



**SERIES
813**

Double Row

2.54 mm, Surface mount perpendicular



Technical drawing of the 1000 Series 1/2. The left side shows a side view with dimensions: Stroke 14, 5.08, 6, 4, 0.4, $\phi 1.07$, and $\phi 1.83$. The right side shows a top view with dimensions: $N/2 \times 2.54$, 2.54, 2.54, and $\phi 2$.

Flammability

UL 94V-O

Piston and barrel

Brass CuZn36Pb3 (C36000)

Spring

Music wire DIN 17223, gold plated

Max. stroke

1.4 mm

Forces initial

0.25 N

Forces initial at 1/2 stroke

0.85 N

Mechanical life

50'000 cycles

Max. operating current

3.5 A

Contact resistance

10 m (static measurement, halfway position)

Coplanarity SMD terminations

Max. 0.1 mm (measured on 25 mm long connectors)

Plating

Barrel: 0.25 μm gold / Piston: 0.5 μm gold

Initial height A (mm)

6

Height plastic body B (mm)

4

XXX code

014

6.5

4

015

7

4

016

7.5

4

017

NNN number of poles. Replace NNN with the requested number of poles, e.g. 813-S1-NNN-30-014101 for a double row version with 16 pins becomes 813-S1-016-30-014101.

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 (SO₂) test IEC 60068-2-42 Kc: 96 h at 25 ppm SO₂, 25 °C, 75 %rH
 - 3) Hydrogen sulfide (H₂S) test IEC 60068-2-43 Kd: 96 h at 12 ppm H₂S, 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.

Mouser Electronics

Authorized Distributor

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[Preci-dip:](#)

[813-S1-010-30-014101](#) [823-S1-016-30-014101](#)