

Printed-circuit board connector - HSCP-SP 2,5-1UTT-55/55-7035 - 2202607

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PCB connector, nominal current: 8 A, rated voltage (III/2): 300 V, nominal cross section: 2.5 mm², number of positions: 2, pitch: 5 mm, connection method: Push-in spring connection, color: light gray, contact surface: Tin, Color of the spring levers: green, green / green, green


Your advantages

- ✓ Time saving push-in connection, tools not required
- ✓ Defined contact force ensures that contact remains stable over the long term
- ✓ Intuitive use through colour coded actuation lever
- ✓ Operation and conductor connection from one direction enable integration into front of device
- ✓ Quick and convenient testing using integrated test option
- ✓ User-friendly front connection plug for high contact densities

RoHS



Key Commercial Data

| | |
|------------------------|---|
| Packing unit | 50 pc |
| Minimum order quantity | 500 pc |
| GTIN |  4 055626 296265 |
| GTIN | 4055626296265 |

Technical data

Item properties

| | |
|---------------------------|---------------------------------|
| Brief article description | Printed-circuit board connector |
| Plug-in system | HSC 2,5 |
| Type of contact | Female connector |
| Range of articles | HSCP-SP 2,5-.. |
| Pitch | 5 mm |
| Number of positions | 2 |
| Connection method | Push-in spring connection |
| Number of levels | 2 |

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Item properties

| | |
|-----------------------|---|
| Number of connections | 2 |
| Number of potentials | 4 |

Electrical parameters

| | |
|-----------------------------|-------|
| Nominal current | 8 A |
| Nom. voltage | 300 V |
| Rated voltage | 250 V |
| Rated voltage (III/2) | 300 V |
| Rated voltage (II/2) | 600 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated surge voltage (III/2) | 4 kV |
| Rated surge voltage (II/2) | 4 kV |

Connection capacity

| | |
|---|---------------------------|
| Connection method | Push-in spring connection |
| pluggable | Yes |
| Conductor cross section solid | 0.2 mm² ... 1.5 mm² |
| Conductor cross section flexible | 0.2 mm² ... 2.5 mm² |
| Conductor cross section AWG / kcmil | 24 ... 16 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm² ... 1.5 mm² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm² ... 1.5 mm² |
| Cylindrical gauge a x b / diameter | 2.4 mm x 1.5 mm / 1.9 mm |
| Stripping length | 10 mm |

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 terminal point (top layer) | Tin (4 - 8 µm Sn) |
| Metal surface contact area (top layer) | Tin (4 - 8 µm Sn) |

Material data - housing

| | |
|---|-------------------|
| Housing color | light gray (7035) |
| 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 |

Material data – actuating element

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Material data – actuating element

| | |
|--|-------|
| Color of the actuating lever | green |
| Insulating material | PBT |
| CTI according to IEC 60112 | 275 |
| Flammability rating according to UL 94 | V0 |

Dimensions for the product

| | |
|-----------------------------|---------|
| Length [l] | 21.6 mm |
| Width [w] | 10.9 mm |
| Height [h] | 18.8 mm |
| Pitch | 5 mm |
| Height (without solder pin) | 18.8 mm |

Packaging information

| | |
|----------------------------|---------------------|
| Type of packaging | packed in cardboard |
| Pieces per package | 50 |
| Denomination packing units | Pcs. |
| Outer packaging type | Carton |

General product information

| | |
|--------------|---|
| Type of note | Assembly instruction: |
| Note | Refer to the data sheet for the range in the download area. |

Ambient conditions

| | |
|---|---|
| Ambient temperature (storage/transport) | -40 °C ... 55 °C |
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -40 °C ... 105 °C (dependent on the derating curve) |

Termination and connection method

| | |
|--|---|
| Conductor connection test | The stripped-off ends of the largest conductor can be completely inserted in the opening of the terminal point without using excessive force. |
| Test result | Test passed |
| Test – repeated connection and release | IEC 60999-1:1999-11 |
| | Test passed |
| Test for conductor damage and slackening | IEC 60999-1:1999-11 |
| | Test passed |

Pull-out test

| | |
|--|-----------------------------|
| Pull-out test | IEC 60999-1:1999-11 |
| | Test passed |
| Conductor cross section / conductor type / tensile force | 0.2 mm² / solid / > 10 N |
| | 0.2 mm² / flexible / > 10 N |
| | 1.5 mm² / solid / > 40 N |

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Pull-out test

| | |
|--|---|
| | 2.5 mm ² / flexible / > 50 N |
|--|---|

Mechanical tests according to standard

| | |
|-------------------------------------|------------------------|
| Test specification | IEC 61984 |
| Visual inspection | IEC 60512-1-1:2002-02 |
| Dimension check | IEC 60512-1-2:2002-02 |
| Resistance of inscriptions | IEC 60068-2-70:1995-12 |
| Insertion and withdrawal force | IEC 60512-13-2:2006-02 |
| No. of cycles | 25 |
| Insertion strength per pos. approx. | 4 N |
| Withdraw strength per pos. approx. | 3 N |
| Polarization and coding | IEC 60512-13-5:2006-02 |
| Contact holder in insert | IEC 60512-15-1:2008-05 |
| Test force per pos. | 20 N |

Air clearances and creepage distances

| | |
|---|---------------------|
| Clearances and creepage distances | IEC 60664-1:2007-04 |
| Specification | IEC 60664-1:2007-04 |
| Minimum clearance - inhomogeneous field (III/3) | 3 mm |
| Minimum clearance - inhomogeneous field (III/2) | 3 mm |
| Minimum clearance - inhomogeneous field (II/2) | 3 mm |
| Minimum creepage distance value (III/3) | 3.2 mm |
| Minimum creepage distance value (III/2) | 3 mm |
| Minimum creepage distance value (II/2) | 3.2 mm |

Current carrying capacity / derating curves

| | |
|------------------|---|
| Caption | Type: HSCP-SP 2,5-... with HSCH 2,5-...U/... THR 9005 |
| Specification | IEC 61984:2008-10 |
| Reduction factor | 0.8 |
| Note | Representation based on IEC 60512-5-2:2002-02 |
| | For number of positions, see diagram |

Mechanical tests (A)

| | |
|--|-------------|
| Test specification | IEC 61984 |
| Insertion strength per pos. approx. | 4 N |
| Withdraw strength per pos. approx. | 3 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 ₁ | 1.7 mΩ |

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Durability tests (B)

| | |
|--|----------|
| Insertion/withdrawal cycles | 25 |
| Contact resistance R ₂ | 1.9 mΩ |
| Impulse withstand voltage at sea level | 4.8 kV |
| Power-frequency withstand voltage | 2.21 kV |
| Insulation resistance, neighboring positions | > 1.9 TΩ |

Thermal tests (C)

| | |
|---|-----------------------|
| Specification | IEC 60512-5-1:2002-02 |
| Number of positions | 32 |
| Conductor cross section | 2.5 mm ² |
| Test current | 8 A |
| Upper limiting temperature requirements <100 °C | Test passed |

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 ³ SO ₂ on 300 dm ³ /40 °C/1 cycle |
| Impulse withstand voltage at sea level | 4.8 kV |
| Power-frequency withstand voltage | 1.39 kV |

Environmental and durability tests (E)

| | |
|---------------------------------------|-------------------------------------|
| Specification | IEC 61984:2008-10 |
| Result, degree of protection, IP code | Finger safety with IP20 test finger |

Standards and Regulations

| | |
|--|--|
| Connection in acc. with standard | EN-VDE |
| Flammability rating according to UL 94 | V0 |
| Safety note | WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property. |
| | • WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible. |
| | • WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product. |
| | • The item is intended to be an unencapsulated plug for installation in a housing. |
| | • Operate the connector only when it is fully plugged in. |

Environmental Product Compliance

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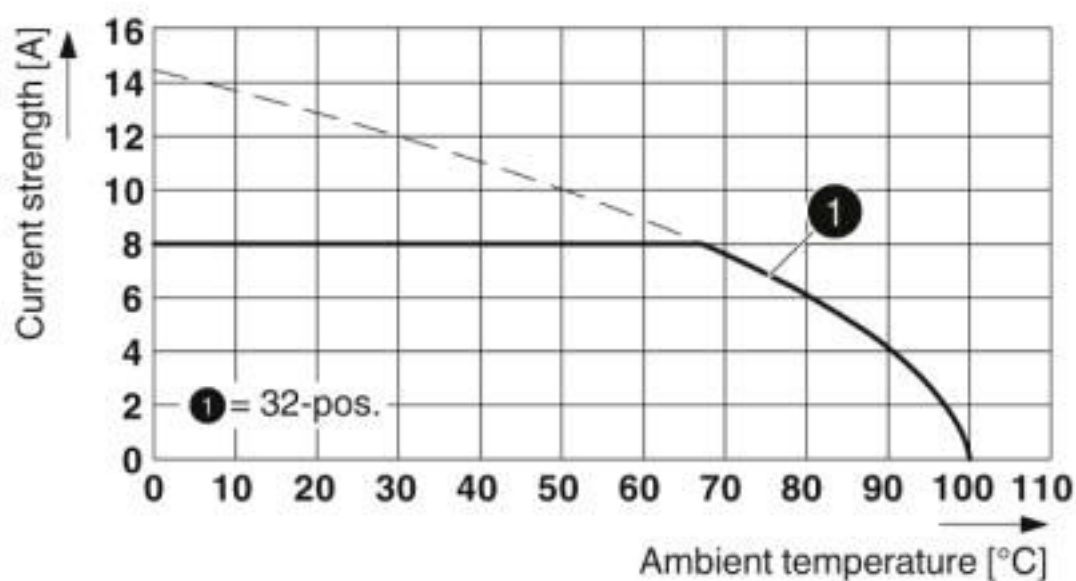
Technical data

Environmental Product Compliance

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

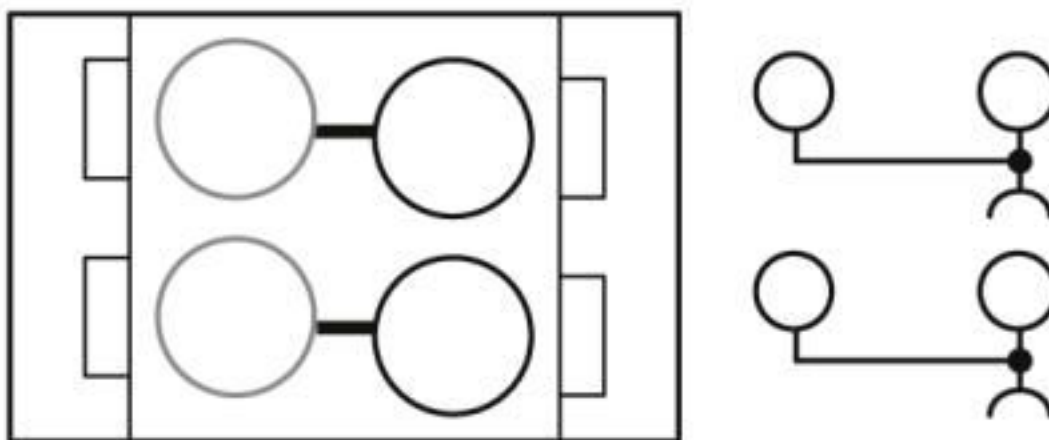
Drawings

Diagram



Type: HSCP-SP 2,5-... with HSCH 2,5-...U/... THR 9005

Schematic diagram



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Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440309 |
| eCl@ss 5.0 | 27371300 |
| eCl@ss 5.1 | 27371300 |
| eCl@ss 6.0 | 27180800 |
| eCl@ss 7.0 | 27182702 |
| eCl@ss 8.0 | 27440309 |
| eCl@ss 9.0 | 27440309 |

ETIM

| | |
|----------|----------|
| ETIM 4.0 | EC001031 |
| ETIM 5.0 | EC002638 |
| ETIM 6.0 | EC002638 |
| ETIM 7.0 | EC002638 |

UNSPSC

| | |
|-------------|----------|
| UNSPSC 13.2 | 39121409 |
| UNSPSC 18.0 | 39121409 |
| UNSPSC 19.0 | 39121409 |
| UNSPSC 20.0 | 39121409 |
| UNSPSC 21.0 | 39121409 |

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

| | | |
|-----|------------|---------|
| EAC | EAC | B.01687 |
|-----|------------|---------|

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