWG	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 (possible from 0.14 mm², when using ferrule AI 0.14- 6 GY in combination with crimping pliers CRIMPFOX 10T-F)
Stripping length	6 mm

Mounting

Mounting type	THR soldering
Pin layout	Linear pinning

Processing notes

Process	Reflow/wave soldering
Moisture Sensitive Level	MSL 1
Classification temperature T_c	260 °C
Solder cycles in the reflow	3

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

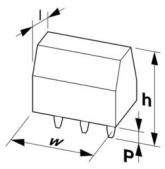
Material data - housing

Color (Housing)	signal white (9003)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Notes

Note on application	Pick and place pads may protrude beyond the components. The PCB layout must ensure that collisions are avoided when components are assembled.

Dimensions

Dimensional drawing	
Pitch	2.5 mm
Width [w]	18 mm
Height [h]	12.1 mm
Length [l]	5 mm
Installed height	10 mm
Solder pin length [P]	2.1 mm
Pin dimensions	0.3 x 0.8 mm

PCB design

Pin spacing	2.5 mm
Hole diameter	1.2 mm

Electrical tests

Air clearances and creepage distances |

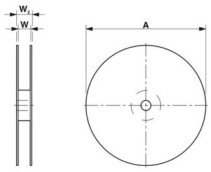
Insulating material group	I
Rated insulation voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated insulation voltage (II/2)	400 V
Rated surge voltage (II/2)	2.5 kV

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Dimensional drawing	
Type of packaging	44 mm wide tape
[W] tape width	44 mm
[W2] coil overall dimension	50.4 mm
[A] coil diameter	330 mm
Outer packaging type	Transparent-Bag
ESD level	(D) electrostatically conductive
Specification	DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07

Classifications

ECLASS

ECLASS-11.0	27460101
ECLASS-12.0	27460101
ECLASS-13.0	27460101

ETIM

ETIM 9.0	EC002643

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

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

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