

## Printed-circuit board connector - GMSTBVA 2,5 HC/ 2-G-7,62 - 1792397

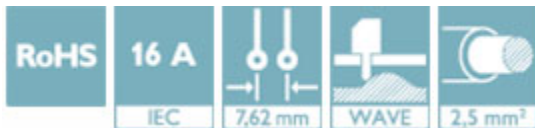
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PCB headers, nominal current: 16 A, number of positions: 2, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering



### Your advantages

- ✓ Well-known mounting principle allows worldwide use
- ✓ Larger pitch for increased voltage requirements
- ✓ Closed contour for optimum stability of the plug-in connection
- ✓ Vertical connection enables multi-row arrangement on the PCB



### Key Commercial Data

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 1 pc                                                                                                    |
| Minimum order quantity               | 50 pc                                                                                                   |
| GTIN                                 | <br>4 046356 615167 |
| GTIN                                 | 4046356615167                                                                                           |
| Weight per Piece (excluding packing) | 2.000 g                                                                                                 |
| Custom tariff number                 | 85366930                                                                                                |
| Country of origin                    | Germany                                                                                                 |

### Technical data

#### Item properties

|                           |                      |
|---------------------------|----------------------|
| Brief article description | Feed-through header  |
| Plug-in system            | POWER COMBICON 2,5   |
| Type of contact           | Male connector       |
| Range of articles         | GMSTBVA 2,5 HC/...-G |
| Pitch                     | 7.62 mm              |

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## Technical data

### Item properties

|                       |                |
|-----------------------|----------------|
| Number of positions   | 2              |
| Mounting type         | Wave soldering |
| Pin layout            | Linear pinning |
| Locking               | without        |
| Number of levels      | 1              |
| Number of connections | 2              |
| Number of potentials  | 2              |

### Electrical parameters

|                             |       |
|-----------------------------|-------|
| Rated current               | 16 A  |
| Rated voltage (III/2)       | 630 V |
| Rated surge voltage (III/2) | 6 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 (3 - 5 µm Sn)                                                                 |
| Metal surface contact area (middle layer)   | Nickel (1.3 - 3 µm Ni),                                                           |
| Metal surface soldering area (top layer)    | Tin (3 - 5 µm Sn)                                                                 |
| Metal surface soldering area (middle layer) | Nickel (1.3 - 3 µm Ni)                                                            |

### 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 |

### Dimensions for the product

|                             |          |
|-----------------------------|----------|
| Length [ l ]                | 8.6 mm   |
| Width [ w ]                 | 15.24 mm |
| Height [ h ]                | 15.9 mm  |
| Pitch                       | 7.62 mm  |
| Height (without solder pin) | 12 mm    |
| Solder pin [P]              | 3.9 mm   |
| Pin dimensions              | 1 x 1 mm |

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## Technical data

### Dimensions for the product

|             |         |
|-------------|---------|
| Dimension a | 7.62 mm |
|-------------|---------|

### Dimensions for PCB design

|               |        |
|---------------|--------|
| Hole diameter | 1.4 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) |

### Air clearances and creepage distances

|                                                 |        |
|-------------------------------------------------|--------|
| Rated insulation voltage (III/3)                | 500 V  |
| Rated insulation voltage (III/2)                | 630 V  |
| Rated insulation voltage (II/2)                 | 1000 V |
| Rated surge voltage (III/3)                     | 6 kV   |
| Rated surge voltage (III/2)                     | 6 kV   |
| Rated surge voltage (II/2)                      | 6 kV   |
| Minimum clearance - inhomogeneous field (III/3) | 5.5 mm |
| Minimum clearance - inhomogeneous field (III/2) | 5.5 mm |
| Minimum clearance - inhomogeneous field (II/2)  | 5.5 mm |
| Minimum creepage distance value (III/3)         | 6.3 mm |
| Minimum creepage distance value (III/2)         | 3.2 mm |
| Minimum creepage distance value (II/2)          | 5 mm   |

### Mechanical tests (A)

|                                              |             |
|----------------------------------------------|-------------|
| Insertion strength per pos. approx.          | 6 N         |
| Withdraw strength per pos. approx.           | 4 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 <sub>1</sub>      | 0.64 mΩ               |
| Insertion/withdrawal cycles            | 50                    |
| Contact resistance R <sub>2</sub>      | 0.75 mΩ               |
| Impulse withstand voltage at sea level | 9.8 kV                |

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## Technical data

### Durability tests (B)

|                                              |         |
|----------------------------------------------|---------|
| Power-frequency withstand voltage            | 3.31 kV |
| Insulation resistance, neighboring positions | 7 TΩ    |

### 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 <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle |
| Impulse withstand voltage at sea level | 9.8 kV                                                                    |
| Power-frequency withstand voltage      | 3.31 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 |
|                                        | CUL    |
| Flammability rating according to UL 94 | V0     |

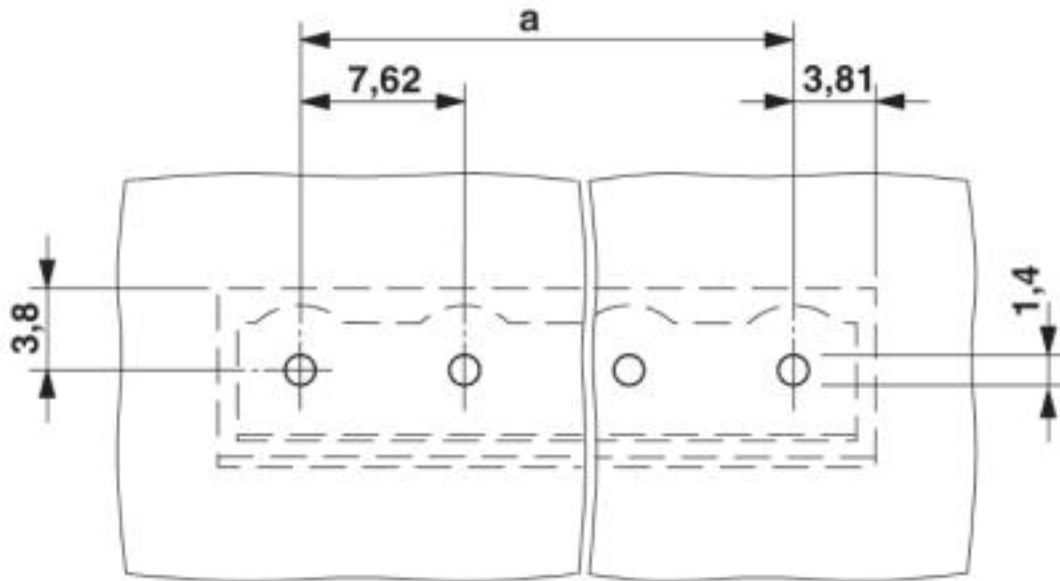
### Environmental Product Compliance

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

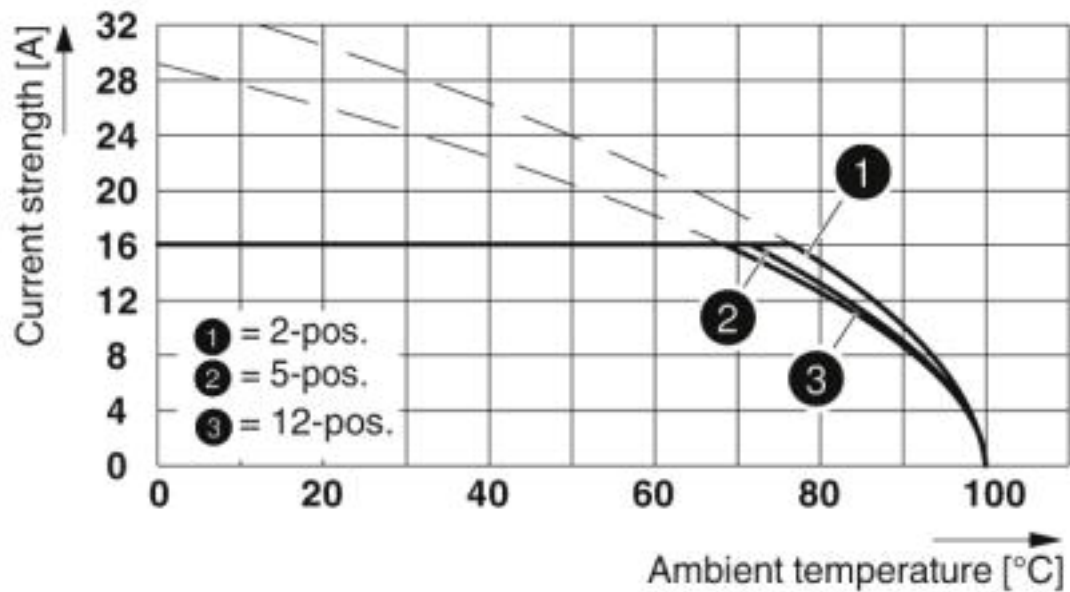
## Drawings

## Printed-circuit board connector - GMSTBVA 2,5 HC/ 2-G-7,62 - 1792397

Drilling diagram



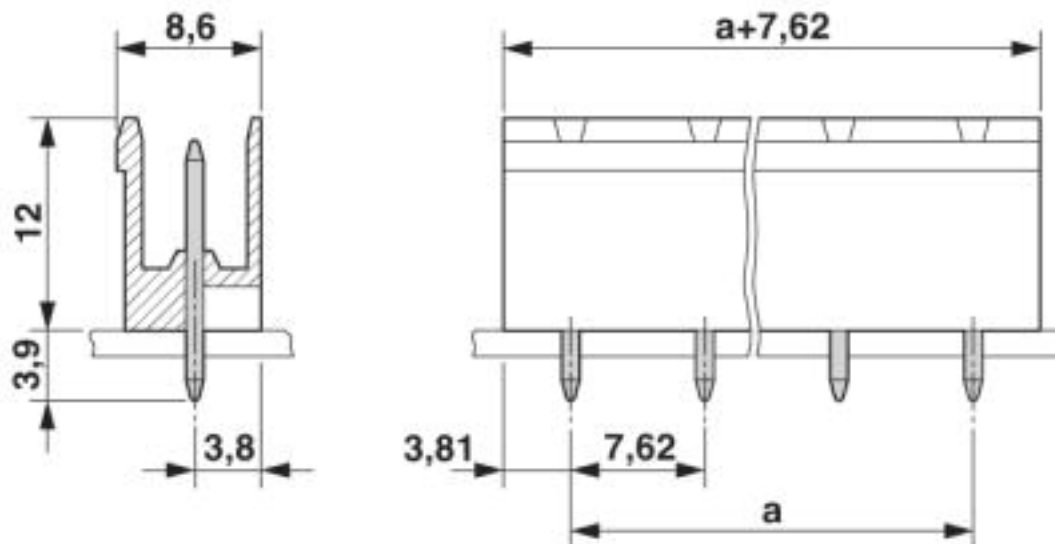
Diagram



Type: GMSTB 2.5 HCV/...-ST-7.62(-LR) with GMSTBVA 2.5 HC/...-G-7.62(-LR)

## Printed-circuit board connector - GMSTBVA 2,5 HC/ 2-G-7,62 - 1792397

Dimensional drawing



### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| 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 | EC002637 |
| 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 |

# Printed-circuit board connector - GMSTBVA 2,5 HC/ 2-G-7,62 - 1792397

## Classifications

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 13.2 | 39121409 |
|-------------|----------|

## Approvals

### Approvals

#### Approvals

EAC / cULus Recognized / IECCEB Scheme / VDE Zeichengenehmigung

#### Ex Approvals

### Approval details

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

|                    |                                                                                     |                                                                                                                                                       |                 |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 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> | E60425-19931013 |
|                    | B                                                                                   | D                                                                                                                                                     |                 |
| Nominal voltage UN | 300 V                                                                               | 300 V                                                                                                                                                 |                 |
| Nominal current IN | 20 A                                                                                | 10 A                                                                                                                                                  |                 |

|                    |                                                                                     |                                                           |                |
|--------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------|----------------|
| IECCEB Scheme      |  | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | DE1-60988-B1B2 |
|                    |                                                                                     |                                                           |                |
| Nominal voltage UN | 400 V                                                                               |                                                           |                |
| Nominal current IN | 16 A                                                                                |                                                           |                |

|                        |                                                                                     |                                                                                                                                                                                                           |          |
|------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| VDE Zeichengenehmigung |  | <a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a> | 40050079 |
|                        |                                                                                     |                                                                                                                                                                                                           |          |
| Nominal voltage UN     | 400 V                                                                               |                                                                                                                                                                                                           |          |
| Nominal current IN     | 16 A                                                                                |                                                                                                                                                                                                           |          |

## Printed-circuit board connector - GMSTBVA 2,5 HC/ 2-G-7,62 - 1792397

### Accessories

### Additional products

Printed-circuit board connector - GMSTB 2,5 HCV/ 2-ST-7,62 - 1714278



PCB connector, nominal current: 16 A, number of positions: 2, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Printed-circuit board connector - GIC 2,5 HC/ 2-G-7,62 - 1745784



PCB headers, nominal current: 16 A, number of positions: 2, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering

Printed-circuit board connector - GICV 2,5 HC/ 2-G-7,62 - 1756485



PCB headers, nominal current: 16 A, number of positions: 2, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering

Printed-circuit board connector - GMVSTBR 2,5 HV/ 2-ST-7,62 - 1774454



PCB connector, nominal current: 12 A, number of positions: 2, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Printed-circuit board connector - GMVSTBW 2,5 HV/ 2-ST-7,62 - 1771910



PCB connector, nominal current: 12 A, number of positions: 2, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



