



preci-dip

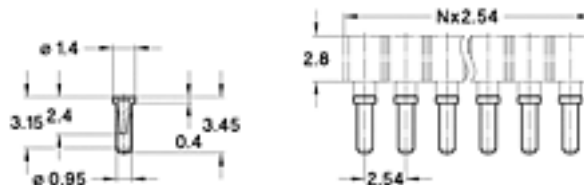
PCB CONNECTORS

SERIES 714

714-PP-1NN-31-012101

Single row
2.54 mm, Carrier

"Zero profile" socket connectors Single socket contacts for solder mount into PCB, supplied on disposable carriers.



TECHNICAL SPECS.:

Insulator	Black glass filled polyester PCT-GF30-FR
Flammability	UL 94V-O
Sleeve	Brass CuZn36Pb3 (C36000)
Contact	Clip (3 finger): Beryllium copper (C17200)
Mating pin Ø	0.40 to 0.52 mm
Insertion force	1 N typ.
Withdrawal force	0.4 N typ. (polished steel gauge Ø 0.43 mm)
Mechanical life	Min. 500 cycles
Rated current	3 A
Contact resistance	Max. 10 m
Dielectric strength	Min. 1000 V RMS

ORDERING INFORMATION:

PP Plating code	Sleeve	Clip
87	Tin	Gold flash
83	Tin	Gold 0.75 µm

NN number of poles. Replace NN with the requested number of poles, e.g. 714-83-1NN-41-001101 for a single row version with 8 pins becomes 714-83-108-41-001101.

TECHNICAL ASSISTANCE

GENERAL SPECIFICATIONS:

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

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

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

MECHANICAL CHARACTERISTICS:

Clip retention	Min. 40 N (no displacement under axial force applied)
Contact (sleeve / clip) retention	Min. 3.3 N acc. to MIL-DTL-83734, pt 4.6.4.2

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

Air and creepage distances between any two adjacent contacts :

SERIES	3xx/4xx/7xx	80x	83x	85x	86x
mm	0.7	0.85 / 0.7	0.5	0.4 / 0.5	0.5

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

SOLDERLESS COMPLIANT PRESS-FIT CHARACTERISTICS:

PRESS-FIT CHARACTERISTICS MEASURED ACC. TO IEC 60352-5

- Press-in force: 90 N max. (at min. hole dia.) / 65 N typ.
- Push-out force: 30 N min. (at max. hole dia.) / 50 N typ.
- Push-out 3rd cycle: 20 N min. (at max. hole dia.)

PCB HOLE DIMENSIONS

- 2 mm grid: Finished hole $\varnothing$: $0.7 + 0.09/-0.06$ mm | Drilled hole $\varnothing$: 0.8 ± 0.02 mm
- 2.54 mm grid: Finished hole $\varnothing$: $1 + 0.09/-0.06$ mm | Drilled hole $\varnothing$: 1.15 ± 0.02 mm

PCB HOLE PLATING

- PCB surface finish: Hole plating
- Tin: 5-15 μm tin over min. 25 μm copper
- Copper: min. 25 μm copper
- Gold over nickel: 0.05-0.2 μm gold over 2.5-5 μm nickel over min. 25 μm copper

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Preci-dip:

[714-87-121-31-012101](#) [714-87-132-31-012101](#) [714-87-131-31-012101](#) [714-87-130-31-012101](#) [714-87-129-31-012101](#) [714-87-128-31-012101](#) [714-83-105-31-012101](#) [714-83-104-31-012101](#) [714-83-103-31-012101](#) [714-83-102-31-012101](#) [714-83-123-31-012101](#) [714-83-113-31-012101](#) [714-83-111-31-012101](#) [714-83-108-31-012101](#) [714-83-107-31-012101](#) [714-83-106-31-012101](#) [714-83-119-31-012101](#) [714-83-118-31-012101](#) [714-83-117-31-012101](#) [714-83-116-31-012101](#) [714-83-115-31-012101](#) [714-83-114-31-012101](#) [714-87-159-31-012101](#) [714-83-122-31-012101](#) [714-83-124-31-012101](#) [714-83-110-31-012101](#) [714-83-121-31-012101](#) [714-83-120-31-012101](#) [714-83-161-31-012101](#) [714-87-158-31-012101](#) [714-87-164-31-012101](#) [714-87-163-31-012101](#) [714-87-162-31-012101](#) [714-87-161-31-012101](#) [714-83-154-31-012101](#) [714-83-153-31-012101](#) [714-83-152-31-012101](#) [714-83-151-31-012101](#) [714-83-150-31-012101](#) [714-87-160-31-012101](#) [714-83-160-31-012101](#) [714-83-148-31-012101](#) [714-83-158-31-012101](#) [714-83-157-31-012101](#) [714-83-156-31-012101](#) [714-83-155-31-012101](#) [714-87-103-31-012101](#) [714-87-102-31-012101](#) [714-83-164-31-012101](#) [714-83-163-31-012101](#) [714-83-162-31-012101](#) [714-83-147-31-012101](#) [714-83-159-31-012101](#) [714-87-108-31-012101](#) [714-87-107-31-012101](#) [714-87-106-31-012101](#) [714-87-105-31-012101](#) [714-83-129-31-012101](#) [714-83-128-31-012101](#) [714-83-127-31-012101](#) [714-83-126-31-012101](#) [714-83-125-31-012101](#) [714-83-137-31-012101](#) [714-83-149-31-012101](#) [714-83-134-31-012101](#) [714-83-133-31-012101](#) [714-83-132-31-012101](#) [714-83-131-31-012101](#) [714-83-130-31-012101](#) [714-83-141-31-012101](#) [714-83-140-31-012101](#) [714-83-139-31-012101](#) [714-83-138-31-012101](#) [714-87-111-31-012101](#) [714-83-136-31-012101](#) [714-83-135-31-012101](#) [714-83-146-31-012101](#) [714-83-145-31-012101](#) [714-83-144-31-012101](#) [714-83-143-31-012101](#) [714-83-142-31-012101](#) [714-87-139-31-012101](#) [714-87-138-31-012101](#) [714-87-137-31-012101](#) [714-87-136-31-012101](#) [714-87-109-31-012101](#) [714-87-147-31-012101](#) [714-87-134-31-012101](#) [714-87-144-31-012101](#) [714-87-143-31-012101](#) [714-87-142-31-012101](#) [714-87-141-31-012101](#) [714-87-140-31-012101](#) [714-87-151-31-012101](#) [714-87-149-31-012101](#) [714-87-148-31-012101](#) [714-87-133-31-012101](#) [714-87-146-31-012101](#) [714-87-157-31-012101](#) [714-87-156-31-012101](#)