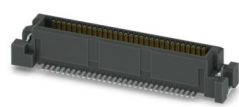


Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.

SMD male connector, nominal current: 0.5 A, test voltage: 500 V AC, number of positions: 60, pitch: 0.635 mm, color: black, contact surface: Au, contact connection type: Pin, mounting: SMD soldering



Your advantages

- Design-in support during device development using MCAD/ECAD data and a free sample service
- Cost and space savings with the comprehensive portfolio available in various stack heights
- Easy mating with integrated keyways and tolerance compensation for error-free production
- Time savings during the development process with customer-specific simulations for data integrity
- High-speed data transmission up to 30 Gbps for various possible applications

Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1332122       |
| Packing unit                         | 850 pc        |
| Minimum order quantity               | 850 pc        |
| Sales key                            | AA23          |
| Product key                          | AAWGCA        |
| GTIN                                 | 4063151626594 |
| Weight per piece (including packing) | 1.295 g       |
| Weight per piece (excluding packing) | 1.295 g       |
| Customs tariff number                | 85366930      |
| Country of origin                    | CN            |

## Technical data

### Product properties

|                     |                        |
|---------------------|------------------------|
| Product type        | SMD male connector     |
| Product family      | FS 0,635/...-MV-R- 5,0 |
| Number of positions | 60                     |
| Pitch               | 0.635 mm               |
| Number of rows      | 2                      |
| Pin layout          | Linear pad geometry    |

### Electrical properties

#### Properties

|                           |                                                 |
|---------------------------|-------------------------------------------------|
| Nominal current $I_N$     | 0.5 A IEC 60512-5-2:2002-02 (40-pos. / 60-pos.) |
| Contact resistance        | 40 mΩ                                           |
| Test voltage              | 500 V AC IEC 60512-4-1:2003-05                  |
| Rated voltage (I/I)       | 125 V                                           |
| Rated surge voltage (I/I) | 0.8 kV                                          |

#### Data transmission

|                        |         |
|------------------------|---------|
| Data transmission rate | 20 Gbps |
|------------------------|---------|

### Mounting

|               |                     |
|---------------|---------------------|
| Mounting type | SMD soldering       |
| Pin layout    | Linear pad geometry |

#### Processing notes

|                                  |                  |
|----------------------------------|------------------|
| Process                          | Reflow soldering |
| Moisture Sensitive Level         | MSL 1            |
| Classification temperature $T_c$ | 260 °C           |
| Solder cycles in the reflow      | 3                |

### Material specifications

#### 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                     | Selective coating                                                                |
| Metal surface contact area (top layer)      | Gold (Au)                                                                        |
| Metal surface contact area (middle layer)   | Nickel (Ni)                                                                      |
| Metal surface soldering area (top layer)    | Tin (Sn)                                                                         |
| Metal surface soldering area (middle layer) | Nickel (Ni)                                                                      |

#### Material data - housing

|                 |              |
|-----------------|--------------|
| Color (Housing) | black (9005) |
|-----------------|--------------|

# FS 0,635/ 60-MV-R- 5,0 - SMD male connectors



1332122

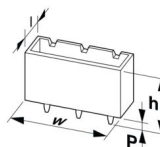
<https://www.phoenixcontact.com/us/products/1332122>

|                                        |      |
|----------------------------------------|------|
| Insulating material                    | LCP  |
| Insulating material group              | IIIa |
| CTI according to IEC 60112             | 175  |
| Flammability rating according to UL 94 | V0   |

## Notes

|                    |                                                                                                                                                                                                                      |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Notes on operation | The permissible voltage during operation depends on the application, taking into consideration the air clearances and creepage distances within the scope of insulation requirements in accordance with IEC 60664-1. |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Dimensions

|                     |                                                                                    |
|---------------------|------------------------------------------------------------------------------------|
| Dimensional drawing |  |
| Pitch               | 0.635 mm                                                                           |
| Width [w]           | 25.92 mm                                                                           |
| Height [h]          | 5.6 mm                                                                             |
| Length [l]          | 5.2 mm                                                                             |
| Installed height    | 5 mm                                                                               |

## Application

|                   |                                                                                                                                                                                   |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact cover     | 0.6 mm                                                                                                                                                                            |
| Center offset     | ± 0.5 mm in longitudinal and transverse direction                                                                                                                                 |
| Stack height      | 6 mm Tolerance: +0.6 mm (in combination with Range of articles:FS 0,635/...-FV-R- 4,0)<br>12 mm Tolerance: +0.6 mm (in combination with Range of articles:FS 0,635/...-FV-R-10,0) |
| Wipe length       | 0.6 mm                                                                                                                                                                            |
| Angular tolerance | ± 10 ° in longitudinal and transverse direction (when plugging in)<br>± 2 ° in longitudinal and transverse direction (when plugged in)                                            |

## PCB design

|               |               |
|---------------|---------------|
| Pad geometry  | 0.35 x 1.8 mm |
| Hole diameter | 0.9 mm        |

## Electrical tests

### Thermal test | Test group C

|                            |                       |
|----------------------------|-----------------------|
| Specification              | IEC 60512-5-2:2002-02 |
| Tested number of positions | 60                    |

### Insulation resistance

|                                              |                       |
|----------------------------------------------|-----------------------|
| Specification                                | IEC 60512-3-1:2002-02 |
| Insulation resistance, neighboring positions | ≥ 5 GΩ                |

# FS 0,635/ 60-MV-R- 5,0 - SMD male connectors



1332122

<https://www.phoenixcontact.com/us/products/1332122>

## Air clearances and creepage distances |

|                                                   |                     |
|---------------------------------------------------|---------------------|
| Specification                                     | IEC 60664-1:2007-04 |
| Insulating material group                         | IIIa                |
| Minimum value for clearance and creepage distance | 0.19 mm             |

## Environmental and real-life conditions

### Vibration test

|                        |                       |
|------------------------|-----------------------|
| Specification          | IEC 60068-2-6:2007-12 |
| Frequency              | 10 - 55 - 10 Hz       |
| Sweep speed            | 1 octave/min          |
| Amplitude              | 1.52 mm               |
| Acceleration           | 181 m/s <sup>2</sup>  |
| Test duration per axis | 2 h                   |
| Test directions        | X-, Y- and Z-axis     |

### Durability test

|                                              |                                   |
|----------------------------------------------|-----------------------------------|
| Specification                                | IEC 60512-9-1:2010-03 (following) |
| Contact resistance R <sub>1</sub>            | 40 mΩ                             |
| Contact resistance R <sub>2</sub>            | 40 mΩ                             |
| Insertion/withdrawal cycles                  | 50                                |
| Insulation resistance, neighboring positions | ≥ 5 GΩ                            |

### Climatic test

|                                   |                        |
|-----------------------------------|------------------------|
| Specification                     | IEC 60068-2-60:2015-06 |
| Corrosive stress                  | Method 4, 10 days      |
| Thermal stress                    | 125 °C/168 h           |
| Power-frequency withstand voltage | 500 V                  |

### Ambient conditions

|                                         |                   |
|-----------------------------------------|-------------------|
| Ambient temperature (operation)         | -55 °C ... 125 °C |
| Ambient temperature (storage/transport) | -40 °C ... 70 °C  |
| Relative humidity (storage/transport)   | 30 % ... 70 %     |
| Ambient temperature (assembly)          | -5 °C ... 100 °C  |

## Packaging specifications

|                             |                 |
|-----------------------------|-----------------|
| Dimensional drawing         |                 |
| Type of packaging           | 44 mm wide tape |
| [W] tape width              | 44 mm           |
| [W2] coil overall dimension | ≤ 50.4 mm       |
| [A] coil diameter           | ≤ 330 mm        |

# FS 0,635/ 60-MV-R- 5,0 - SMD male connectors



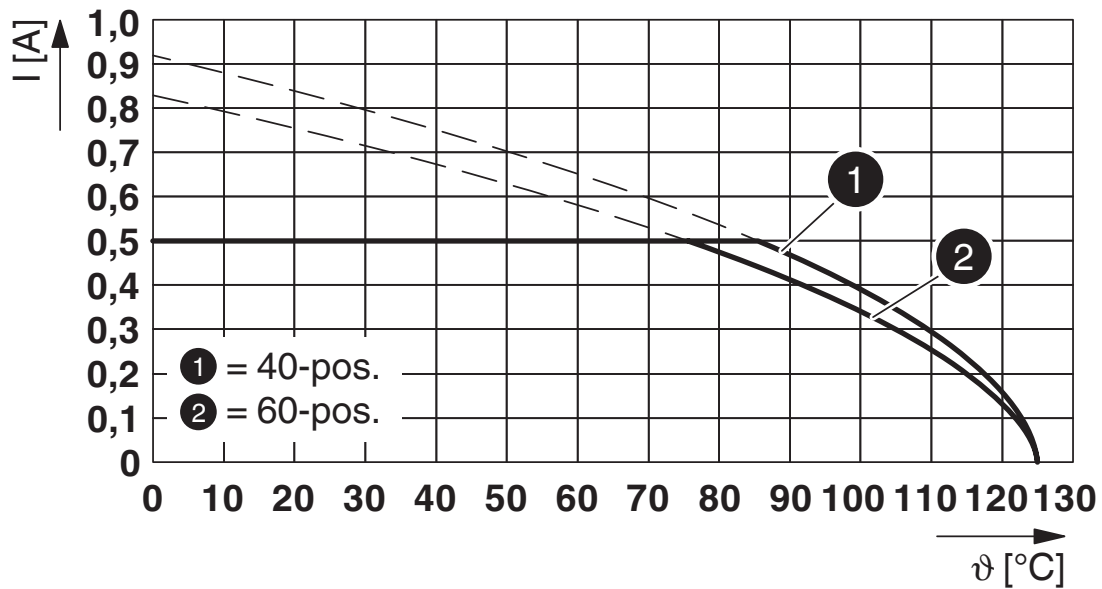
1332122

<https://www.phoenixcontact.com/us/products/1332122>

|                      |                 |
|----------------------|-----------------|
| Outer packaging type | Transparent-Bag |
|----------------------|-----------------|

## Drawings

Diagram



Type: FS 0,635/...-MV-R- 5,0 with FS 0,635/...-FV-R- 4,0

# FS 0,635/ 60-MV-R- 5,0 - SMD male connectors



1332122

<https://www.phoenixcontact.com/us/products/1332122>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1332122>

|                                                                                                                                                        |                       |                       |                   |                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| <div> <b>cULus Recognized</b><br/>Approval ID: E118976-20230512</div> |                       |                       |                   |                             |
|                                                                                                                                                        | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine                                                                                                                                                  |                       |                       |                   |                             |
|                                                                                                                                                        | 29.9 V                | 0.5 A                 | -                 | -                           |

# FS 0,635/ 60-MV-R- 5,0 - SMD male connectors



1332122

<https://www.phoenixcontact.com/us/products/1332122>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27460201 |
| ECLASS-15.0 | 27460201 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002637 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

# FS 0,635/ 60-MV-R- 5,0 - SMD male connectors



1332122

<https://www.phoenixcontact.com/us/products/1332122>

## 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% |
|-------------------------------------|----------------------------|

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)