

Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm



The figure shows a 10-position version of the product

Your advantages

- Plug-in direction parallel to the conductor axis
- W type with stand-off
- Standard pin strip for 320 V (III/2)
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Well-known mounting principle allows worldwide use
- Stand-offs enable the PCB to be cleaned or sealed



Key Commercial Data

| | |
|--------------|---------------|
| Packing unit | 50 pc |
| GTIN | |
| GTIN | 4017918027551 |

Technical data

Item properties

| | |
|---------------------------|---------------------|
| Brief article description | Feed-through header |
| Plug-in system | CLASSIC COMBICON |
| Type of contact | Male connector |
| Range of articles | MSTBW 2,5/...-G |
| Pitch | 5.08 mm |
| Number of positions | 7 |
| Mounting type | Wave soldering |
| Pin layout | Linear pinning |
| Locking | without |

Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Technical data

Item properties

| | |
|-----------------------|---|
| Number of levels | 1 |
| Number of connections | 7 |
| Number of potentials | 7 |

Electrical parameters

| | |
|-----------------------------|-------|
| Nominal current | 12 A |
| Nom. voltage | 320 V |
| Rated voltage | 250 V |
| Rated voltage (III/2) | 320 V |
| Rated voltage (II/2) | 400 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated surge voltage (III/2) | 4 kV |
| Rated surge voltage (II/2) | 4 kV |

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 | Tin-plated |
| Metal surface contact area (top layer) | Tin (5 - 7 µm Sn) |
| Metal surface contact area (middle layer) | Nickel (2 - 3 µm Ni), |
| Metal surface soldering area (top layer) | Tin (5 - 7 µm Sn) |
| Metal surface soldering area (middle layer) | Nickel (2 - 3 µm Ni) |

Material data - housing

| | |
|--|--------------|
| Housing color | green (6021) |
| Insulating material | PBT |
| Insulating material group | IIIa |
| CTI according to IEC 60112 | 225 |
| Flammability rating according to UL 94 | V0 |

Dimensions for the product

| | |
|-----------------------------|----------|
| Length [l] | 8.6 mm |
| Width [w] | 41.38 mm |
| Height [h] | 15.5 mm |
| Pitch | 5.08 mm |
| Height (without solder pin) | 12 mm |
| Solder pin [P] | 3.5 mm |
| Pin dimensions | 1 x 1 mm |

Dimensions for PCB design

| | |
|---------------|--------|
| Hole diameter | 1.4 mm |
|---------------|--------|

Packaging information

Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Technical data

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) |

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) | 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) | 3.2 mm |
| Minimum creepage distance value (II/2) | 4 mm |

Mechanical tests (A)

| | |
|--|-------------|
| Test specification | IEC 61984 |
| Insertion strength per pos. approx. | 8 N |
| Withdraw strength per pos. approx. | 6 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 | 1.3 mΩ |
| Insertion/withdrawal cycles | 25 |
| Contact resistance R ₂ | 1.3 mΩ |
| Impulse withstand voltage at sea level | 4.8 kV |
| Power-frequency withstand voltage | 2.21 kV |
| Insulation resistance, neighboring positions | > 0.2 TΩ |

Thermal tests (C)

| | |
|---|-----------------------|
| Specification | IEC 60512-5-1:2002-02 |
| Number of positions | 20 |
| Conductor cross section | 2.5 mm ² |
| Test current | 12 A |
| Upper limiting temperature requirements <100 °C | Test passed |

Climatic tests (D)

| | |
|---------------|------------------|
| Specification | ISO 6988:1985-02 |
|---------------|------------------|

Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Technical data

Climatic tests (D)

| | |
|--|---|
| 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 |

Vibration test

| | |
|------------------------|------------------------|
| Specification | IEC 60068-2-6:2007-12 |
| Result | Test passed |
| Frequency | 10 - 150 - 10 Hz |
| Sweep speed | 1 octave/min |
| Amplitude | 0.35 mm (10 - 60.1 Hz) |
| Acceleration | 5 g (60.1 - 150 Hz) |
| Test duration per axis | 2.5 h |

Standards and Regulations

| | |
|--|--------|
| Connection in acc. with standard | EN-VDE |
| | CSA |
| Flammability rating according to UL 94 | V0 |

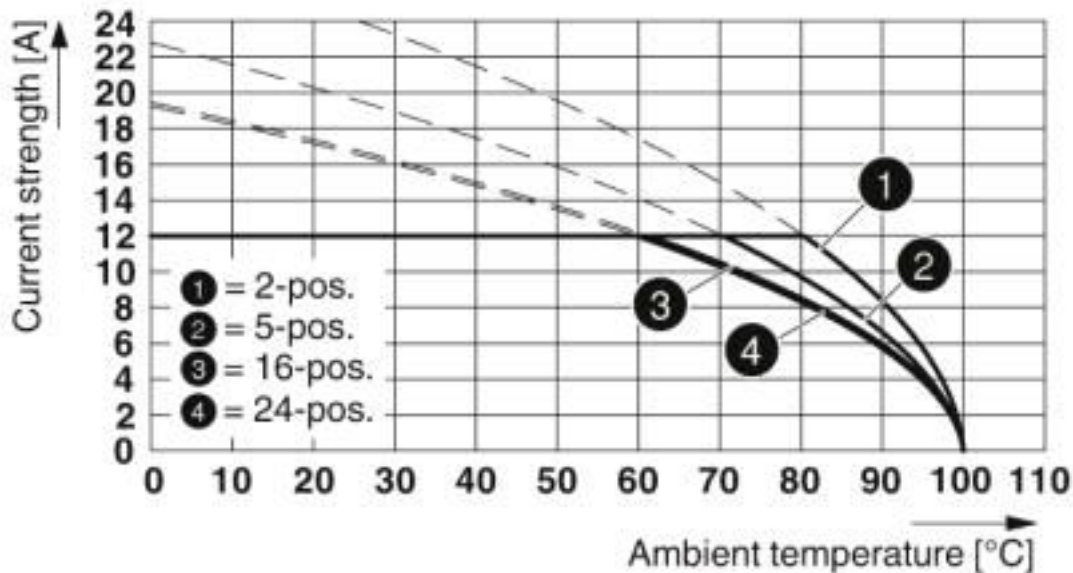
Environmental Product Compliance

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

Drawings

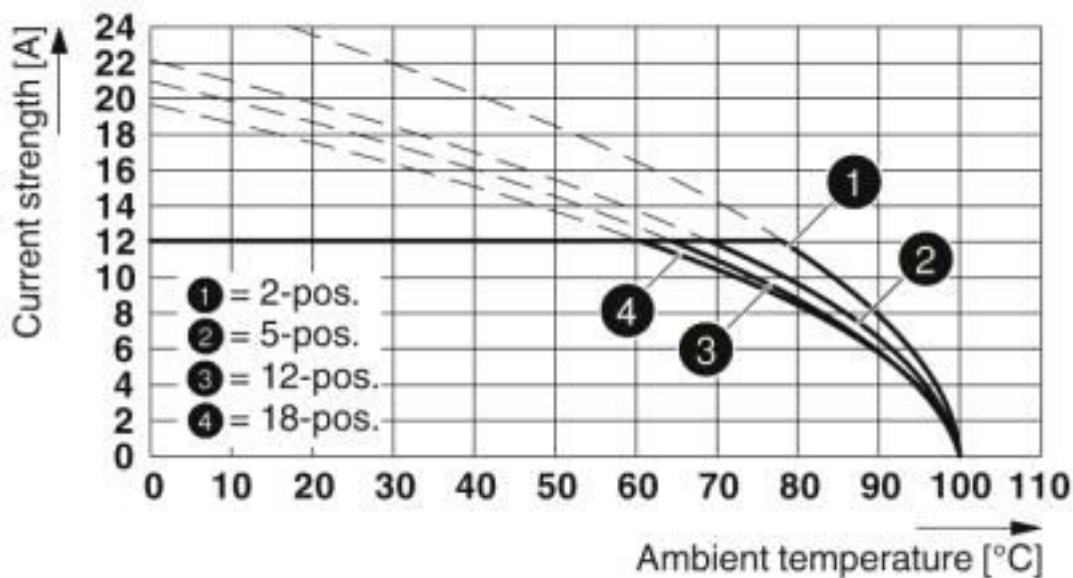
Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Diagram



Type: MSTB 2,5/...-ST-5,08 with MSTBW 2,5/...-G-5,08

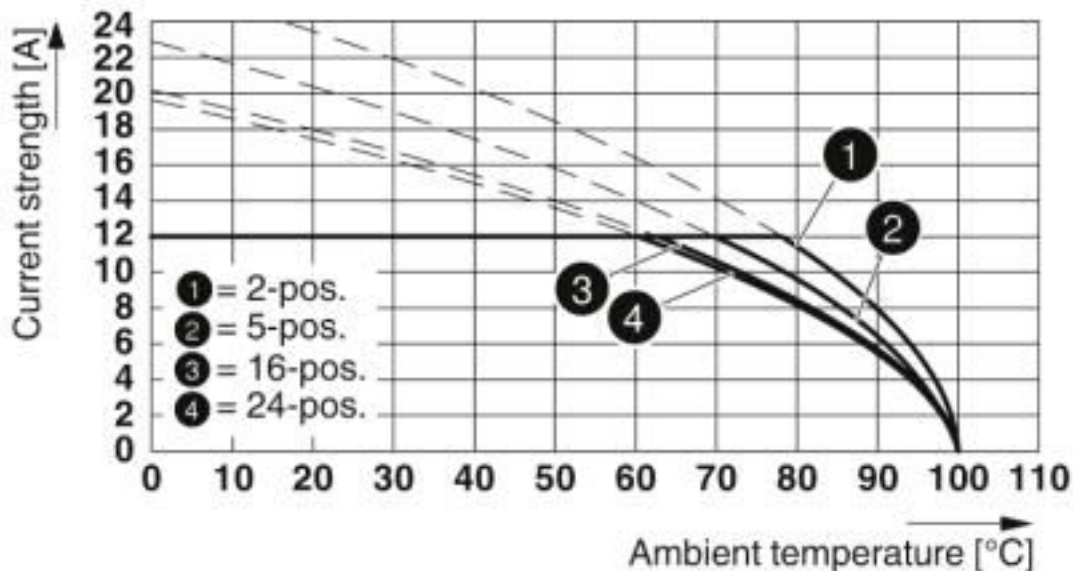
Diagram



Type: MSTBT 2,5/...-ST-5,08 with MSTBW 2,5/...-G-5,08

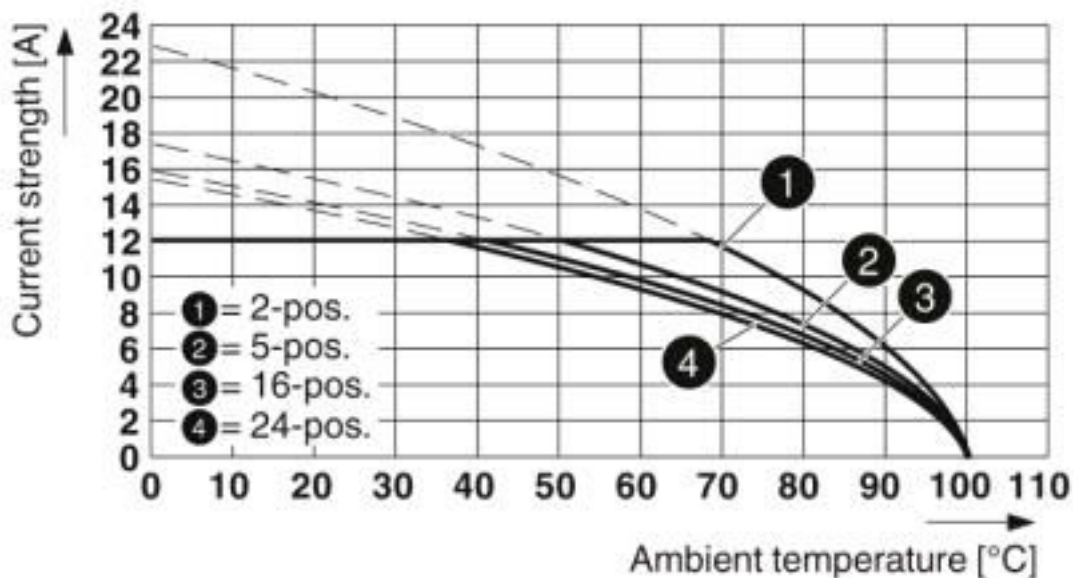
Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Diagram



Type: MSTBP 2,5/...-ST-5,08 with MSTBW 2,5/...-G-5,08

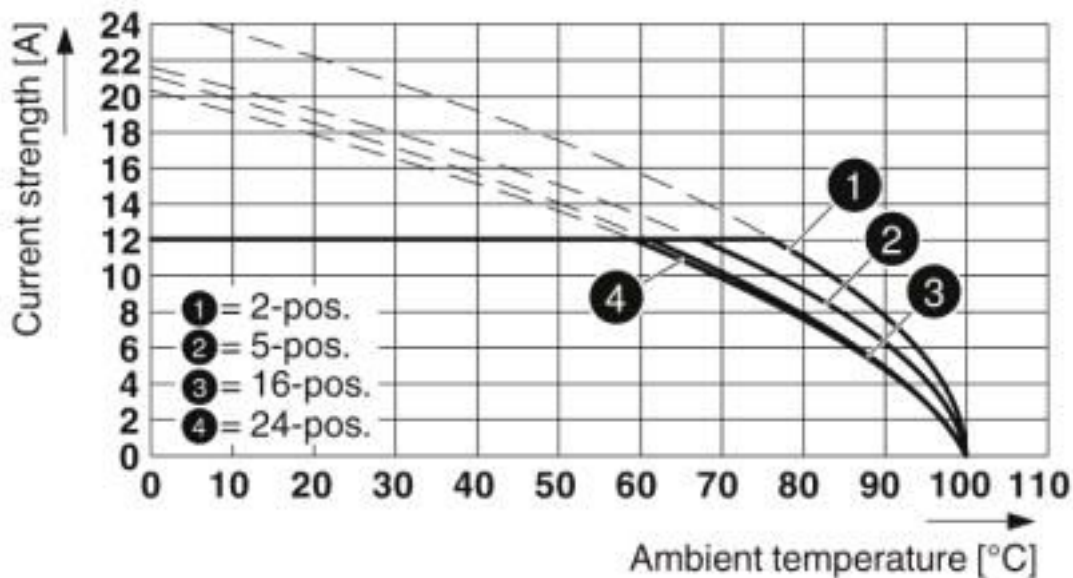
Diagram



Type: SMSTBW 2,5/...-ST-5,08 with MSTBW 2,5/...-G-5,08

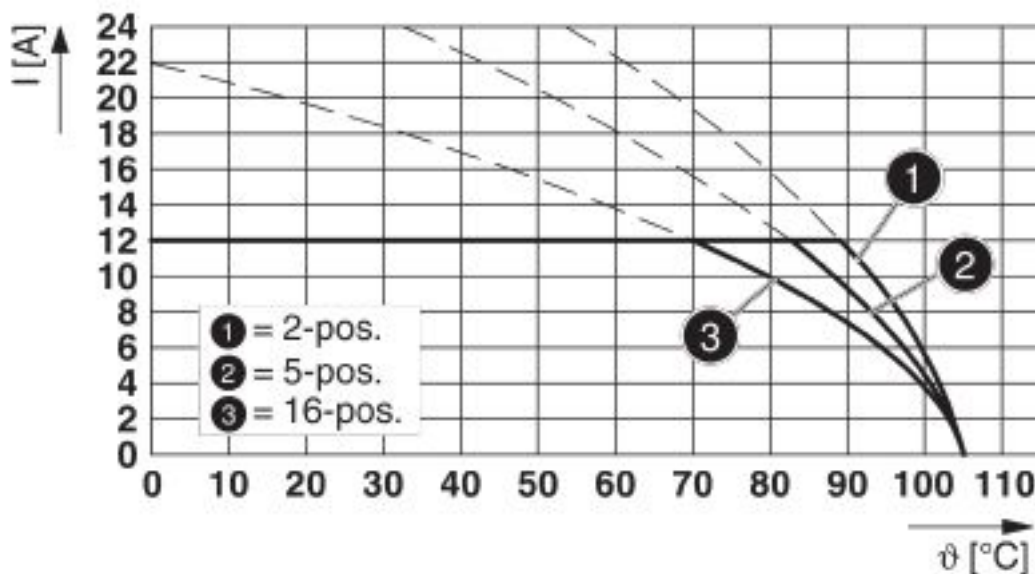
Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Diagram



Type: FRONT-MSTB 2,5/...-ST-5,08 with MSTBW 2,5/...-G-5,08

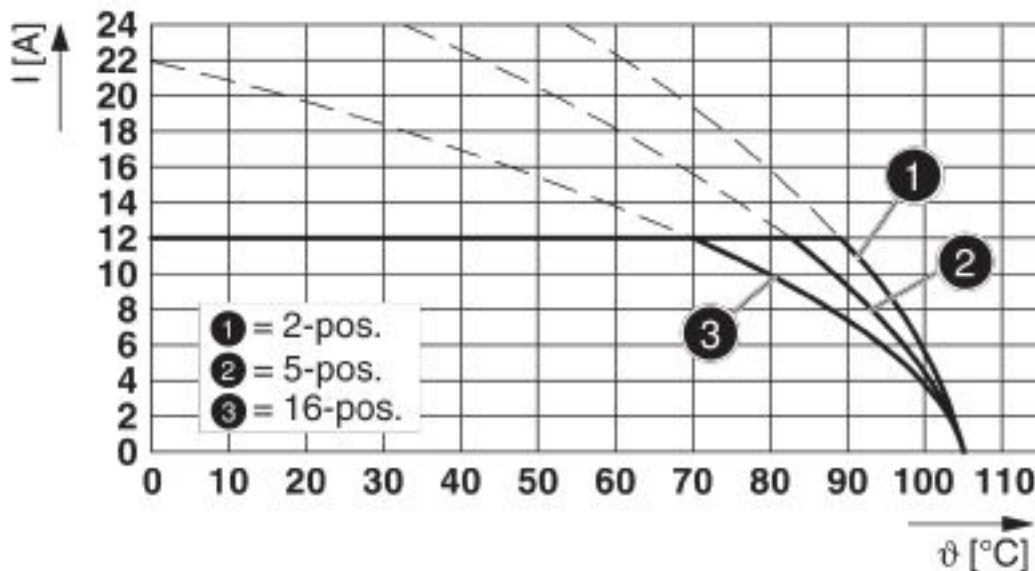
Diagram



Type: FKCVR 2,5/...-ST-5,08 with MSTBW 2,5/...-G-5,08

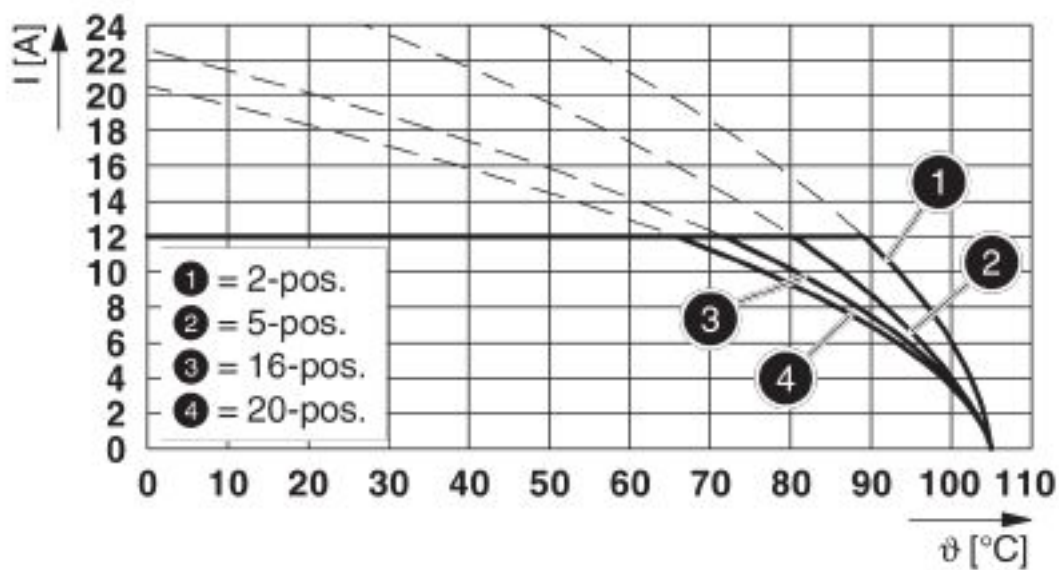
Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Diagram



Type: FKCVW 2,5/...-ST-5,08 with MSTBW 2,5/...-G-5,08

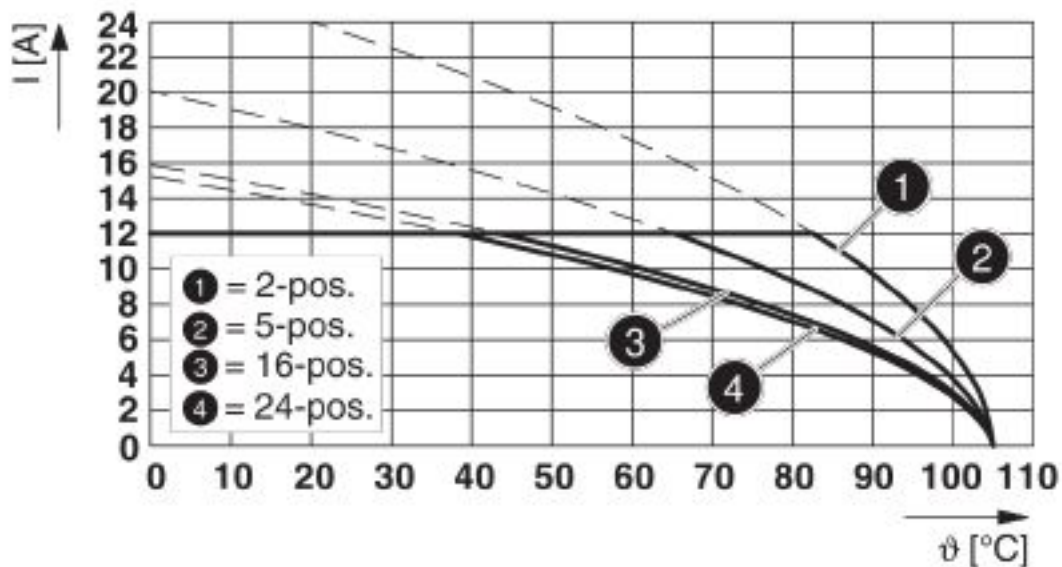
Diagram



Type: FKCS 2,5/...-ST-5,08 with MSTBW 2,5/...-G-5,08

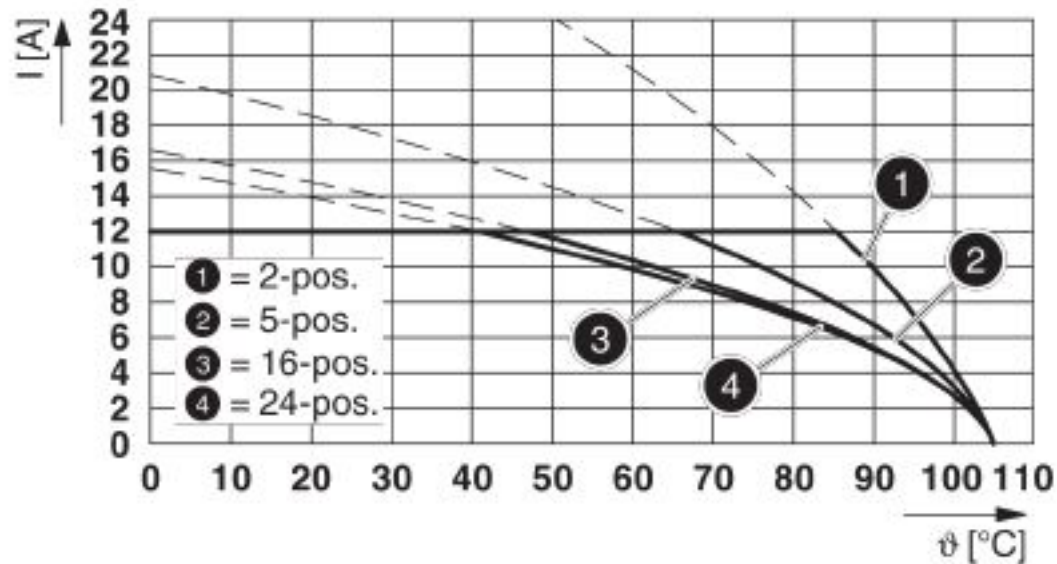
Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Diagram



Type: ICV 2,5/...-G-5,08 with MSTBW 2,5/...-G-5,08

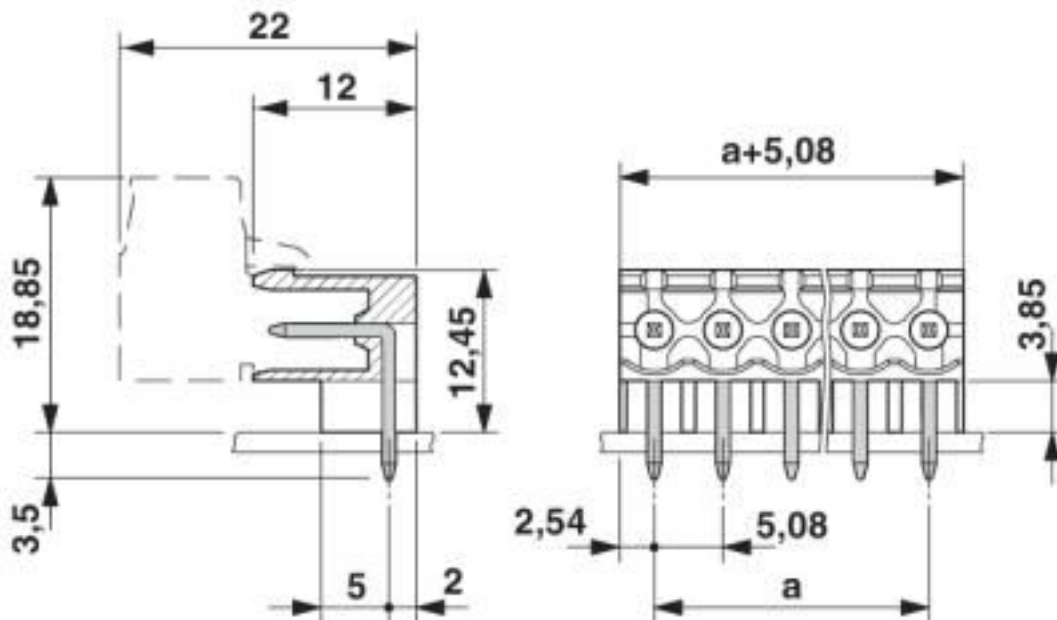
Diagram



Type: IC 2,5/...-G-5,08 with MSTBW 2,5/...-G-5,08

Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Dimensional drawing



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440402 |
| eCl@ss 4.0 | 27260700 |
| eCl@ss 4.1 | 27260700 |
| eCl@ss 5.0 | 27260700 |
| eCl@ss 5.1 | 27260700 |
| eCl@ss 6.0 | 27260700 |
| eCl@ss 7.0 | 27440402 |
| eCl@ss 8.0 | 27440402 |
| eCl@ss 9.0 | 27440402 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | EC002637 |
| ETIM 5.0 | EC002637 |
| ETIM 6.0 | EC002637 |
| ETIM 7.0 | EC002637 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211810 |
| UNSPSC 7.0901 | 39121409 |
| UNSPSC 11 | 39121409 |
| UNSPSC 12.01 | 39121409 |

Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Classifications

UNSPSC

| | |
|-------------|----------|
| 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 / EAC / cULus Recognized / VDE Zeichengenehmigung

Ex Approvals

Approval details

| | | | |
|--------------------|-------|---|-------|
| CSA | | http://www.csagroup.org/services-industries/product-listing/ | 13631 |
| | B | D | |
| Nominal voltage UN | 300 V | 300 V | |
| Nominal current IN | 15 A | 10 A | |

| | | | |
|--------------------|-------|---|----------------|
| IECEE CB Scheme | | http://www.iecee.org/ | DE1-60988-B1B2 |
| Nominal voltage UN | 250 V | | |
| Nominal current IN | 12 A | | |

| | | |
|-----|--|---------|
| EAC | | B.01687 |
|-----|--|---------|

| | | | |
|--------------------|-------|---|-----------------|
| cULus Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E60425-19931011 |
| | B | D | |
| Nominal voltage UN | 300 V | 300 V | |

Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Approvals

| | | |
|--------------------|------|------|
| | B | D |
| Nominal current IN | 15 A | 10 A |

| | | | |
|------------------------|-------|---|----------|
| VDE Zeichengenehmigung | | http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx | 40050648 |
| Nominal voltage UN | 250 V | | |
| Nominal current IN | 12 A | | |

Accessories

Accessories

Coding element

Coding section - CR-MSTB - 1734401

Coding section, inserted into the recess in the header or the inverted plug, red insulating material



Filler plug

Accessories - MSTB-BL - 1755477



Keying cap, for forming sections, plugs onto header pin, green insulating material

Labeled terminal marker

Marker card - SK 5,08/3,8:FORTL.ZAHLEN - 0804293



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 3.8 mm

Additional products

Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Accessories

Printed-circuit board connector - TVMSTB 2,5/ 7-ST-5,08 - 1719053



PCB connector, nominal current: 12 A, rated voltage (III/2): 400 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Printed-circuit board connector - FKCN 2,5/ 7-ST-5,08 - 1754610



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - MSTB 2,5/ 7-ST-5,08 - 1757064



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Printed-circuit board connector - MSTBP 2,5/ 7-ST-5,08 - 1769065



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Printed-circuit board connector - MSTB 2,5/ 7-STZ-5,08 - 1776113



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Accessories

Printed-circuit board connector - FRONT-MSTB 2,5/ 7-ST-5,08 - 1777332

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Front screw connection, color: green, contact surface: Tin



Printed-circuit board connector - MSTBT 2,5/ 7-ST-5,08 - 1781030

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



Printed-circuit board connector - MVSTBR 2,5/ 7-ST-5,08 - 1792294

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



Printed-circuit board connector - MVSTBW 2,5/ 7-ST-5,08 - 1792809

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



Printed-circuit board connector - MSTBC 2,5/ 7-ST-5,08 - 1808861

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Crimp connection, color: green, 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



Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Accessories

Printed-circuit board connector - MSTBC 2,5/ 7-STZ-5,08 - 1809556



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Crimp connection, color: green, 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

Printed-circuit board connector - MSTBU 2,5/ 7-STD-5,08 - 1824175



Direct plug-in block, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin, mounting: Direct mounting

Printed-circuit board connector - MSTBU 2,5/ 7-ST-5,08-FL - 1824405



Direct plug-in block, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin, mounting: Direct mounting

Printed-circuit board connector - SMSTB 2,5/ 7-ST-5,08 - 1826335



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Printed-circuit board connector - MSTBVK 2,5/ 7-ST-5,08 - 1831362



DIN rail connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin, mounting: DIN rail

Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Accessories

Printed-circuit board connector - UMSTBVK 2,5/ 7-ST-5,08 - 1833865



DIN rail connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin, mounting: DIN rail

Printed-circuit board connector - TMSTBP 2,5/ 7-ST-5,08 - 1853065



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin, The plug allows conductors to be looped through from module to module.

Printed-circuit board connector - FKCV 2,5/ 7-ST-5,08 - 1873100



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - FKCVW 2,5/ 7-ST-5,08 - 1873702



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - FKCVR 2,5/ 7-ST-5,08 - 1874002



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Feed-through header - MSTBW 2,5/ 7-G-5,08 - 1735837

Accessories

Printed-circuit board connector - QC 1/ 7-ST-5,08 - 1883307



PCB connector, nominal current: 10 A, rated voltage (III/2): 630 V, nominal cross section: 1 mm², number of positions: 7, pitch: 5.08 mm, connection method: Displacement connection, color: green, contact surface: Tin

Printed-circuit board connector - FKCT 2,5/ 7-ST-5,08 - 1902165



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - TFKC 2,5/ 7-ST-5,08 - 1962655



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - FKCS 2,5/ 7-ST-5,08 - 1975121



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 7, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[1735837](#)