

SMD male connectors - FP 1,27/ 80-MV 1,75 - 1714945

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SMD male connector, Nominal current at 20 °C: 1.4 A, Test voltage: 500 V AC, number of positions: 80, 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 | 280 pc |
| Minimum order quantity | 280 pc |
| GTIN | |
| GTIN | 4055626403168 |

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/...-MV 1,75 |
| Pitch | 1.27 mm |
| Number of positions | 80 |
| Mounting type | SMD soldering |
| Pin layout | Linear pad geometry |
| Number of levels | 2 |
| Number of potentials | 80 |

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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] | 6 mm |
| Width [w] | 55.89 mm |
| Height [h] | 7.45 mm |
| Pitch | 1.27 mm |
| Height (without solder pin) | 6.7 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 |
| Stack height | 8 mm Tolerance: +1,5 mm (in combination with Range of articles:FP 1,27/...-FV 6,25) |
| | 10.8 mm Tolerance: +1,5 mm (in combination with Range of articles:FP 1,27/...-FV 9,05) |

Packaging information

| | |
|--------------------|-----------------|
| Type of packaging | 72 mm wide tape |
| Pieces per package | 280 |

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Technical data

Packaging information

| | |
|-----------------------------|--|
| Denomination packing units | Pcs. |
| [W] tape width | 72 mm |
| [A] coil diameter | 330 mm |
| [W2] coil overall dimension | 78.4 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/...-MV 1,75 |
| 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 |
|--------------|--|

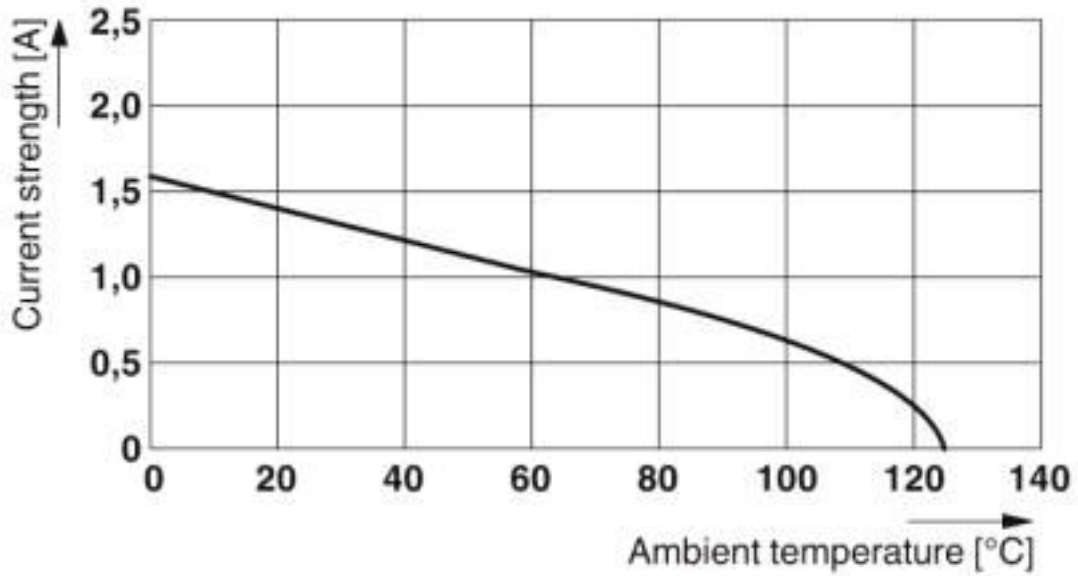
Environmental Product Compliance

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

Drawings

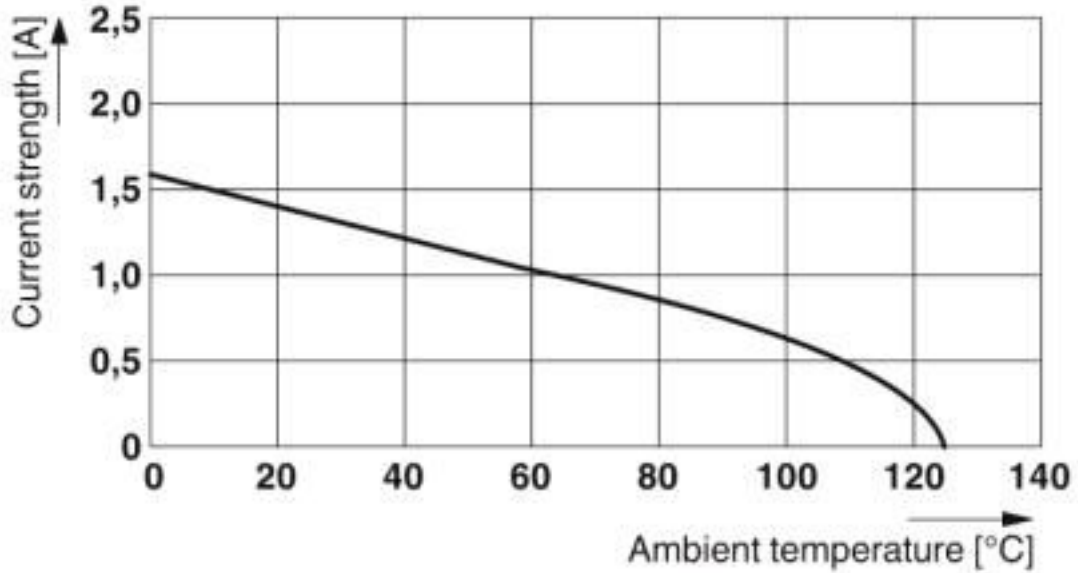
SMD male connectors - FP 1,27/ 80-MV 1,75 - 1714945

Diagram



Type: FP 1,27/...-FH with FP 1,27/...-MV 1,75

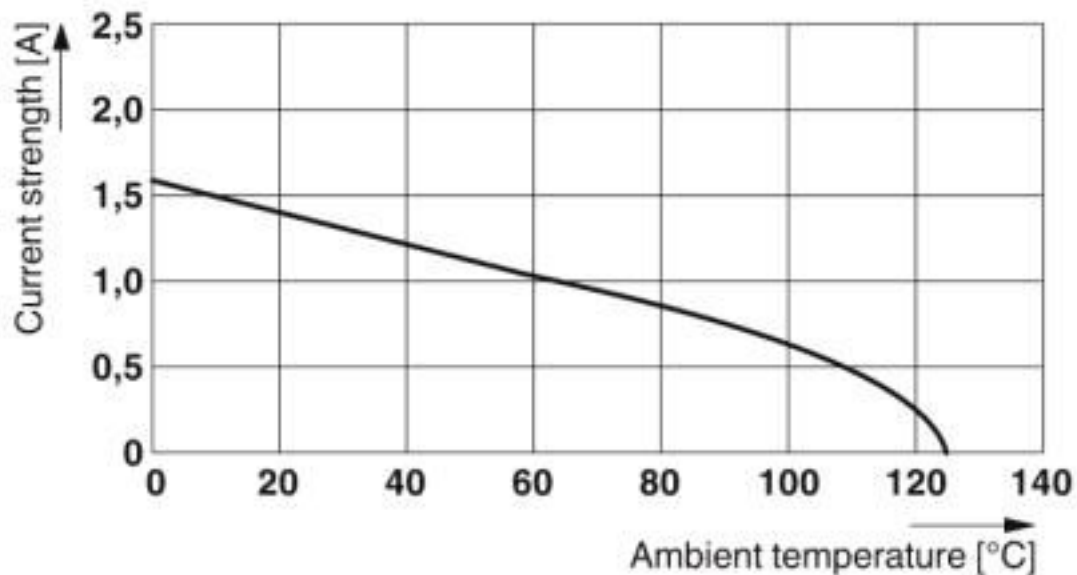
Diagram



Type: FP 1,27/...-FV 6,25 with FP 1,27/...-MV 1,75

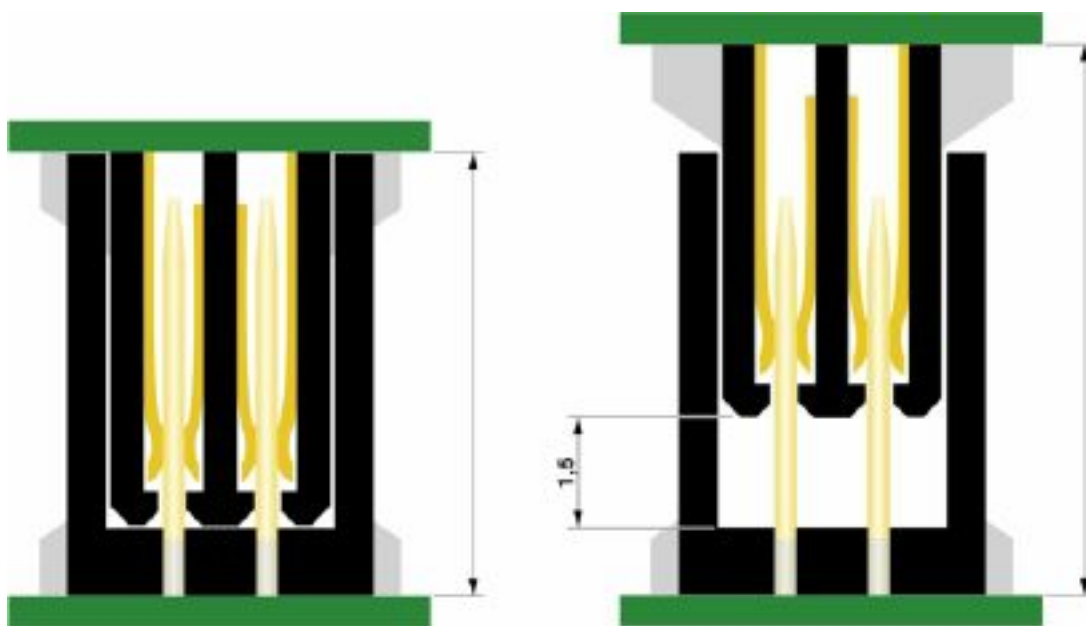
SMD male connectors - FP 1,27/ 80-MV 1,75 - 1714945

Diagram



Type: FP 1,27/...-FV 9,05 with FP 1,27/...-MV 1,75

Schematic diagram



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440402 |
| eCl@ss 4.0 | 27260700 |
| eCl@ss 4.1 | 27260700 |

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Classifications

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| 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

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/ 80-FV 9,05 - 1714889



SMD female connector, Nominal current at 20 °C: 1.4 A, Test voltage: 500 V AC, number of positions: 80, pitch: 1.27 mm, color: black, contact surface: Gold, mounting: SMD soldering

SMD male connectors - FP 1,27/ 80-MV 1,75 - 1714945

Accessories

SMD female connectors - FP 1,27/ 80-FV 6,25 - 1714901



SMD female connector, Nominal current at 20 °C: 1.4 A, Test voltage: 500 V AC, number of positions: 80, pitch: 1.27 mm, color: black, contact surface: Gold, mounting: SMD soldering

SMD female connectors - FP 1,27/ 80-FH - 1714880



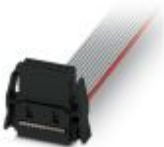
SMD female connector, Nominal current at 20 °C: 1.4 A, Test voltage: 500 V AC, number of positions: 80, pitch: 1.27 mm, color: black, contact surface: Gold, mounting: SMD soldering

IDC female connectors - FP 1,27/ 80-FWL - 1714911



IDC female connector, Nominal current at 20 °C: 1.2 A, Test voltage: 500 V AC, number of positions: 80, pitch: 1.27 mm, color: black, contact surface: Gold

Preassembled IDC female connector - FP 1,27/ 80-FWL-10/.../... - 1010252



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/ 80-FWL-11/.../... - 1010243



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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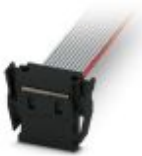
Accessories

Preassembled IDC female connector - FP 1,27/ 80-FWL-12/.../... - 1010234



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/ 80-FWL-20/.../... - 1010220



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/ 80-FWL-21/.../... - 1010180



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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