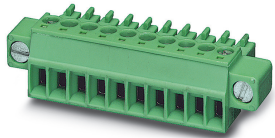


Printed-circuit board connector - MC 1,5/ 8-STF-3,5 - 1847181

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The figure shows a 10-position version of the product


PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: MC 1,5/..-STF, pitch: 3.5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ Screwable flange for superior mechanical stability



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 113483
GTIN	4017918113483
Weight per Piece (excluding packing)	6.590 g
Custom tariff number	85366990
Country of origin	United States

Technical data

Item properties

Brief article description	PCB connector
Plug-in system	MINI COMBICON
Type of contact	Female connector
Range of articles	MC 1,5/..-STF

Printed-circuit board connector - MC 1,5/ 8-STF-3,5 - 1847181

Technical data

Item properties

Pitch	3.5 mm
Number of positions	8
Drive form screw head	Slotted (L)
Screw thread	M2
Locking	Screw flange
Number of levels	1
Number of connections	8
Number of potentials	8

Electrical parameters

Nominal current	8 A
Nom. voltage	160 V
Rated voltage (III/3)	160 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	Screw connection with tension sleeve
pluggable	Yes
Conductor cross section solid	0.14 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section AWG / kcmil	28 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 0.5 mm ²
2 conductors with same cross section, solid	0.08 mm ² ... 0.5 mm ²
2 conductors with same cross section, flexible	0.08 mm ² ... 0.75 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm ² ... 0.34 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 0.5 mm ²
Cylindrical gauge a x b / diameter	2.4 mm x 1.5 mm / 1.6 mm
Stripping length	7 mm
Torque	0.22 Nm ... 0.25 Nm

Flange specifications

Type of locking	Screw locking
Mounting flange	Screw flange

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Technical data

Flange specifications

Torque	0.3 Nm
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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 contact area (top layer)	Tin (4 - 8 µm Sn)

Material data - housing

Housing color	green (6021)
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 for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	16.1 mm
Width [w]	38.3 mm
Height [h]	11.1 mm
Pitch	3.5 mm
Height (without solder pin)	11.1 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1999-11
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Printed-circuit board connector - MC 1,5/ 8-STF-3,5 - 1847181

Technical data

Termination and connection method

	Test passed
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Pull-out test

Pull-out test	IEC 60999-1:1999-11
Conductor cross section / conductor type / tensile force	0.14 mm ² / solid / > 10 N
	0.14 mm ² / flexible / > 10 N
	1.5 mm ² / solid / > 40 N
	1.5 mm ² / flexible / > 40 N

Mechanical tests according to standard

Test specification	IEC 61984
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Resistance of inscriptions	IEC 60068-2-70:1995-12
Insertion and withdrawal force	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	6 N
Withdraw strength per pos. approx.	4 N
Polarization and coding	IEC 60512-13-5:2006-02
Contact holder in insert	IEC 60512-15-1:2008-05
Test force per pos.	24.5 N

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

Current carrying capacity / derating curves

Caption	Type: MC 1,5/...-STF-3,5 with MC 1,5/...-GF-3,5
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Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	6 N
Withdraw strength per pos. approx.	4 N
Polarization when inserted requirement >20 N	Test passed

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Technical data

Mechanical tests (A)

Contact holder in insert requirements >20 N	Test passed
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Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R ₁	1.3 mΩ
Insertion/withdrawal cycles	25
Contact resistance R ₂	1.4 mΩ
Impulse withstand voltage at sea level	2.95 kV

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	20
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)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

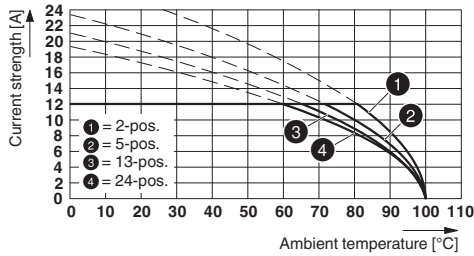
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

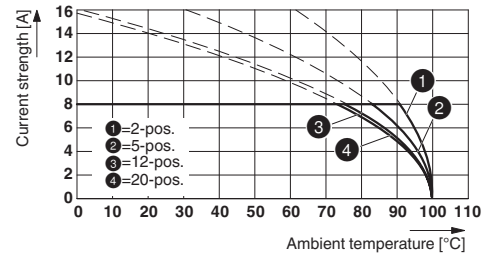
Drawings

Printed-circuit board connector - MC 1,5/ 8-STF-3,5 - 1847181

Diagram



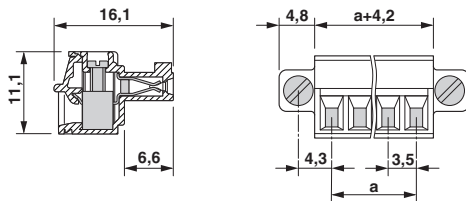
Diagram



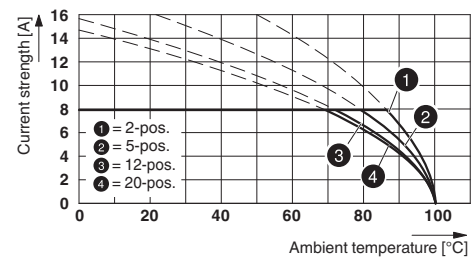
Type: MC 1,5/...-ST(F)-3,5 with MC 1,5/...-G(F)-3,5 P... THR

Type: MC 1,5/...-STF-3,5 with MCV 1,5/...-GF-3,5

Dimensional drawing

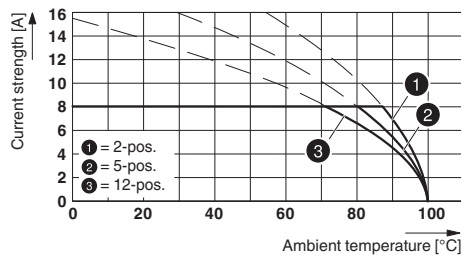


Diagram



Type: MC 1,5/...-STF-3,5 with MC 1,5/...-GF-3,5

Diagram



Type: MC 1,5/...-ST(F)-3,5 with MCV 1,5/...-G(F)-3,5 P... THR

Classifications

eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 11.0	27460202
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700

Printed-circuit board connector - MC 1,5/ 8-STF-3,5 - 1847181

Classifications

eCl@ss

eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440309
eCl@ss 8.0	27440309
eCl@ss 9.0	27440309

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002638
ETIM 5.0	EC002638
ETIM 6.0	EC002638
ETIM 7.0	EC002638

UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

Approvals

Approvals

Approvals


CSA / IECCEB CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized


Ex Approvals


Approval details


Printed-circuit board connector - MC 1,5/ 8-STF-3,5 - 1847181


Approvals

CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	8 A	8 A	
mm ² /AWG/kcmil	28-16	28-16	

IECEE CB Scheme		http://www.iecee.org/	DE1-60987-B1B2
Nominal voltage UN	160 V		
Nominal current IN	8 A		
mm ² /AWG/kcmil	0.2-1.5		

VDE Gutachten mit Fertigungsüberwachung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40011723
Nominal voltage UN	160 V		
Nominal current IN	8 A		
mm ² /AWG/kcmil	0.2-1.5		

EAC			B.01687
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20110128
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	8 A	8 A	
mm ² /AWG/kcmil	30-14	30-14	

Accessories

Accessories

Printed-circuit board connector - MC 1,5/ 8-STF-3,5 - 1847181

Accessories

Labeled terminal marker

Marker card - SK 3,5/2,8:FORTL.ZAHLEN - 0804073



Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 99, mounting type: adhesive, for terminal block width: 3.5 mm, lettering field size: 3.5 x 2.8 mm

Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Screwdriver tools

Screwdriver - SZS 0,4X2,5 VDE - 1205037



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

Additional products

Printed-circuit board connector - MCV 1,5/ 8-GF-3,5 P20 THRR56 - 1780781



PCB header, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: MCV 1,5/..-GF-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: 56 mm wide tape, User information and design recommendations for through hole reflow technology can be found under: Downloads

Printed-circuit board connector - MC 1,5/ 8-STF-3,5 - 1847181

Accessories

Printed-circuit board connector - MC 1,5/ 8-GF-3,5 P26 THR - 1789287



PCB header, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: MC 1,5/...-GF-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Printed-circuit board connector - MC 1,5/ 8-GF-3,5 P26 THRR56 - 1789290



PCB header, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: MC 1,5/...-GF-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: 56 mm wide tape

Printed-circuit board connector - MC 1,5/ 8-GF-3,5 P14 THR - 1789724



PCB header, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: MC 1,5/...-GF-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 1.4 mm, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Printed-circuit board connector - MC 1,5/ 8-GF-3,5 P14 THRR56 - 1789737



PCB header, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: MC 1,5/...-GF-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 1.4 mm, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: 56 mm wide tape

Feed-through header - MCV 1,5/ 8-GF-3,5 - 1843282



PCB header, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: MCV 1,5/...-GF, pitch: 3.5 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Printed-circuit board connector - MC 1,5/ 8-STF-3,5 - 1847181

Accessories

Feed-through header - MC 1,5/ 8-GF-3,5 - 1843855

PCB header, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: MC 1,5/...-GF, pitch: 3.5 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard



Feed-through header - EMC 1,5/ 8-GF-3,5 - 1897306

PCB header, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: EMC 1,5/...-GF, pitch: 3.5 mm, mounting: Press-in technology, pin layout: Linear pinning, solder pin [P]: 3.5 mm, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard



Feed-through header - EMCV 1,5/ 8-GF-3,5 - 1911224

PCB header, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: EMCV 1,5/...-GF, pitch: 3.5 mm, mounting: Press-in technology, pin layout: Linear pinning, solder pin [P]: 3.8 mm, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard



Feed-through header - MC 1,5/ 8-GF-3,5 THT - 1937376

PCB headers, color: black, contact surface: Tin, Number of positions per row: 8, product range: MC 1,5/...-GF-THT, pitch: 3.5 mm, pin layout: Linear pinning, solder pin [P]: 3.4 mm, type of packaging: packed in cardboard, User information and design recommendations for through hole reflow technology can be found under: Downloads



Feed-through header - MCV 1,5/ 8-GF-3,5 THT - 1937460

PCB headers, color: black, contact surface: Tin, Number of positions per row: 8, product range: MCV 1,5/...-GF-THT, pitch: 3.5 mm, pin layout: Linear pinning, type of packaging: packed in cardboard, User information and design recommendations for through hole reflow technology can be found under: Downloads



Printed-circuit board connector - MC 1,5/ 8-STF-3,5 - 1847181

Accessories

Feed-through header - MC 1,5/ 8-GF-3,5 THT-R56 - 1996922



PCB headers, color: black, contact surface: Tin, Number of positions per row: 8, product range: MC 1,5/..-GF-THT, pitch: 3.5 mm, pin layout: Linear pinning, solder pin [P]: 3.4 mm, User information and design recommendations for through hole reflow technology can be found under: Downloads