1768781

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PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: SMSTB 2,5/..-ST, pitch: 5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -45 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

Your advantages

- · Well-known connection principle allows worldwide use
- · Optimized for tight installation situations: operation and conductor connection from one direction
- · Angled conductor connection enables operation and conductor connection from one direction
- · Low temperature rise, thanks to maximum contact force

Commercial data

Item number	1768781
Packing unit	100 рс
Minimum order quantity	100 рс
Sales key	AA03
Product key	AACAFK
Catalog page	Page 268 (C-1-2013)
GTIN	4017918034146
Weight per piece (including packing)	7.648 g
Weight per piece (excluding packing)	7.314 g
Customs tariff number	85366990
Country of origin	PL



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Technical data

Product properties

Туре	Standard
Product line	COMBICON Connectors M
Product type	PCB connector
Product family	SMSTB 2,5/ST
Number of positions	4
Pitch	5 mm
Number of connections	4
Number of rows	1
Mounting flange	without
Number of potentials	4

Electrical properties

Nominal current I _N	12 A
Nominal voltage U _N	320 V
Degree of pollution	3
Contact resistance	2.3 mΩ
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

Connection data

Connection technology

Connector system	COMBICON MSTB 2,5
Nominal cross section	2.5 mm ²
Contact connection type	Socket

Interlock

Locking type	without
Mounting flange	without

Conductor connection

Connection method	Screw connection with tension sleeve
Conductor/PCB connection direction	-45 °
Conductor cross section rigid	0.2 mm ² 2.5 mm ²
Conductor cross section flexible	0.2 mm ² 2.5 mm ²
Conductor cross section AWG	24 12
Conductor cross section flexible, with ferrule without plastic	0.25 mm ² 2.5 mm ²

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sleeve

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sieeve	
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 2.5 mm²
2 conductors with same cross section, solid	0.2 mm ² 1 mm ²
2 conductors with same cross section, flexible	0.2 mm² 1.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 1 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 1.5 mm²
Cylindrical gauge a x b / diameter	2.8 mm x 2.0 mm / 2.4 mm
Stripping length	7 mm
Tightening torque	0.5 Nm 0.6 Nm
pecifications for ferrules without insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
pecifications for ferrules with insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
aterial specifications	
erial specifications	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
aterial specifications	
aterial specifications aterial data - contact Note	60068-2-82/JEDEC JESD 201
erial specifications laterial data - contact Note Contact material	60068-2-82/JEDEC JESD 201 Cu alloy
eerial specifications laterial data - contact Note Contact material Surface characteristics	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated
eerial specifications laterial data - contact Note Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer)	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated Tin (5 - 7 μm Sn)
eerial specifications laterial data - contact Note Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer) laterial data - housing	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated Tin (5 - 7 μm Sn) Tin (5 - 7 μm Sn)
eerial specifications laterial data - contact Note Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer)	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated Tin (5 - 7 μm Sn)
eerial specifications laterial data - contact Note Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer) aterial data - housing Color (Housing)	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated Tin (5 - 7 μm Sn) Tin (5 - 7 μm Sn) green (6021)
eerial specifications laterial data - contact Note Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer) laterial data - housing Color (Housing) Insulating material	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated Tin (5 - 7 μm Sn) Tin (5 - 7 μm Sn) green (6021) PA
eerial specifications laterial data - contact Note Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer) Metal surface contact area (top layer) laterial data - housing Color (Housing) Insulating material Insulating material group	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated Tin (5 - 7 μm Sn) Tin (5 - 7 μm Sn) green (6021) PA I
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eerial specifications aterial data - contact Note Contact material Surface characteristics Metal surface terminal point (top layer) Metal surface contact area (top layer) Metal surface contact area (top layer) aterial data - housing Color (Housing) Insulating material Insulating material group CTI according to IEC 60112 Flammability rating according to UL 94	60068-2-82/JEDEC JESD 201 Cu alloy hot-dip tin-plated Tin (5 - 7 μm Sn) Tin (5 - 7 μm Sn) green (6021) PA I 600 V0

Temperature for the ball pressure test according to EN 60695-10-2

Dimensions

Dimensional drawing







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Width [w]	20 mm
Height [h]	15.5 mm
Length [I]	25.6 mm

Mounting

Drive form screw head	Slotted (L)
Drive form screw head	Slotted (L)

Notes

Notes on operation	In accordance with IEC 61984, COMBICON connectors have no
	switching power (COC). During designated use, they must not be
	plugged in or disconnected when carrying voltage or under load.

Mechanical tests

Test for conductor	damage and	slackening
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Specification	IEC 60999-1:1999-11
Result	Test passed
Pull-out test	
Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm² / solid / > 10 N

setpoint/actual value		0.2 mm² / flexible / > 10 N
	2.5 mm² / solid / > 50 N	
		2.5 mm² / flexible / > 50 N

insertion and withdrawar forces	
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Torque test	
Specification	IEC 60999-1:1999-11
Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Result	Test passed
Polarization and coding	
Specification	IEC 60512-13-5:2006-02
Result	Test passed
Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02

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ration test Specification IEC 60068-2-6:2007-12 Frequency 10 - 150 - 10 Hz Sweep speed 1 octave/min Amplitude 0.35 mm (10 Hz 60.1 Hz) Sweep speed 5g (60.1 Hz 150 Hz) Sweep speed 5g (60.1 Hz 150 Hz) Sweep speed 5g (60.1 Hz 150 Hz) Test duration per axis 2.5 h rability test IEC 60512-9-1:2010-03 Specification IEC 60512-9-1:2010-03 Impulse withstand voltage at sea level 4.8 kV Contact resistance R ₁ 2.3 mΩ Contact resistance R ₂ 3.0 ML Contact resistance R ₂ 2.9 ML Insertion/withdrawal cycles 2.5 ML Specification ISO 6988-1985-02 Corrosive stress 0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle Thermal stress 100 °C/168 h Power-frequency withstand voltage 40 °C 100 °C (dependent on the derating curve) Arbient temperature (storage/transport) -40 °C 100 °C (dependent on the derating curve) Arbient temperature (storage/transport) -40 °C 100 °C (dependent on the derating curve) </th <th>Result</th> <th>Test passed</th>	Result	Test passed
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Frequency 10 - 150 - 10 Hz Sweep speed 1 octave/min Amplitude 0.35 mm (10 Hz 60.1 Hz) Sweep speed 5g (60.1 Hz 150 Hz) Test duration per axis 2 5 h arability test	ibration test	
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SpecificationIEC 60512-3-1:2002-02Insulation resistance, neighboring positions> 5 MΩr clearances and creepage distances IEC 60664-1:2007-04SpecificationIEC 60664-1:2007-04Insulating material groupIComparative tracking index (IEC 60112)CTI 600	lested number of positions	24
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r clearances and creepage distances Specification IEC 60664-1:2007-04 Insulating material group I Comparative tracking index (IEC 60112) CTI 600	Specification	IEC 60512-3-1:2002-02
SpecificationIEC 60664-1:2007-04Insulating material groupIComparative tracking index (IEC 60112)CTI 600	Insulation resistance, neighboring positions	> 5 MΩ
SpecificationIEC 60664-1:2007-04Insulating material groupIComparative tracking index (IEC 60112)CTI 600	ir clearances and creepage distances	
Insulating material group I Comparative tracking index (IEC 60112) CTI 600		IEC 60664-1:2007-04
Comparative tracking index (IEC 60112) CTI 600		
		CTI 600
	Rated insulation voltage (III/3)	



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Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 mm
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 mm
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

Packaging specifications

Type of packaging

packed in cardboard

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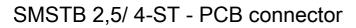
Classifications

ECLASS

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

ETIM

	ETIM 9.0	EC002638
UNSPSC		
	UNSPSC 21.0	39121400



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Environmental product compliance

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

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