Printed-circuit board connector - TFKC 2,5/ 2-ST-5,08 - 1962600

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The figure shows a 10-position version of the product

PCB connector, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Your advantages

- Time saving push-in connection, tools not required
- Potentials can be easily looped through – ideal for BUS applications
- Intuitive use through colour coded actuation lever
- Can be combined with the MSTB 2,5 range
- Quick and convenient testing using integrated test option

Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	4 017918 912031
GTIN	4017918912031
Weight per Piece (excluding packing)	4.760 g
Custom tariff number	85366990
Country of origin	Bulgaria

Technical data

Item properties

Brief article description	Printed-circuit board connector
Plug-in system	CLASSIC COMBICON
Type of contact	Female connector

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Technical data

Item properties

Range of articles	TFKC 2,5/..-ST
Pitch	5.08 mm
Number of positions	2
Connection method	Push-in spring connection
Locking	without
Number of levels	1
Number of connections	4
Number of potentials	2

Electrical parameters

Rated current	12 A

Connection capacity

Conductor cross section solid	0.2 mm² ... 2.5 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section AWG / kcmil	24 ... 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 2.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 2.5 mm²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm² ... 1.5 mm²
Cylindrical gauge a x b / diameter	2.8 mm x 2.0 mm / 2.0 mm
Stripping length	10 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 contact area (top layer)	Tin (4 - 8 µm Sn)

Material data - housing

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

Material data – actuating element

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Technical data

Material data – actuating element

Insulating material	PBT
CTI according to IEC 60112	275
Flammability rating according to UL 94	V0

Dimensions for the product

Length [l]	25.7 mm
Width [w]	10.06 mm
Height [h]	22.1 mm
Pitch	5.08 mm
Height (without solder pin)	22.1 mm
Dimension a	5.08 mm

Packaging information

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

General product information

Type of note	Notes on operation
Note	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.

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

Conductor connection test	The stripped-off ends of the largest conductor can be completely inserted in the opening of the terminal point without using excessive force.
Test result	Test passed
Test – repeated connection and release	IEC 60999-1:1999-11
	Test passed
Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N

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Pull-out test

	2.5 mm² / solid / > 50 N
	2.5 mm² / flexible / > 50 N

Mechanical tests according to standard

Test specification	IEC 61984
Visual examination	Test passed IEC 60512-1-1:2002-02
Dimensional test	Test passed IEC 60512-1-2:2002-02
Resistance of marking	Test passed IEC 60068-2-70:1995-12
Result	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	10 N
Withdraw strength per pos. approx.	9.5 N
Polarization and coding	Test passed IEC 60512-13-5:2006-02
Result	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	40 N

Air clearances and creepage distances

Specification	IEC 60664-1:2007-04
Rated insulation voltage (III/3)	320 V
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	4 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm

Electrical tests - Function

Specification	IEC 60999-1:1999-11

Temperature cycles

Specification	IEC 60999-1:1999-11
Test current (minimum cross section)	4 A DC
Test current (maximum cross section)	12 A DC
Temperature cycles	192

Current carrying capacity / derating curves

Specification	IEC 61984

Mechanical tests (A)

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Technical data

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	10 N
Withdraw strength per pos. approx.	9.5 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	2 mΩ
Insertion/withdrawal cycles	25
Contact resistance R_2	2.2 mΩ
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	10^{12} Ω

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	4.8 kV
Power-frequency withstand voltage	2.21 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

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

Drawings

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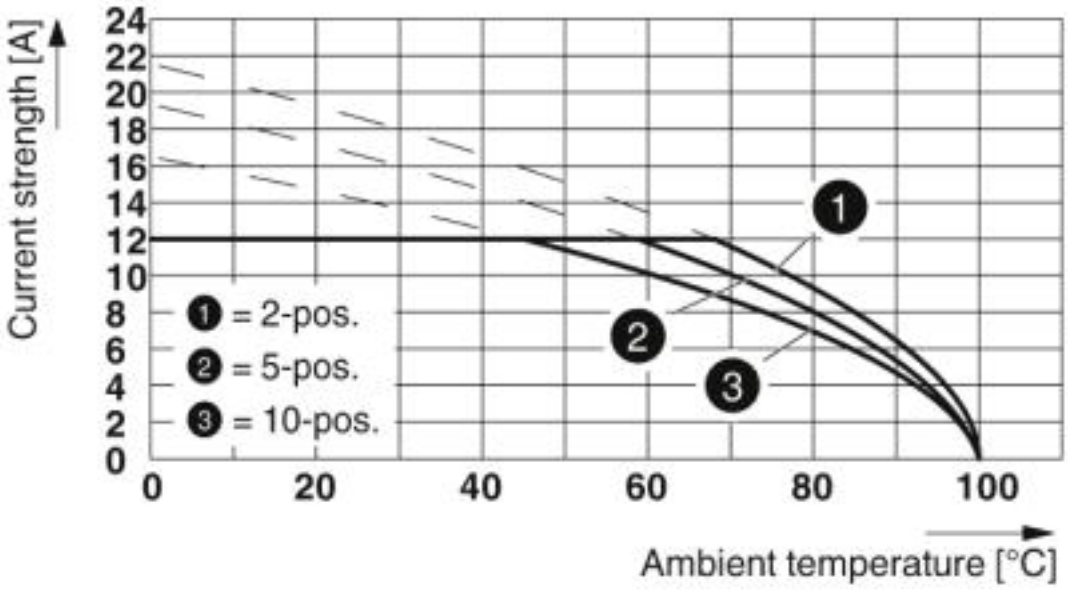
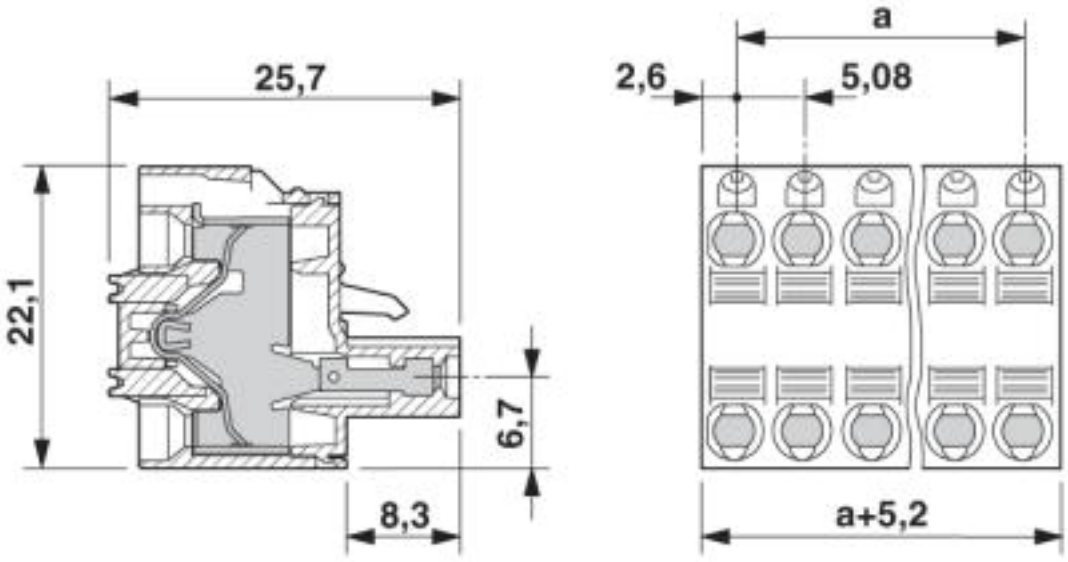
Diagram



Type: TFKC 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08

Dimensional drawing



Classifications

eCl@ss

eCl@ss 4.0	27260700

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Classifications

eCl@ss

eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
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

Approvals

Approvals

Approvals

IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

Ex Approvals

Approval details

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Approvals

IECEE CB Scheme	CB scheme	http://www.iecee.org/	DE1-60988-B1B2

Nominal voltage UN	250 V
Nominal current IN	12 A
mm²/AWG/kcmil	0.2-2.5

VDE Gutachten mit Fertigungsüberwachung	VDE	http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40004701

Nominal voltage UN	250 V
Nominal current IN	12 A
mm²/AWG/kcmil	0.2-2.5

EAC	EAC	B.01742

cULus Recognized	c UL us	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19931011

	B	D
Nominal voltage UN	300 V	300 V
Nominal current IN	10 A	10 A
mm²/AWG/kcmil	26-12	26-12

Accessories

Accessories

Coding element

Coding profile - CP-MSTB - 1734634

Coding profile, is inserted into the slot on the plug or inverted header, red insulating material

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Accessories

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, color: white

Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, color: red

Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, color: blue

Labeled terminal marker

Marker card - SK 5,08/2,8:FORTL.ZAHLEN - 0804280

Marker card, Card, white, labeled, Horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 2.8 mm

Marker pen

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Accessories

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 0,6X3,5 - 1205053

Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

Terminal marking

Marker card - SK U/2,8 WH:UNBEDRUCKT - 0803883

Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm, Number of individual labels: 3600

Test plug terminal block

Reducing plug - RPS - 0201647

Reducing plug, color: gray

Additional products

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Accessories

Feed-through header - MSTBW 2,5/ 2-G-5,08 - 1735882

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 - 1755736

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

Printed-circuit board connector - MSTBA 2,5/ 2-G-5,08 - 1757242

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

Feed-through header - MSTBV 2,5/ 2-G-5,08 - 1758018

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

Feed-through header - MSTB 2,5/ 2-G-5,08 - 1759017

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

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Accessories

Feed-through header - MDSTB 2,5/ 2-G-5,08 - 1762062

PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Can be aligned! Mounting flange: Order no. 1736771, 1736768. In combination with MVSTB or FKCV plugs, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plugs is not possible!

Printed-circuit board connector - MDSTBV 2,5/ 2-G-5,08 - 1763074

PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Can be aligned! Mounting flange: Order No. 1836477, 1836480. In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

Feed-through header - SMSTBA 2,5/ 2-G-5,08 - 1767371

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

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Printed-circuit board connector - SMSTB 2,5/ 2-G-5,08 - 1769463

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

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Feed-through header - MSTBA 2,5/ 2-G-5,08-LA - 1770944

PCB headers, number of positions: 2, pitch: 5.08 mm, color: green

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Accessories

Feed-through header - MDSTBW 2,5/ 2-G-5,08 - 1802430

PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, The article can be aligned to create different nos. of positions! In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

Feed-through header - MDSTBA 2,5/ 2-G-5,08 - 1842063

PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, The article can be aligned to create different nos. of positions! In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

Feed-through header - MDSTBVA 2,5/ 2-G-5,08 - 1845332

PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, The article can be aligned to create different nos. of positions! In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

Feed-through header - EMSTBVA 2,5/ 2-G-5,08 - 1859519

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Press-in technology

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Feed-through header - MDSTBA 2,5/ 2-GL-5,08 - 1877601

PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, The article can be aligned to create different nos. of positions! In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

Printed-circuit board connector - TFKC 2,5/ 2-ST-5,08 - 1962600

Accessories

Feed-through header - MDSTBA 2,5/ 2-GR-5,08 - 1877614

PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, The article can be aligned to create different nos. of positions! In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

Feed-through header - MDSTBVA 2,5/ 2-GL-5,08 - 1877627

PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, The article can be aligned to create different nos. of positions! In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

Feed-through header - MDSTBVA 2,5/ 2-GR-5,08 - 1877630

PCB headers, nominal current: 10 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, The article can be aligned to create different nos. of positions! In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

Printed-circuit board connector - DFK-MSTBA 2,5/ 2-G-5,08 - 1898839

Feed-through header, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

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Printed-circuit board connector - DFK-MSTBVA 2,5/ 2-G-5,08 - 1899139

Feed-through header, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering

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Printed-circuit board connector - TFKC 2,5/ 2-ST-5,08 - 1962600

Accessories

Printed-circuit board connector - MSTBA 2,5/ 2-G-5,08 THT-R32 - 1937237

PCB headers, number of positions: 2, pitch: 5.08 mm, color: black, User information and design recommendations for through hole reflow technology can be found under “Downloads”

Printed-circuit board connector - MSTBVA 2,5/ 2-G-5,08 THT-R56 - 1940415

PCB headers, number of positions: 2, pitch: 5.08 mm, color: black, User information and design recommendations for through hole reflow technology can be found under “Downloads”

Printed-circuit board connector - CC 2,5/ 2-G-5,08 P26THR - 1954388

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under “Downloads”

Printed-circuit board connector - CC 2,5/ 2-G-5,08 P26THRR32 - 1954582

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under “Downloads”

Printed-circuit board connector - CCA 2,5/ 2-G-5,08 P26THR - 1954919

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under “Downloads”

Printed-circuit board connector - TFKC 2,5/ 2-ST-5,08 - 1962600

Accessories

Printed-circuit board connector - CCA 2,5/ 2-G-5,08 P26THRR32 - 1955031

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under “Downloads”

Printed-circuit board connector - CCV 2,5/ 2-G-5,08 P26THR - 1955387

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under “Downloads”

Printed-circuit board connector - CCV 2,5/ 2-G-5,08 P26THRR32 - 1955523

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under “Downloads”

Printed-circuit board connector - CCVA 2,5/ 2-G-5,08 P26THR - 1955853

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under “Downloads”

Printed-circuit board connector - CCVA 2,5/ 2-G-5,08 P26THRR32 - 1955963

PCB headers, nominal current: 12 A, number of positions: 2, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under “Downloads”