



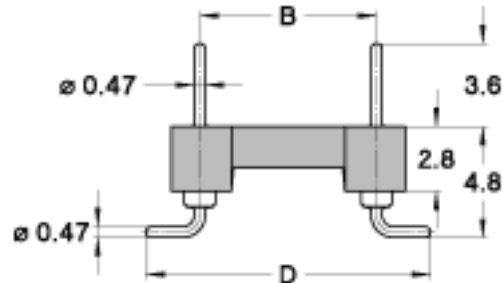
preci-dip

DIL SOCKETS

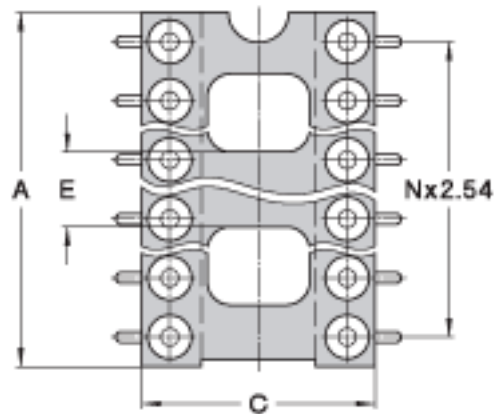
SERIES
150

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

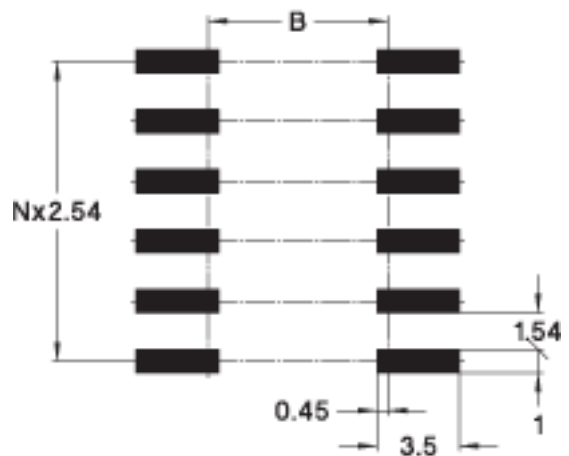
Specially designed for reflow soldering including vapor phase. With male contact pluggable into standard socket contacts and gull wing terminations



Insulator



PCB Layout



TECHNICAL SPECS.:

Insulator

Black glass filled polyester PCT-GF30-FR

Flammability

UL 94V-O

Contact

Brass CuZn36Pb3 (C36000)

| | |
|-------------------------------------|-----------------|
| 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 number Other 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