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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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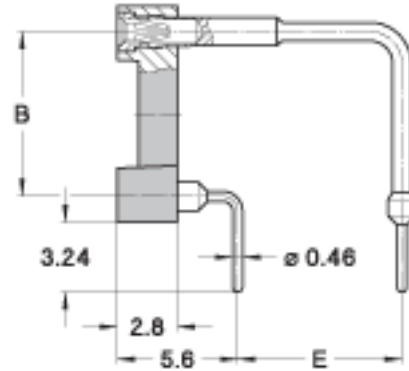
preci-dip

DIL SOCKETS

SERIES
299

299-PP-XXX-XX-00X101
2.54 mm, Right angle, Solder tail

Right angle DIL Sockets for components to be mounted perpendicularly to the PCB such as displays



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)
Accepted 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. 100 cycles
Rated current	1 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

For complete part number replace XX with the code given below left

ADVANCED INFORMATION:

Order Codes	Poles	A	B	C	D	E	See
299-PP-210-10-001101	10	12.6	5.08	7.6			Fig. 1

299-PP-608-10-002101	8	10.1	15.24	17.7	Fig. 3
299-PP-610-10-002101	10	12.6	15.24	17.7	Fig. 3
299-PP-612-10-002101	12	15.2	15.24	10.1	Fig. 3
299-PP-614-10-002101	14	17.7	15.24	10.1	Fig. 3
299-PP-616-10-002101	16	20.1	15.24	17.7	Fig. 3
299-PP-618-10-002101	18	22.8	15.24	17.7	Fig. 3
299-PP-620-10-002101	20	25.3	15.24	17.7	Fig. 3
299-PP-622-10-002101	22	27.8	15.24	17.7	Fig. 3
299-PP-624-10-002101	24	30.4	15.24	17.7	Fig. 3
299-PP-626-10-002101	26	33.0	15.24	17.7	Fig. 3
299-PP-628-10-002101	28	35.5	15.24	17.7	Fig. 3
299-PP-630-10-002101	30	38.0	15.24	17.7	Fig. 3
299-PP-632-10-002101	32	40.6	15.24	17.7	Fig. 3
299-PP-636-10-002101	36	45.7	15.24	17.7	Fig. 3
299-PP-640-10-002101	40	50.6	15.24	17.7	Fig. 3
299-PP-648-10-002101	48	61.0	15.24	17.7	Fig. 3

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