

## Printed-circuit board connector - MSTB 2,5/12-ST - 1754643

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Plug component, Nominal current: 12 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Connection method: Screw connection with tension sleeve, Color: green, Contact surface: Tin



The figure shows a 10-position version of the product

### Why buy this product

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors



### Key Commercial Data

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 50 STK                                                                                                  |
| GTIN                                 | <br>4 017918 028817 |
| GTIN                                 | 4017918028817                                                                                           |
| Weight per Piece (excluding packing) | 19.880 g                                                                                                |
| Custom tariff number                 | 85366990                                                                                                |
| Country of origin                    | Germany                                                                                                 |

### Technical data

#### Dimensions

|             |          |
|-------------|----------|
| Width       | 59.95 mm |
| Pitch       | 5 mm     |
| Dimension a | 55 mm    |

#### General

|                     |                                      |
|---------------------|--------------------------------------|
| Range of articles   | MSTB 2,5/..-ST                       |
| Type of contact     | Female connector                     |
| Number of positions | 12                                   |
| Connection method   | Screw connection with tension sleeve |

# Printed-circuit board connector - MSTB 2,5/12-ST - 1754643

## Technical data

### General

|                                        |                                                           |
|----------------------------------------|-----------------------------------------------------------|
| Insulating material group              | I                                                         |
| Rated surge voltage (III/3)            | 4 kV                                                      |
| Rated surge voltage (III/2)            | 4 kV                                                      |
| Rated surge voltage (II/2)             | 4 kV                                                      |
| Rated voltage (III/3)                  | 250 V                                                     |
| Rated voltage (III/2)                  | 320 V                                                     |
| Rated voltage (II/2)                   | 630 V                                                     |
| Connection in acc. with standard       | EN-VDE                                                    |
| Nominal current $I_N$                  | 12 A                                                      |
| Nominal cross section                  | 2.5 mm <sup>2</sup>                                       |
| Maximum load current                   | 12 A (with a 2.5 mm <sup>2</sup> conductor cross section) |
| Insulating material                    | PA                                                        |
| Flammability rating according to UL 94 | V0                                                        |
| Internal cylindrical gage              | A3                                                        |
| Stripping length                       | 7 mm                                                      |
| Screw thread                           | M3                                                        |
| Tightening torque, min                 | 0.5 Nm                                                    |
| Tightening torque max                  | 0.6 Nm                                                    |

### Connection data

|                                                                                         |                      |
|-----------------------------------------------------------------------------------------|----------------------|
| Conductor cross section solid min.                                                      | 0.2 mm <sup>2</sup>  |
| Conductor cross section solid max.                                                      | 2.5 mm <sup>2</sup>  |
| Conductor cross section flexible min.                                                   | 0.2 mm <sup>2</sup>  |
| Conductor cross section flexible max.                                                   | 2.5 mm <sup>2</sup>  |
| Conductor cross section flexible, with ferrule without plastic sleeve min.              | 0.25 mm <sup>2</sup> |
| Conductor cross section flexible, with ferrule without plastic sleeve max.              | 2.5 mm <sup>2</sup>  |
| Conductor cross section flexible, with ferrule with plastic sleeve min.                 | 0.25 mm <sup>2</sup> |
| Conductor cross section flexible, with ferrule with plastic sleeve max.                 | 2.5 mm <sup>2</sup>  |
| Conductor cross section AWG min.                                                        | 24                   |
| Conductor cross section AWG max.                                                        | 12                   |
| 2 conductors with same cross section, solid min.                                        | 0.2 mm <sup>2</sup>  |
| 2 conductors with same cross section, solid max.                                        | 1 mm <sup>2</sup>    |
| 2 conductors with same cross section, stranded min.                                     | 0.2 mm <sup>2</sup>  |
| 2 conductors with same cross section, stranded max.                                     | 1.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.   | 0.25 mm <sup>2</sup> |
| 2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.   | 1 mm <sup>2</sup>    |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min. | 0.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 1.5 mm <sup>2</sup>  |

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## Technical data

### Connection data

|                                 |    |
|---------------------------------|----|
| Minimum AWG according to UL/CUL | 30 |
| Maximum AWG according to UL/CUL | 12 |

### Standards and Regulations

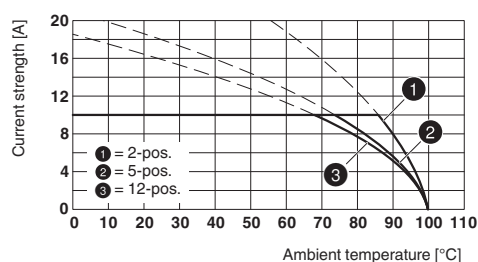
|                                        |        |
|----------------------------------------|--------|
| Connection in acc. with standard       | EN-VDE |
|                                        | CSA    |
| Flammability rating according to UL 94 | V0     |

### Environmental Product Compliance

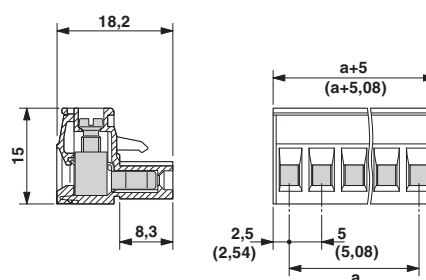
|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| China RoHS | Environmentally Friendly Use Period = 50                                                            |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

## Drawings

Diagram

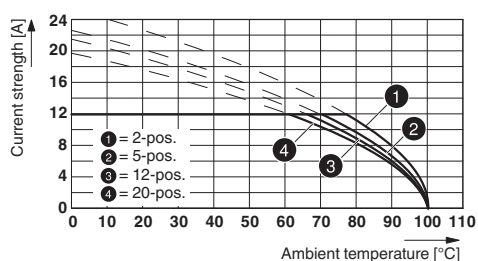


Dimensional drawing

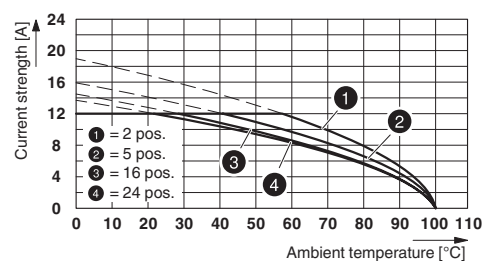


Type: MSTB 2,5/...-ST with MDSTBV 2,5/...-G

Diagram



Diagram



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

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

## Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 272607xx |
| eCl@ss 4.1 | 27260701 |
| eCl@ss 5.0 | 27260701 |
| eCl@ss 5.1 | 27260701 |

## Printed-circuit board connector - MSTB 2,5/12-ST - 1754643

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 6.0 | 27260704 |
| eCl@ss 7.0 | 27440402 |
| 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 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211810 |
| UNSPSC 7.0901 | 39121409 |
| UNSPSC 11     | 39121409 |
| UNSPSC 12.01  | 39121409 |
| UNSPSC 13.2   | 39121409 |

### Approvals

#### Approvals

#### Approvals

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

#### Ex Approvals

#### Approval details

|                                |                                                                                     |                                                                                                                                                                                           |       |
|--------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| CSA                            |  | <a href="http://www.csagroup.org/services/testing-and-certification/certified-product-listing/">http://www.csagroup.org/services/testing-and-certification/certified-product-listing/</a> | 13631 |
|                                | B                                                                                   | D                                                                                                                                                                                         |       |
| mm²/AWG/kcmil                  | 28-12                                                                               | 28-12                                                                                                                                                                                     |       |
| Nominal current I <sub>N</sub> | 15 A                                                                                | 10 A                                                                                                                                                                                      |       |
| Nominal voltage U <sub>N</sub> | 300 V                                                                               | 300 V                                                                                                                                                                                     |       |

## Printed-circuit board connector - MSTB 2,5/12-ST - 1754643

### Approvals

|                                            |                                                                                   |                                                                                                                                                                                                              |          |
|--------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| VDE Gutachten mit<br>Fertigungsüberwachung |  | <a href="http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx">http://www.vde.com/en/Institute/OnlineService/<br/>VDE-approved-products/Pages/Online-Search.aspx</a> | 40004701 |
|                                            |                                                                                   |                                                                                                                                                                                                              |          |
| mm²/AWG/kcmil                              | 0.2-2.5                                                                           |                                                                                                                                                                                                              |          |
| Nominal current I <sub>N</sub>             | 12 A                                                                              |                                                                                                                                                                                                              |          |
| Nominal voltage U <sub>N</sub>             | 250 V                                                                             |                                                                                                                                                                                                              |          |

|                                |  |                                                                                   |                                                           |                |         |
|--------------------------------|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------|----------------|---------|
| IECEE CB Scheme                |  |  | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | DE1-56062-B1B2 |         |
|                                |  |                                                                                   |                                                           |                |         |
| mm²/AWG/kcmil                  |  |                                                                                   |                                                           |                | 0.2-2.5 |
| Nominal current I <sub>N</sub> |  |                                                                                   |                                                           |                | 12 A    |
| Nominal voltage U <sub>N</sub> |  |                                                                                   |                                                           |                | 250 V   |

|                                |                                                                                     |                                                                                                                                                       |                 |
|--------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| cULus Recognized               |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | E60425-19931011 |
|                                |                                                                                     |                                                                                                                                                       |                 |
|                                | B                                                                                   | D                                                                                                                                                     |                 |
| mm²/AWG/kcmil                  | 30-12                                                                               | 30-12                                                                                                                                                 |                 |
| Nominal current I <sub>N</sub> | 15 A                                                                                | 15 A                                                                                                                                                  |                 |
| Nominal voltage U <sub>N</sub> | 300 V                                                                               | 150 V                                                                                                                                                 |                 |

|     |                                                                                     |         |
|-----|-------------------------------------------------------------------------------------|---------|
| EAC |  | B.01742 |
|-----|-------------------------------------------------------------------------------------|---------|

### Accessories

#### Accessories

#### Bridge

Insertion bridge - EBP 2- 5 - 1733169



Insertion bridge, fully insulated, for connectors with 5.0 or 5.08 mm pitch, no. of positions: 2

#### Cable housing

## Printed-circuit board connector - MSTB 2,5/12-ST - 1754643

### Accessories

Cable housing - KGS-MSTB 2,5/12 - 1783818



Cable housing, Pitch: 0 mm, Number of positions: 12, Dimension a: 60 mm, Color: green

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### 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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### Labeled terminal marker

Marker card - SK 5/3,8:FORTL.ZAHLEN - 0804183



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 mm, Lettering field: 5 x 3.8 mm

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### 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

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### Additional products

Base strip - MSTBW 2,5/12-G - 1736014



Header, Nominal current: 12 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green, Contact surface: Tin, Mounting: Wave soldering

## Printed-circuit board connector - MSTB 2,5/12-ST - 1754643

### Accessories

#### Base strip - MSTBV 2,5/12-G - 1753631



Header, Nominal current: 12 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green, Contact surface: Tin, Mounting: Wave soldering

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#### Base strip - MSTB 2,5/12-G - 1754630



Header, Nominal current: 12 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green, Contact surface: Tin, Mounting: Wave soldering

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#### Base strip - MSTBVA 2,5/12-G - 1755600



Header, Nominal current: 12 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green, Contact surface: Tin, Mounting: Wave soldering

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#### Base strip - MSTBA 2,5/12-G - 1757569



Header, Nominal current: 12 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green, Contact surface: Tin, Mounting: Wave soldering

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#### Base strip - MDSTB 2,5/12-G1 - 1762790



Header, Nominal current: 10 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green, Contact surface: Tin, Mounting: Wave soldering, 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 - MSTB 2,5/12-ST - 1754643

### Accessories

#### Base strip - MDSTBV 2,5/12-G1 - 1762949



Header, Nominal current: 10 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green, Contact surface: Tin, Mounting: Wave soldering, 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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#### Base strip - MSTB 2,5/12-G-LA - 1768286



Header, Nominal current: 12 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green, Contact surface: Tin, Mounting: Wave soldering

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#### Base strip - SMSTB 2,5/12-G - 1769337



Header, Nominal current: 12 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green, Contact surface: Tin, Mounting: Wave soldering

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#### Base strip - SMSTBA 2,5/12-G - 1769900



Header, Nominal current: 12 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green, Contact surface: Tin, Mounting: Wave soldering

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#### Base strip - MSTBA 2,5/12-G-LA - 1770588



Header, Nominal current: 12 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green, Contact surface: Tin, Mounting: Wave soldering

## Printed-circuit board connector - MSTB 2,5/12-ST - 1754643

### Accessories

#### Housing - MDSTBVA 2,5/12-G - 1845882



Header, Nominal current: 10 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 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!

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#### Housing - MDSTBV 2,5/12-G - 1846030



Header, Nominal current: 10 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 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!

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#### Housing - MDSTB 2,5/12-G - 1846467



Header, Nominal current: 10 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green, Contact surface: Tin, Mounting: Wave soldering, Can be aligned! Mounting flange: Order No. 1736771, 1736768. 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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#### Housing - MDSTBA 2,5/12-G - 1846616



Header, Nominal current: 10 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 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!

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#### Housing - MDSTBW 2,5/12-G - 1846917



Header, Nominal current: 10 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 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 - MSTB 2,5/12-ST - 1754643

### Accessories

Base strip - EMSTBA 2,5/12-G - 1899948

Header, Nominal current: 12 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green,  
Contact surface: Tin, Mounting: Press-in technology



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Base strip - EMSTBVA 2,5/12-G - 1914959

Header, Nominal current: 12 A, Rated voltage (III/2): 320 V, Number of positions: 12, Pitch: 5 mm, Color: green,  
Contact surface: Tin, Mounting: Press-in technology

