



preci-dip

# SPRING-LOADED CONNECTORS & PAD CONNECTORS

**SERIES**  
**811**

**811-SS-NNN-30-XXX101**  
Single Row  
2.54 mm, Surface mount perpendicular

Basic modular connectors with spring-loaded contacts (SLC), surface mount. Contacts with hollow piston design for low profile.



## TECHNICAL SPECS.:

|                                     |   |
|-------------------------------------|---|
| <b>Flammability</b>                 | UL 94V-O  |
| <b>Piston and barrel</b>            | Brass CuZn36Pb3 (C36000)                        |
| <b>Spring</b>                       | Stainless steel X12 CrNi177, DIN 17224          |
| <b>Max. stroke</b>                  | 1.4 mm (1.15 mm for 811-...-001101)             |
| <b>Forces initial</b>               | 0.25 N  |
| <b>Forces initial at 1/2 stroke</b> | 0.6 N   |
| <b>Mechanical life</b>              | 100'000 cycles                                  |
| <b>Max. operating current</b>       | 3.5 A   |
| <b>Contact resistance</b>           | 15 m (static measurement, halfway position)     |
| <b>Coplanarity SMD terminations</b> | Max. 0.1 mm (measured on 25 mm long connectors) |
| <b>Plating</b>                      | Gold 0.5 µm barrel and piston                   |

## ORDERING INFORMATION:

| Initial height A (mm) | Height plastic body B (mm) | XXX code |
|-----------------------|----------------------------|----------|
| 4.5                   | 2.95                       | 001      |
| 5                     | 2.95                       | 002      |
| 5.5                   | 2.95                       | 003      |
| 6                     | 4                          | 004      |
| 6.5                   | 4                          | 005      |
| 7                     | 4                          | 006      |
| 7.5                   | 4                          | 007      |

NNN number of poles. Replace NNN with the requested number of poles, e.g. 811-SS-NNN-30-002101 for a single row version with 16 pins

becomes 811-SS-016-30-00210110-  
001101.

# TECHNICAL ASSISTANCE

## GENERAL SPECIFICATIONS:

The values listed below are general specs applying for PRECI-DIP spring-loaded connectors. Please see individual catalog page for additional and product specific technical data.

|                             |                                 |
|-----------------------------|---------------------------------|
| Operating temperature range | -55 ... +125 °C                 |
| Climatic category (IEC)     | 55/85/21                        |
| Operating humidity range    | annual mean 75 %                |
| Max working voltage         | 100 VRMS/150 VDC (2.54 mm grid) |

PRECI-DIP products are recognized by Underwriters Laboratories Inc. and listed under "Connectors for Use in Data, Signal, Control and Power Applications", File Nr. E174442.

## ELECTRICAL CHARACTERISTICS:

|   |                           |
|---|---------------------------|
| Insulation resistance between any two adjacent contacts | Min. 10'000 M at 500 V AC |
| Capacitance between any two adjacent contacts           | Max. 1 pF                 |

## ENVIRONMENTAL CHARACTERISTICS:

The sockets withstand the following environmental tests without mechanical and electrical defects:

- Dry heat steady state IEC 60512-11-9.11i / 60068-2-2.Bb: 125 °C, 16h
- Damp heat cyclic IEC 60512-11-12.11m / 60068-2-30.Db: 25/55 °C, 90 – 100 %rH, 1 cycle of 24 h
- Cold steady state IEC 60512-11-10.11j / 60068-2-1.A: -55 °C, 2 h
- Thermal shock IEC 60512-11-4.11d / 60068-2-14.Na: -55/125 °C, 5 cycles 30 min
- Sinusoidal vibrations IEC 60512-6-4.6d / 60068-2-6.Fc: 10 to 500 Hz, 10 g, 1 octave/min, 10 cycles for each axis
- Shock IEC 60512-6-3.6c / 60068-2-27.Ea: 50 g, 11 ms, 3 shocks in three axis

During the above two tests no contact interruption >50 ns does appear.

- Solderability J-STD-002A, Test A, 245°C, 5 s solder alloy SnAg3.8Cu0.7
- Resistance to soldering heat J-STD-0020C, 260°C, 20 s
- Moisture sensitivity J-STD-020C level 1
- Resistance to corrosion :
  - 1) Salt spray test IEC 60068-2-11.Ka: 48 h
  - 2) Sulfur dioxide (SO<sub>2</sub>) test IEC 60068-2-42 Kc: 96 h at 25 ppm SO<sub>2</sub>, 25 °C, 75 %rH
  - 3) Hydrogen sulfide (H<sub>2</sub>S) test IEC 60068-2-43 Kd: 96 h at 12 ppm H<sub>2</sub>S, 25 °C, 75 %rH

## PACKAGING:

Standard connector packaging is card box.

SMD mount connectors available on request with Tape & Reel packaging acc. to EIA Standard 481.