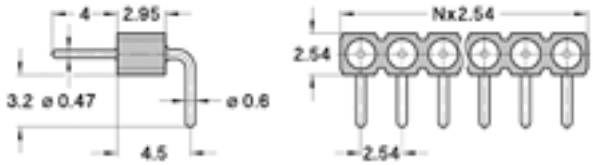
PCB CONNECTORS

SERIES 399

399-PP-1NN-10-009101
Single row
2.54 mm, Right angle solder tail, Pin Ø 0.47 mm

Right angle pin connectors, solder tail.



TECHNICAL SPECS.:

Insulator	Black glass filled polyester PCT-GF30-FR
Flammability	UL 94V-O
Contact	Brass CuZn36Pb3 (C36000)
Connecting pin Ø	0.47 mm
Mechanical life	Min. 500 cycles
Rated current	3 A
Dielectric strength	Min. 1000 V RMS

ORDERING INFORMATION:

PP Plating code	Termination	Connecting pin
10	Gold 0.25 µm	Gold 0.25 µm
80	Tin	Tin
V3	Tin	Gold 0.75 µm

NN number of poles. Replace NN with the requested number of poles, e.g. 499-10-2NN-10-009101 for a double row version with 8 pins becomes 499-10-208-10-009101.

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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 Ø: 0.7 + 0.09/-0.06 mm | Drilled hole Ø: 0.8 ± 0.02 mm
- 2.54 mm grid: Finished hole Ø: 1 + 0.09/-0.06 mm | Drilled hole Ø: 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