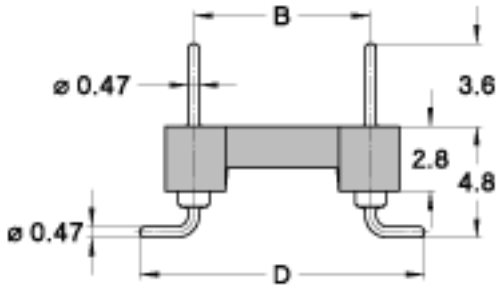
preci-dip

DIL SOCKETS

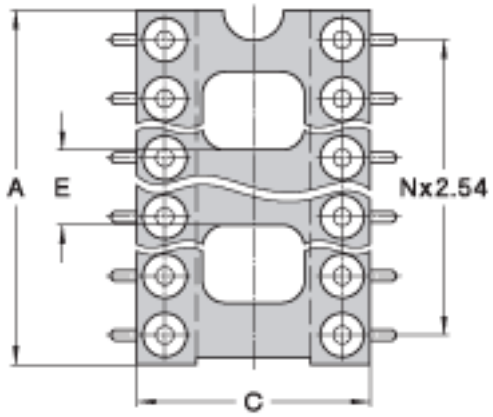
SERIES 150

150-PP-XXX-00-106161
2.54 mm, Surface mount pick and place

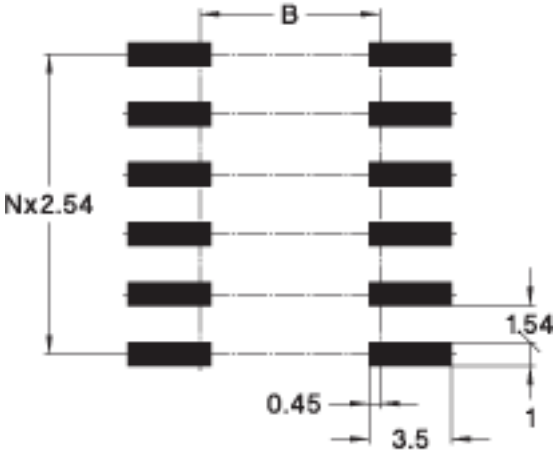
Specially designed for reflow soldering including vapor phase. With male contact pluggable into standard socket contacts and gull wing terminations



Insulator



PCB Layout



TECHNICAL SPECS.:

Insulator	Black glass filled polyester PCT-GF30-FR
Flammability	UL 94V-O
Contact	Brass CuZn36Pb3 (C36000)

PRECI-DIP SA Rue Saint-Henri 11 P.P.Box 834 CH-2800 Delémont / Switzerland
PHONE +41 (0)32 421 04 00 FAX +41 (0)32 421 04 01 E-MAIL sales@precidip.com www.precidip.com

Connecting pin	0.47 mm
Mechanical life	Min. 100 cycles
Rated current	1 A
Dielectric strength	Min. 1000 V RMS
Coplanarity SMD terminations	Max. 0.10 mm

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

Tape & Reel Packaging:replace 161 by suffix 191 to part numberOther pin counts please consult

ADVANCED INFORMATION:

Order Codes	Poles	A	B	C	D	E	See
150-PP-306-00-106161	6	7.6	7.62	10.1	12.30	7.6	
150-PP-308-00-106161	8	10.1	7.62	10.1	12.30	10.1	
150-PP-310-00-106161	10	12.6	7.62	10.1	12.30	12.6	
150-PP-314-00-106161	14	17.8	7.62	10.1	12.30	5.3	
150-PP-316-00-106161	16	20.3	7.62	10.1	12.30	5.3	
150-PP-318-00-106161	18	22.9	7.62	10.1	12.30	5.3	
150-PP-320-00-106161	20	25.4	7.62	10.1	12.30	8.3	
150-PP-324-00-106161	24	30.4	7.62	10.1	12.30	8.3	
150-PP-328-00-106161	28	35.6	7.62	10.1	12.30	8.3	
150-PP-628-00-106161	28	35.5	15.24	17.7	19.22	10.0	
150-PP-632-00-106161	32	40.6	15.24	17.7	19.22	10.0	
150-PP-640-00-106161	40	50.8	15.24	17.7	19.22	10.0	
150-PP-642-00-106161	42	53.4	15.24	17.7	19.22	10.0	

TECHNICAL ASSISTANCE

GENERAL SPECIFICATIONS:

The values listed below are general specs applying for PRECI-DIP DIL sockets. 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

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	Min. 0.6 mm (Min. 0.2 mm FOR SHRINK-DIP SOCKETS)

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

- 2.54 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