1809514

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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 connection type: Socket, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MSTBC 2,5/..-STZ, pitch: 5. 08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross section range [mm²] data: 10A/MSTBC-MT 0,5-1,0 (3190564); 10A/MSTBC-MT 0,5-1,0 BA (3190645); 12A/MSTBC-MT 1,5-2,5 (3190551); 12A/MSTBC-MT 1,5-2,5 BA (3190658). BA = Bandkontakte

Your advantages

- · Inexpensive connection of large quantities of preassembled conductors
- · Pull-out aid facilitates handling and allows the tensile force to be reduced at the contact point

Commercial data

| Item number | 1809514 | |
|--------------------------------------|---------------------|--|
| Packing unit | 50 pc | |
| Minimum order quantity | 50 pc | |
| Sales key | AA03 | |
| Product key | AACCEB | |
| Catalog page | Page 295 (C-1-2013) | |
| GTIN | 4017918047658 | |
| Weight per piece (including packing) | 1.884 g | |
| Weight per piece (excluding packing) | 1.5 g | |
| Customs tariff number | 85389099 | |
| Country of origin | PL | |



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Technical data

Product properties

| Product type | PCB connector | |
|-----------------------|-----------------------|--|
| Product family | MSTBC 2,5/STZ | |
| Product line | COMBICON Connectors M | |
| Туре | Standard | |
| Number of positions | 3 | |
| Pitch | 5.08 mm | |
| Number of connections | 3 | |
| Number of rows | 1 | |
| Number of potentials | 3 | |
| Mounting flange | without | |

Electrical properties

| Nominal current I _N | 12 A |
|--------------------------------|-------|
| Nominal voltage U _N | 320 V |
| Degree of pollution | 3 |
| Rated voltage (III/3) | 320 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

| onnection technology Type | Standard |
|------------------------------------|---|
| Connector system | COMBICON MSTB 2,5 |
| Nominal cross section | 2.5 mm ² |
| Contact connection type | Socket |
| terlock | |
| Locking type | without |
| Mounting flange | without |
| onductor connection | |
| Connection method | Crimp connection |
| Conductor/PCB connection direction | 0 ° |
| Conductor cross section flexible | 0.5 mm ² 2.5 mm ² |
| Conductor cross section AWG | 20 14 |

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Material data - housing

| Color (Housing) | green (6021) |
|---|--------------|
| Insulating material | PA |
| Insulating material group | Ι |
| 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

| Dimensional drawing | h w |
|---------------------|---------|
| Pitch | 5.08 mm |
| Width [w] | 15.2 mm |
| Height [h] | 10.5 mm |
| Length [I] | 25 mm |

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. |

Environmental and real-life conditions

Ambient conditions

| Ambient temperature (operation) | -40 °C 100 °C (dependent on the derating curve) | |
|---|---|--|
| Ambient temperature (storage/transport) | -40 °C 70 °C | |
| Relative humidity (storage/transport) | 30 % 70 % | |
| Ambient temperature (assembly) | -5 °C 100 °C | |

Electrical tests

Air clearances and creepage distances |

| Specification | IEC 60664-1:2007-04 | |
|--|---------------------|--|
| Insulating material group | I | |
| Comparative tracking index (IEC 60112) | CTI 600 | |
| Rated insulation voltage (III/3) | 320 V | |
| Rated surge voltage (III/3) | 4 kV | |
| minimum clearance value - non-homogenous field (III/3) | 3 mm | |



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| minimum creepage distance (III/3) | 4 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

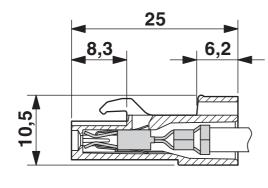
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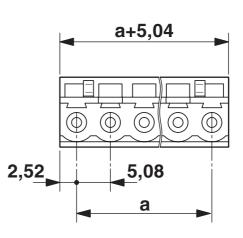
https://www.phoenixcontact.com/us/products/1809514

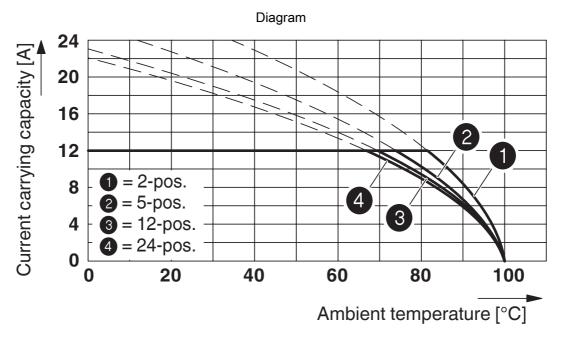


Drawings

Dimensional drawing







Type: MSTBC 2,5/...-ST-5,08 with MSTBA 2,5/...-G-5,08; contact: MSTBC-MT 1,5 - 2,5



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Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1809514

| CULus Recogni Approval ID: E60425 | zed -19930525 | | | |
|--------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| Use group B | | | | |
| | 300 V | 10 A | 20 - 14 | - |
| Use group D | | | | |
| | 300 V | 10 A | 20 - 14 | - |

| CSA Approval ID: 13631 | | | | |
|------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| | 300 V | 10 A | 20 - 14 | - |



VDE Zeichengenehmigung Approval ID: 40050648

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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

EU RoHS

| Fulfills EU RoHS substance requirements | Yes, No exemptions | | |
|---|--|--|--|
| China RoHS | | | |
| Environment friendly use period (EFUP) | EFUP-E | | |
| | No hazardous substances above the limits | | |
| EU REACH SVHC | | | |
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% | | |

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Accessories

MSTBC-MT 0,5-1,0 - Crimp contact

3190564 https://www.phoenixcontact.com/us/products/3190564



Module female contact, is inserted into the plug housing MSTBC after crimping the conductor, for conductors from 0.5 to 1.0 $\rm mm^2$

MSTBC-MT 0,5-1,0 BA - Crimp contact

3190645 https://www.phoenixcontact.com/us/products/3190645



Module female contact, is inserted into the MSTBC connector shell after the conductor has been crimped, for conductors from $0.5 - 1.0 \text{ mm}^2$, ribbon contact

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MSTBC-MT 1,5-2,5 - Crimp contact

3190551

https://www.phoenixcontact.com/us/products/3190551



Module female contact, is inserted into the plug housing MSTBC after crimping the conductor, for conductors from 1.5 to 2.5 \rm{mm}^2

MSTBC-MT 1,5-2,5 BA - Crimp contact

3190658 https://www.phoenixcontact.com/us/products/3190658



Module female contact, is inserted into the MSTBC connector shell after the conductor has been crimped, for conductors from $1.5 - 2.5 \text{ mm}^2$, ribbon contact

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CRIMPFOX MT 2,5 - Crimping pliers

1204038

https://www.phoenixcontact.com/us/products/1204038



Crimping pliers, for crimping conductors to the module female contacts STG-MTN, crimp range: 0.5-2.5 $\rm mm^2,\,AWG:$ 20-14

SZS 0,4X2,5 VDE - Screwdriver

1205037 https://www.phoenixcontact.com/us/products/1205037



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

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STZ 2-MSTBC-5,08 - Strain relief

1810529

https://www.phoenixcontact.com/us/products/1810529



Strain relief for snapping into the latching chambers of the plug components, 2- $\ensuremath{\mathsf{pos}}$, labeling with ZB 6

STZ 4-MSTBC-5,08 - Strain relief

1810532 https://www.phoenixcontact.com/us/products/1810532



Strain relief for snapping into the latching chambers of the plug components, 4- $\ensuremath{\mathsf{pos.}}$, labeling with ZB 6

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https://www.phoenixcontact.com/us/products/1809514



STZ 8-MSTBC-5,08 - Strain relief

1810516

https://www.phoenixcontact.com/us/products/1810516



Strain relief for snapping into the latching chambers of the plug components, 8-pos., labeling with ZB ${\rm 6}$

STZ 12-MSTBC-5,08 - Strain relief

1810503 https://www.phoenixcontact.com/us/products/1810503



Strain relief for snapping into the latching chambers of the plug components, 12-pos., labeling with ZB ${\rm 6}$

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SK 5,08/3,8:FORTL.ZAHLEN - Marker card

0804293

https://www.phoenixcontact.com/us/products/0804293



Marker card, white, labeled, horizontal: consecutive numbers 1 \dots 10, 11 \dots 20, etc. up to 91 \dots (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm

CP-MSTB - Coding profile

1734634 https://www.phoenixcontact.com/us/products/1734634

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



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MSTBC-MT 0,2-0,5 - Crimp contact

1879531

https://www.phoenixcontact.com/us/products/1879531



Module socket contact, is inserted into the plug housing MSTBC after crimping the conductor, for conductors from 0.2 to 0.5 $\rm mm^2$

MSTBC-MT 0,2-0,5 BAND - Crimp contact

1879544 https://www.phoenixcontact.com/us/products/1879544



Module socket contact, is inserted into the plug housing MSTBC after crimping the conductor, for conductors from 0.2 to 0.5 $\rm mm^2$

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MSTBW 2,5/ 3-G-5,08 - PCB header

1735879

https://www.phoenixcontact.com/us/products/1735879



PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MSTBW 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

MDSTBV 2,5/ 3-G1-5,08 - PCB header

1736742 https://www.phoenixcontact.com/us/products/1736742



PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 6, number of rows: 2, number of positions: 3, number of connections: 6, product range: MDSTBV 2,5/..-G1, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, 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!

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MSTBO 2,5/ 3-GL-5,08 - PCB header

1850440

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PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MSTBO 2,5/..-GL, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

MDSTBA 2,5/ 3-GR-5,08 - PCB header

1874727 https://www.phoenixcontact.com/us/products/1874727



PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 6, number of rows: 2, number of positions: 3, number of connections: 6, product range: MDSTBA 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.23 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, 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!

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MDSTBVA 2,5/ 3-GL-5,08 - PCB header

1874756

https://www.phoenixcontact.com/us/products/1874756



PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 6, number of rows: 2, number of positions: 3, number of connections: 6, product range: MDSTBVA 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, 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!

MDSTBVA 2,5/ 3-GR-5,08 - PCB header

1874769

https://www.phoenixcontact.com/us/products/1874769



PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 6, number of rows: 2, number of positions: 3, number of connections: 6, product range: MDSTBVA 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, 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!

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DFK-MSTBVA 2,5/ 3-G-5,08 - Feed-through header

1899142

https://www.phoenixcontact.com/us/products/1899142



Feed-through header, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: DFK-MSTBVA 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

CC 2,5/ 3-G-5,08 P26THR - PCB header

1954391 https://www.phoenixcontact.com/us/products/1954391



PCB headers, nominal cross section: 2.5 mm², color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: CC 2,5/..-G, pitch: 5.08 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, For user information and design recommendations for through-hole reflow technology, go to: Downloads

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CC 2,5/ 3-G-5,08 P26THRR32 - PCB header

1954595

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PCB headers, nominal cross section: 2.5 mm², color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: CC 2,5/..-G, pitch: 5.08 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: 32 mm wide tape, For user information and design recommendations for through-hole reflow technology, go to: Downloads

CCA 2,5/ 3-G-5,08 P26THR - PCB header

1954922 https://www.phoenixcontact.com/us/products/1954922



PCB headers, nominal cross section: 2.5 mm², color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: CCA 2,5/..-G, pitch: 5.08 mm, connection method: Plug-in connection, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, For user information and design recommendations for through-hole reflow technology, go to: Downloads

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CCA 2,5/ 3-G-5,08 P26THRR32 - PCB header

1955044

https://www.phoenixcontact.com/us/products/1955044



PCB headers, nominal cross section: 2.5 mm², color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: CCA 2,5/..-G, pitch: 5.08 mm, connection method: Plug-in connection, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: 32 mm wide tape, For user information and design recommendations for through-hole reflow technology, go to: Downloads

CCV 2,5/ 3-G-5,08 P26THR - PCB header

1955390 https://www.phoenixcontact.com/us/products/1955390



PCB headers, nominal cross section: 2.5 mm², color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: CCV 2,5/..-G, pitch: 5.08 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, For user information and design recommendations for through-hole reflow technology, go to: Downloads

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CCV 2,5/ 3-G-5,08 P26THRR32 - PCB header

1955536

https://www.phoenixcontact.com/us/products/1955536



PCB headers, nominal cross section: 2.5 mm², color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: CCV 2,5/..-G, pitch: 5.08 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: 32 mm wide tape, For user information and design recommendations for through-hole reflow technology, go to: Downloads

CCVA 2,5/ 3-G-5,08 P26THR - PCB header

1955866 https://www.phoenixcontact.com/us/products/1955866



PCB headers, nominal cross section: 2.5 mm², color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: CCVA 2,5/..-G, pitch: 5.08 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, For user information and design recommendations for through-hole reflow technology, go to: Downloads

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