

SMD male connectors - FP 1,27/ 50-MH - 1714920

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>)

SMD male connector, Nominal current at 20 °C: 1.4 A, Test voltage: 500 V AC, number of positions: 50, pitch: 1.27 mm, color: black, contact surface: Gold, mounting: SMD soldering



The figure shows a 12-pos. version with 12 contacts

Your advantages

- ✓ Gold-plated contacts ensure transfer quality remains stable over the long term
- ✓ Compact, high-position board-to-board or wire-to-board connectors for space-saving device designs
- ✓ Stacked, coplanar or orthogonal PCB connections enable maximum flexibility in the device
- ✓ Male and female connectors of different height can be combined – for individual PCB spacing of 8 mm ... 13.8 mm



Key Commercial Data

| | |
|------------------------|---------------|
| Packing unit | 560 pc |
| Minimum order quantity | 560 pc |
| GTIN | |
| GTIN | 4055626402970 |

Technical data

Item properties

| | |
|---------------------------|---------------------|
| Brief article description | SMD male connectors |
| Plug-in system | FINEPITCH 1,27 mm |
| Type of contact | Male connector |
| Range of articles | FP 1,27/...-MH |
| Pitch | 1.27 mm |
| Number of positions | 50 |
| Mounting type | SMD soldering |
| Pin layout | Linear pad geometry |
| Number of levels | 2 |
| Number of potentials | 50 |

SMD male connectors - FP 1,27/ 50-MH - 1714920

Technical data

Electrical data

| | |
|--------------------------|----------------------------------|
| Nominal current at 20 °C | 1.4 A (50-pos.) |
| Test voltage | 500 V AC |
| Contact resistance | ≤25 mΩ, (IEC 60512-2-1:2002-02) |
| Insulation resistance | ≥ 10 GΩ, (IEC 60512-3-1:2002-02) |

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), Palladium nickel (PdNi) |

Material data - housing

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

Dimensions for the product

| | |
|-----------------------------|----------|
| Length [l] | 7.2 mm |
| Width [w] | 36.84 mm |
| Height [h] | 5 mm |
| Pitch | 1.27 mm |
| Height (without solder pin) | 4.2 mm |
| Pin spacing | 1.27 mm |
| Coplanarity | ≤ 0.1 mm |

Dimensions for PCB design

| | |
|-------------|---------|
| Pin spacing | 1.27 mm |
|-------------|---------|

Dimensions for the application

| | |
|-------------------|---|
| Contact cover | 0.9 mm |
| Overlap length | 1.5 mm |
| Medium offset | ± 0.7 mm in longitudinal and transverse direction |
| Angular tolerance | ± 4 ° in longitudinal direction |
| | ± 2 ° in transverse direction |

Packaging information

| | |
|----------------------------|-----------------|
| Type of packaging | 56 mm wide tape |
| Pieces per package | 560 |
| Denomination packing units | Pcs. |
| [W] tape width | 56 mm |
| [A] coil diameter | 330 mm |

SMD male connectors - FP 1,27/ 50-MH - 1714920

Technical data

Packaging information

| | |
|-----------------------------|--|
| [W2] coil overall dimension | 62.4 mm |
| Outer packaging type | Transparent-Bag |
| ESD level | (D) electrostatically conductive |
| Specification | DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07 |

General product information

| | |
|--------------|--|
| Type of note | Notes on operation |
| Note | 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. |

Processing notes

| | |
|---|--|
| Process | Reflow soldering |
| Specification | Following IPC/JEDEC J-STD-020E:2014-12 |
| Moisture Sensitive Level | MSL 1 |
| Classification temperature T _c | 260 °C |

Ambient conditions

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

Mechanical tests

| | |
|--|---------------|
| Insertion and withdrawal force per contact | approx. 0.5 N |
|--|---------------|

Air clearances and creepage distances

| | |
|---------------------------------------|-------------|
| Air clearances and creepage distances | min. 0.4 mm |
|---------------------------------------|-------------|

Current carrying capacity / derating curves

| | |
|------------------|--|
| Caption | Type: FP 1,27/...-FH with FP 1,27/...-MH |
| Specification | IEC 60512-5-2:2002-02 |
| Reduction factor | 0.8 |
| Note | max. 1.4 A at 20 °C (50-pos.) |

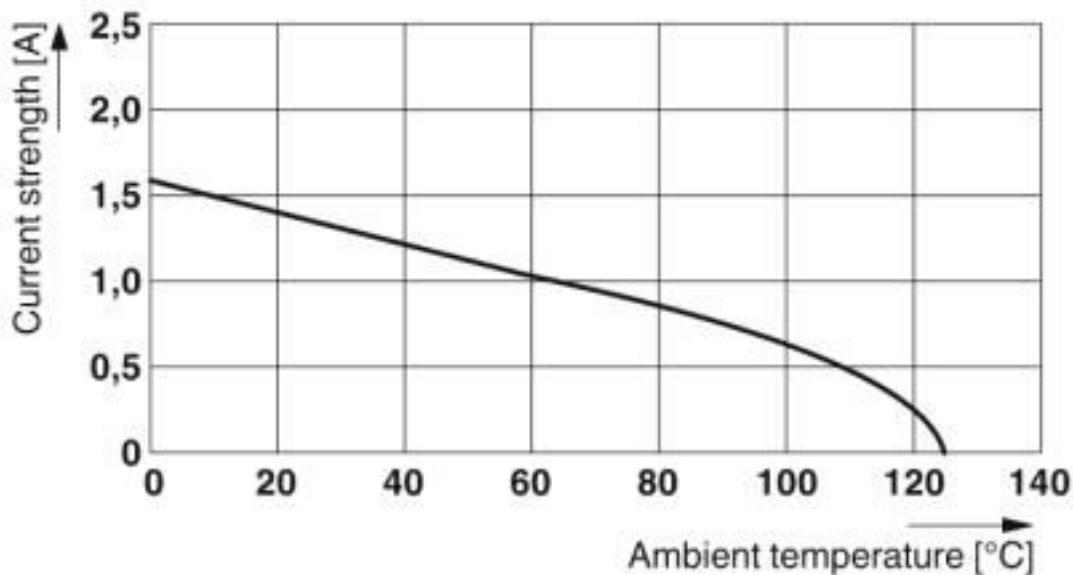
Service life

| | |
|--------------|--|
| Service life | 500 Insertion/withdrawal cycles, Performance level 1 |
|--------------|--|

Drawings

SMD male connectors - FP 1,27/ 50-MH - 1714920

Diagram



Type: FP 1,27/...-FH with FP 1,27/...-MH

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 5.0 | EC002637 |
| ETIM 6.0 | EC002637 |
| ETIM 7.0 | EC002637 |

Approvals

Approvals

Approvals

cULus Recognized / EAC

SMD male connectors - FP 1,27/ 50-MH - 1714920

Approvals

Ex Approvals

Approval details

cULus Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm> E118976-20170331

EAC



B.01687

Accessories

Additional products

SMD female connectors - FP 1,27/ 50-FV 9,05 - 1714886



SMD female connector, Nominal current at 20 °C: 1.4 A, Test voltage: 500 V AC, number of positions: 50, pitch: 1.27 mm, color: black, contact surface: Gold, mounting: SMD soldering

SMD female connectors - FP 1,27/ 50-FV 6,25 - 1714898



SMD female connector, Nominal current at 20 °C: 1.4 A, Test voltage: 500 V AC, number of positions: 50, pitch: 1.27 mm, color: black, contact surface: Gold, mounting: SMD soldering

SMD female connectors - FP 1,27/ 50-FH - 1714878



SMD female connector, Nominal current at 20 °C: 1.4 A, Test voltage: 500 V AC, number of positions: 50, pitch: 1.27 mm, color: black, contact surface: Gold, mounting: SMD soldering

SMD male connectors - FP 1,27/ 50-MH - 1714920

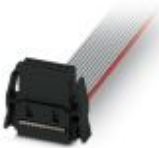
Accessories

IDC female connectors - FP 1,27/ 50-FWL - 1714909



IDC female connector, Nominal current at 20 °C: 1.2 A, Test voltage: 500 V AC, number of positions: 50, pitch: 1.27 mm, color: black, contact surface: Gold

Preassembled IDC female connector - FP 1,27/ 50-FWL-10/.../... - 1010254



Assembled IDC female connector, rated current: 1.2 A, cable length: Free input (0.05 ... 0.95 m), Cable type:Flat-ribbon conductor, Flat-ribbon conductor

Preassembled IDC female connector - FP 1,27/ 50-FWL-11/.../... - 1010245



Assembled IDC female connector, rated current: 1.2 A, cable length: Free input (0.05 ... 0.95 m), Cable type:Flat-ribbon conductor, Flat-ribbon conductor

Preassembled IDC female connector - FP 1,27/ 50-FWL-12/.../... - 1010236



Assembled IDC female connector, rated current: 1.2 A, cable length: Free input (0.05 ... 0.95 m), Cable type:Flat-ribbon conductor, Flat-ribbon conductor

Preassembled IDC female connector - FP 1,27/ 50-FWL-20/.../... - 1010224



Assembled IDC female connector, rated current: 1.2 A, cable length: Free input (0.05 ... 0.95 m), Cable type:Flat-ribbon conductor, Flat-ribbon conductor

SMD male connectors - FP 1,27/ 50-MH - 1714920

Accessories

Preassembled IDC female connector - FP 1,27/ 50-FWL-21/.../... - 1010202



Assembled IDC female connector, rated current: 1.2 A, cable length: Free input (0.05 ... 0.95 m), Cable type: Flat-ribbon conductor, Flat-ribbon conductor

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>

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Board to Board & Mezzanine Connectors](#) category:

Click to view products by [Phoenix Contact](#) manufacturer:

Other Similar products are found below :

[589158040000018](#) [MDF7C-18P-2.54DSA\(55\)](#) [FCN-230C068-11](#) [FCN-268F012-G/BD](#) [FCN-268F036-G/BD](#) [FCN-268M012-G/0D](#) [FCN-268M024-G/1D](#) [FCN-723J004/1](#) [MIS-048-01-F-D-DP-K](#) [832-10-034-10-001000](#) [FX4C-80S-1.27DSA](#) [FCN-214Q030-G/0](#) [FCN-234P048-G/0](#) [FCN-235D050-G/C](#) [210-93-314-41-105000](#) [2-22603-0](#) [MDF7-40DP-2.54DSA\(55\)](#) [AXG720047](#) [5031084030](#) [MIT-114-03-F-D-K](#) [55323-1519](#) [DF33-2P-3.3DSA\(24\)](#) [YFT-20-05-H-03-SB-K](#) [503308-3040](#) [026-6203-PDB](#) [027-6203-PDB](#) [069159702701000](#) [10123981-102LF](#) [101A10019X](#) [55650-0588-C](#) [68682-310LF](#) [68684-306](#) [75140-7012](#) [87471-650](#) [194261-1](#) [FCN-268F024-G0D](#) [10124054-515LF](#) [68685-603](#) [8-1616154-3](#) [MIS-019-01-F-D](#) [FCN-268M024-G/3D](#) [FCN-268M036-G/BD](#) [20021832-06016C1LF](#) [KX15-20KLDL-E1000E](#) [MDF7-16DP-2.54DSA\(55\)](#) [AXE810124](#) [FCN-214J100-G/0](#) [FCN-230C068-E/S](#) [AXE812124](#) [AXE816124](#)