



preci-dip

PCB CONNECTORS

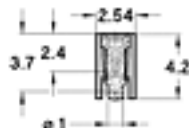
SERIES 314

314-PP-1NN-01-899101

Single row

2.54 mm, Surface mount perp. floating pin, Mating pin Ø 0.47 mm

Socket connectors SMD perpendicular mount



TECHNICAL SPECS.:

Insulator	Black glass filled polyester PCT-GF30-FR
Flammability	UL 94V-O
Sleeve	Brass CuZn36Pb3 (C36000)
Contact	Clip (4 finger): Beryllium copper (C17200)
Mating pin Ø	0.40 to 0.56 mm
Insertion force	2 N typ.
Withdrawal force	1 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
Coplanarity SMD terminations	Max. 0.1 mm (measured on 25 mm long connectors)

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. 410-87-2NN-41-105101 for a double row version with 16 pins becomes 410-87-216-41-105101.

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
- Sinus

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

PACKAGING:

Standard connector packaging is card box.

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