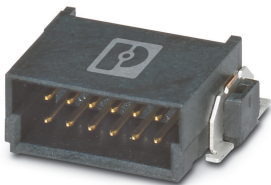


## SMD male connectors - FP 1,27/ 50-MH - 1714920

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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, type of contact: Male connector, 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	 4 0 5 5 6 2 6 4 0 2 9 7 0
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 IEC 60512-5-2:2002-02 (50-pos.)
Test voltage	500 V AC IEC 60512-4-1:2003
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)
Metal surface soldering area (top layer)	Tin (Sn)

### Material data - housing

Housing color	black (9005)
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

### Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
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
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### 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

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

### Technical data

#### Packaging information

Denomination packing units	Pcs.
[W] tape width	56 mm
[A] coil diameter	330 mm
[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 <sub>c</sub>	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	0.5 N
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#### Air clearances and creepage distances

Air clearances and creepage distances	min. 0.4 mm
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#### Current carrying capacity / derating curves

Caption	Type: FP 1,27/...-FH with FP 1,27/...-MH
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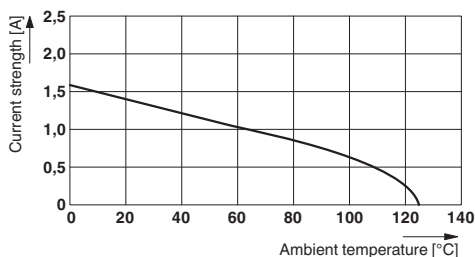
#### Service life

Service life	500 Insertion/withdrawal cycles, Performance level 1
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### 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 11.0	27460201
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 9.0	27440402

### ETIM

ETIM 6.0	EC002637
ETIM 7.0	EC002637

## Approvals

### Approvals

#### Approvals

cULus Recognized

#### Ex Approvals

### Approval details

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> E118976-20170331
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## SMD male connectors - FP 1,27/ 50-MH - 1714920

### 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, type of contact: Female connector, mounting: SMD soldering

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##### 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, type of contact: Female connector, mounting: SMD soldering

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##### 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, type of contact: Female connector, mounting: SMD soldering

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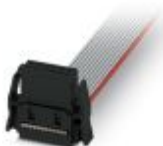
##### IDC female connectors - FP 1,27/ 50-FWL - 1714909



IDC female connector, Nominal current at 20 °C: 1.2 A, Test voltage: 500 V AC, number of positions: 50, pitch: 1.27 mm, Number of rows: 1, color: black, contact surface: Gold, type of contact: Female connector

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##### 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

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

### Accessories

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

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