# DIL SOCKETS



# QUICK SELECTOR CHART DIL/SIL/TO SOCKETS

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	DIL			SIL	то	
GRID		2.54 mm	1.778 mm	STAGGERED 2.54 mm	STAGGERED 2.54 mm	:
SOCKETS				SEE PAGE		
Soldertail		129	141	150	150	149
Solder tail automatic insertion	7 7	130	·	:	: : :	: : : :
Solder tail with decoupling capacitor		131	*	:	: :	· · · · · · · · · · · · · · · · · · ·
Surface mount		132, 134	141	:	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Surface mount pick and place	<b>-</b> /	133, 135	· · · · · · · · · · · · · · · · · · ·	:		149
Solder tail ultralow profile	u u	137	· · · · · · · · · · · · · · · · · · ·		:	· · · · · · · · · · · · · · · · · · ·
Solder tail interconnect		138				
Wire-wrap		139	:			
Solderless press-fit mount		142	: : : :	<u> </u>	:	
Carrier		143	· · · · · · · · · · · · · · · · · · ·			
Display right angle solder tail	<b>I</b>	144	<u> </u>			
Crystal, relay and display, partially equipped solder tail	7	151	:	<u> </u>		
HEADERS						
Solder tail		145	141	:	: : :	• • • •
Solder tail interconnect		145	: :		:	
Surface mount		146	:			
Surface mount pick and place	<b></b>	147				
Solder tail wiring slotted head		148	:	:	:	:
Solder tail wiring turret head		148	:			
Solder tail wiring solder cup	4 1	148	: :			
		:	:	:	:	<b>:</b> · · · · · · · · · · · · · · · ·



# DIL SOCKETS

GENERAL SPECIFICATIONS

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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 RETENTIONMin. 40 N (no displacement under axial force applied)CONTACT (SLEEVE/CLIP) RETENTIONMin. 3.3 N acc. to MIL-DTL-83734, pt 4.6.4.2

#### **ELECTRICAL CHARACTERISTICS**

INSULATION RESISTANCE AT 500 V AC BETWEEN ANY TWO ADJACENT CONTACTS Min.  $10'000~M\Omega$  CAPACITANCE BETWEEN ANY TWO ADJACENT CONTACTS Max. 1~pFAIR AND CREEPAGE DISTANCES BETWEEN ANY TWO ADJACENT CONTACTS (Min. 0.2~mm FOR SHRINK-DIP SOCKETS) Min. 0.6~mm

#### **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, 16 h
- 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.
- $\bullet$  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-020C, 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 (SO<sub>2</sub>) test IEC 60068-2-42 Kc: 96 h at 25 ppm SO<sub>2</sub>,
  - 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 ± 0.025 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**

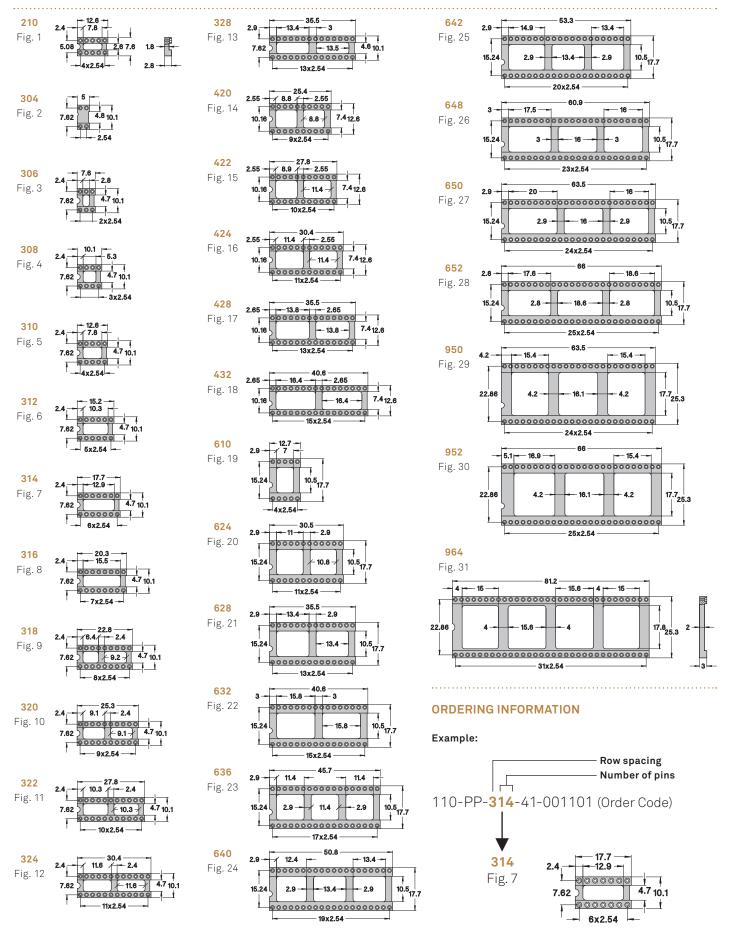
- Standard packaging for DIL sockets is tube packaging.
- SMD mount sockets available on request with Tape & Reel packaging acc. to EIA Standard 481. These products are marked with the symbol:



Please consult **www.precidip.com** for availability, size of tape, size of reel, number of components per reel and packing units.

INSULATOR BODIES / STANDARD, OPEN FRAME

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OPEN FRAME / SOLDER TAIL

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Open frame standard low profile DIL Sockets.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

Brass CuZn36Pb3 (C36000) SLEEVE CONTACT CLIP (4 FINGER) Beryllium copper (C17200)

0.40 to 0.56 mm ACCEPTED PIN Ø

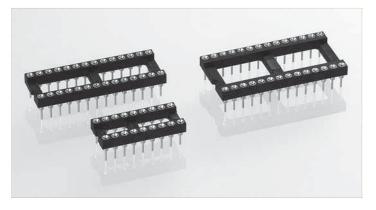
FORCES 2 N typ. insertion 1 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

MECHANICAL LIFE Min. 100 cycles

1 A RATED CURRENT

Max. 10 m□ CONTACT RESISTANCE Min. 1'000 VRMS DIELECTRIC STRENGTH



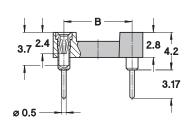
**SEE PAGE 128** 

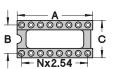
ORDER CODES

Other plating on request (see page 178 for plating specs).

#### ORDERING INFORMATION ROHS COMPLIANT PARTS

PP PLATING CODE SLEEVE 87 Tin Flash gold 83 Tin 0.75 µm gold





NO. OF POLES

10	12.6	5.08	7.6	Fig. 1	110 <b>-PP</b> -210-41-001101
4	5.0	7.62	10.1	Fig. 2	110- <b>PP</b> -304-41-001101
6	7.6	7.62	10.1	Fig. 3	110- <b>PP</b> -306-41-001101
8	10.1	7.62	10.1	Fig. 4	110- <b>PP</b> -308-41-001101
10	12.6	7.62	10.1	Fig. 5	110- <b>PP</b> -310-41-001101
12	15.2	7.62	10.1	Fig. 6	110- <b>PP</b> -312-41-001101
14	17.7	7.62	10.1	Fig. 7	110- <b>PP</b> -314-41-001101
16	20.3	7.62	10.1	Fig. 8	110- <b>PP</b> -316-41-001101
18*	22.8	7.62	10.1	Fig. 9	110- <b>PP</b> -318-41-001101
20*	25.3	7.62	10.1	Fig. 10	110- <b>PP</b> -320-41-001101
22*	27.8	7.62	10.1	Fig. 11	110- <b>PP</b> -322-41-001101
24*	30.4	7.62	10.1	Fig. 12	110- <b>PP</b> -324-41-001101
28	35.5	7.62	10.1	Fig. 13	110- <b>PP</b> -328-41-001101
20	25.4	10.16	12.6	Fig. 14	110- <b>PP</b> -420-41-001101
22	27.8	10.16	12.6	Fig. 15	110- <b>PP</b> -422-41-001101
24	30.4	10.16	12.6	Fig. 16	110- <b>PP</b> -424-41-001101
28	35.5	10.16	12.6	Fig. 17	110- <b>PP</b> -428-41-001101
32	40.6	10.16	12.6	Fig. 18	110- <b>PP</b> -432-41-001101
10	12.7	15.24	17.7	Fig. 19	110- <b>PP</b> -610-41-001101
24*	30.5	15.24	17.7	Fig. 20	110- <b>PP</b> -624-41-001101
28*	35.5	15.24	17.7	Fig. 21	110- <b>PP</b> -628-41-001101
32*	40.6	15.24	17.7	Fig. 22	110- <b>PP</b> -632-41-001101
36	45.7	15.24	17.7	Fig. 23	110- <b>PP</b> -636-41-001101
40*	50.8	15.24	17.7	Fig. 24	110- <b>PP</b> -640-41-001101
42	53.3	15.24	17.7	Fig. 25	110- <b>PP</b> -642-41-001101
48*	60.9	15.24	17.7	Fig. 26	110- <b>PP</b> -648-41-001101
50	63.5	15.24	17.7	Fig. 27	110- <b>PP</b> -650-41-001101
52	66.0	15.24	17.7	Fig. 28	110- <b>PP</b> -652-41-001101
50	63.5	22.86	25.3	Fig. 29	110- <b>PP</b> -950-41-001101
52	66.0	22.86	25.3	Fig. 30	110- <b>PP</b> -952-41-001101
64	81.2	22.86	25.3	Fig. 31	110- <b>PP</b> -964-41-001101

#### **OPTIONS**

#### 1 Insulators without center bar $^{\star}$

Open frame insulators 318, 320, 322, 324, 624, 628, 632, 640 and 648 available on special request without center bars; add suffix 151 to the part number. Example 110-83-628-41-001101 becomes 110-83-628-41-001**151** 

### 2 Sockets with increased solder tail length of 4.2 mm

allowing application on multilayer PCBs up to 3.4 mm thickness replace 110-..-... by 111-..-... by

#### 3 Sockets with soft brass pin series 110-..-..-005101,

please consult

#### 4 For DIL Sockets with closed frame insulators replace 110-...

by 210-... Please consult for available pin numbers



AUTOMATIC INSERTION / OPEN FRAME / SOLDER TAIL

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DIL sockets with ribbed insulator body and soft copper alloy contacts compatible with automatic insertion equipment.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVEBrass CuZn36Pb3 (C36000)CONTACT CLIP (4 FINGER)Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.56 mm

FORCES 2 N typ. insertion 1 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

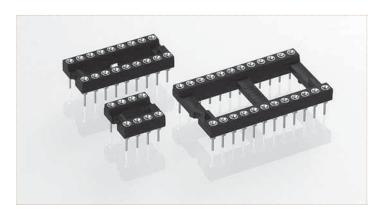
MECHANICAL LIFE Min. 100 cycles

RATED CURRENT 1 A

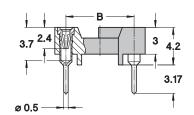
**CONTACT RESISTANCE** Max. 10 m Min. 1'000 VRMs

#### ORDERING INFORMATION ROHS COMPLIANT PARTS

PP PLATING CODESLEEVECLIP87TinFlash gold83Tin0.75 μm gold

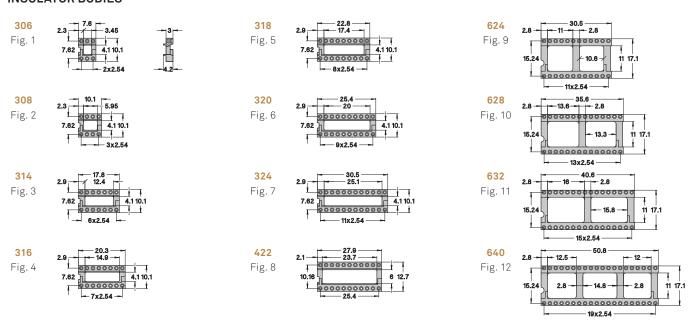


Other plating on request (see page 178 for plating specs). Other pin count please consult.



NO. OF POLES	В	SEE BELOW	ORDER CODES
6	7.62	Fig. 1	110- <b>PP</b> -306-41-605101
8	7.62	Fig. 2	110- <b>PP</b> -308-41-605101
14	7.62	Fig. 3	110- <b>PP</b> -314-41-605101
16	7.62	Fig. 4	110- <b>PP</b> -316-41-605101
18	7.62	Fig. 5	110- <b>PP</b> -318-41-605101
20	7.62	Fig. 6	110- <b>PP</b> -320-41-605101
24	7.62	Fig. 7	110- <b>PP</b> -324-41-605101
22	10.16	Fig. 8	110- <b>PP</b> -422-41-605101
24	15.24	Fig. 9	110- <b>PP</b> -624-41-605101
28	15.24	Fig. 10	110- <b>PP</b> -628-41-605101
32	15.24	Fig. 11	110- <b>PP</b> -632-41-605101
40	15.24	Fig. 12	110- <b>PP</b> -640-41-605101

#### **INSULATOR BODIES**





# DUAL-IN-LINE CAPACITOR SOCKETS

OPEN FRAME / SOLDER TAIL

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With ceramic multilayer decoupling capacitor 100 nF +80% -20% / 50 V, epoxy encapsulated.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVE Brass CuZn36Pb3 (C36000)
CONTACT CLIP (4 FINGER) Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.56 mm

**FORCES** 2 N typ. insertion 1 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

MECHANICAL LIFE Min. 100 cycles

rated current 1 A

 CONTACT RESISTANCE
 Max. 10 m□

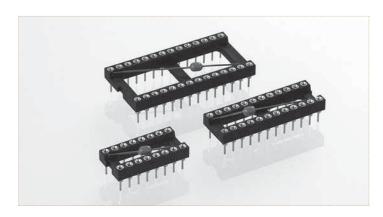
 DIELECTRIC STRENGTH
 Min. 1'000 VRMS

 TEMPERATURE RANGE
 -25°C to +85°C

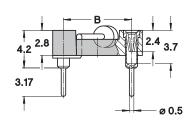
#### ORDERING INFORMATION ROHS COMPLIANT PARTS

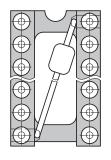
PP PLATING CODE SLEEVE CLI

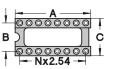
83 Tin  $0.75 \,\mu\text{m}$  gold



Other plating on request (see page 178 for plating specs).







NO. OF POLES	Α	В	С	SEE PAGE 128	ORDER CODES
14	17.7	7.62	10.1	Fig. 7	110- <b>PP</b> -314-41-801101
16	20.3	7.62	10.1	Fig. 8	110- <b>PP</b> -316-41-801101
18	22.8	7.62	10.1	Fig. 9	110- <b>PP</b> -318-41-801101
20	25.3	7.62	10.1	Fig. 10	110- <b>PP</b> -320-41-801101
24	30.5	15.24	17.7	Fig. 20	110- <b>PP</b> -624-41-801101
28	35.5	15.24	17.7	Fig. 21	110- <b>PP</b> -628-41-801101
32	40.6	15.24	17.7	Fig. 22	110- <b>PP</b> -632-41-801101
40	50.8	15.24	17.7	Fig. 24	110- <b>PP</b> -640-41-801101



OPEN FRAME / SURFACE MOUNT

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Specially designed for reflow soldering including vapor phase with gull wing terminations for maximum strength and easy in-circuit test.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVEBrass CuZn36Pb3 (C36000)CONTACT CLIP (4 FINGER)Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.56 mm

**FORCES** 2 N typ. insertion 1 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

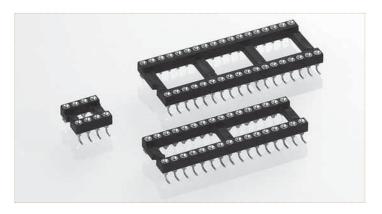
MECHANICAL LIFE Min. 100 cycles

rated current 1 A

CONTACT RESISTANCE Max. 10 m□

DIELECTRIC STRENGTH Min. 1'000 VRMS

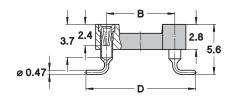
COPLANARITY
SMD TERMINATIONS Max. 0.10 mm

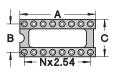


Other plating on request (see page 178 for plating specs).

#### ORDERING INFORMATION ROHS COMPLIANT PARTS

PP PLATING CODESLEEVECLIP87TinFlash gold83Tin0.75 μm gold

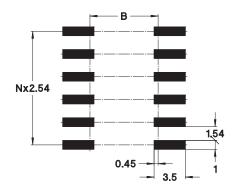




NO. OF POLES A

10	12.6	5.08	7.6	9.72	Fig.	1	110- <b>PP</b> -210-41-105101
4	5.0	7.62	10.1	12.26	Fig.	2	110- <b>PP</b> -304-41-105101
6	7.6	7.62	10.1	12.26	Fig.	3	110- <b>PP</b> -306-41-105101
8	10.1	7.62	10.1	12.26	Fig.	4	110- <b>PP</b> -308-41-105101
10	12.6	7.62	10.1	12.26	Fig.	5	110- <b>PP</b> -310-41-105101
12	15.2	7.62	10.1	12.26	Fig.	6	110- <b>PP</b> -312-41-105101
14	17.7	7.62	10.1	12.26	Fig.	7	110- <b>PP</b> -314-41-105101
16	20.3	7.62	10.1	12.26	Fig.	8	110- <b>PP</b> -316-41-105101
18	22.8	7.62	10.1	12.26	Fig.	9	110- <b>PP</b> -318-41-105101
20	25.3	7.62	10.1	12.26	Fig. 1	10	110- <b>PP</b> -320-41-105101
22	27.8	7.62	10.1	12.26	Fig. 1	11	110- <b>PP</b> -322-41-105101
24	30.4	7.62	10.1	12.26	Fig. 1	12	110- <b>PP</b> -324-41-105101
28	35.5	7.62	10.1	12.26	Fig. 1	13	110- <b>PP</b> -328-41-105101
20	25.4	10.16	12.6	14.80	Fig. 1	14	110- <b>PP</b> -420-41-105101
22	27.8	10.16	12.6	14.80	Fig. 1	15	110- <b>PP</b> -422-41-105101
24	30.4	10.16	12.6	14.80	Fig. 1	16	110- <b>PP</b> -424-41-105101
28	35.5	10.16	12.6	14.80	Fig. 1	17	110- <b>PP</b> -428-41-105101
32	40.6	10.16	12.6	14.80	Fig. 1	18	110- <b>PP</b> -432-41-105101
24	30.5	15.24	17.7	19.88	Fig. 2	20	110- <b>PP</b> -624-41-105101
28	35.5	15.24	17.7	19.88	Fig. 2	21	110- <b>PP</b> -628-41-105101
32	40.6	15.24	17.7	19.88	Fig. 2	22	110- <b>PP</b> -632-41-105101
36	45.7	15.24	17.7	19.88	Fig. 2	23	110- <b>PP</b> -636-41-105101
40	50.8	15.24	17.7	19.88	Fig. 2	24	110- <b>PP</b> -640-41-105101
42	53.3	15.24	17.7	19.88	Fig. 2	25	110- <b>PP</b> -642-41-105101
48	60.9	15.24	17.7	19.88	Fig. 2	26	110- <b>PP</b> -648-41-105101

SEE PAGE 128 ORDER CODES





OPEN FRAME / SURFACE MOUNT, PICK AND PLACE

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Specially designed for reflow soldering including vapor phase with gull wing terminations for maximum strength and easy in-circuit test.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVEBrass CuZn36Pb3 (C36000)CONTACT CLIP (4 FINGER)Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.56 mm

**FORCES** 2 N typ. insertion 1 N typ. withdrawal

ORDERING INFORMATION ROHS COMPLIANT PARTS

SLEEVE

Tin

(polished steel gauge Ø 0.43 mm)

Flash gold

0.75 µm gold

MECHANICAL LIFE Min. 100 cycles

RATED CURRENT 1 A

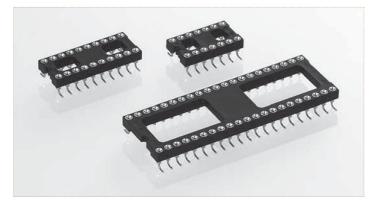
PP PLATING CODE

83

CONTACT RESISTANCE Max. 10 m ☐

DIELECTRIC STRENGTH Min. 1'000 VRMS

COPLANARITY
SMD TERMINATIONS Max. 0.10 mm



Other plating on request (see page 178 for plating specs).

#### Tape & Reel packaging:

replace 161 by suffix 191 to part number Other pin counts please consult.

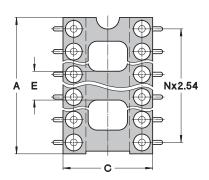


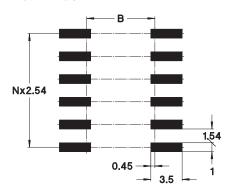
T & R Packaging

•••••	
	-
3.7 2.4	2.8 5.6
	3.6

NO. OF POLES	Α	В	С	D	E	ORDER CODES
6	7.6	7.62	10.1	12.26	7.6	110- <b>PP</b> -306-41-105161
8	10.1	7.62	10.1	12.26	10.1	110- <b>PP</b> -308-41-105161
10	12.6	7.62	10.1	12.26	12.6	110- <b>PP</b> -310-41-105161
14	17.8	7.62	10.1	12.26	5.3	110- <b>PP</b> -314-41-105161
16	20.3	7.62	10.1	12.26	5.3	110- <b>PP</b> -316-41-105161
18	22.9	7.62	10.1	12.26	5.3	110- <b>PP</b> -318-41-105161
20	25.4	7.62	10.1	12.26	8.3	110- <b>PP</b> -320-41-105161
24	30.4	7.62	10.1	12.26	8.3	110- <b>PP</b> -324-41-105161
28	35.6	7.62	10.1	12.26	8.3	110- <b>PP</b> -328-41-105161
28	35.5	15.24	17.7	19.88	10.0	110- <b>PP</b> -628-41-105161
32	40.6	15.24	17.7	19.88	10.0	110- <b>PP</b> -632-41-105161
40	50.8	15.24	17.7	19.88	10.0	110- <b>PP</b> -640-41-105161
42	53.4	15.24	17.7	19.88	10.0	110- <b>PP</b> -642-41-105161

#### **INSULATOR**







OPEN FRAME / SURFACE MOUNT

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

Specially designed for reflow soldering including vapor phase with unique self-aligning floating contacts.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVEBrass CuZn36Pb3 (C36000)CONTACT CLIP (4 FINGER)Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.56 mm

FORCES 2 N typ. insertion 1 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

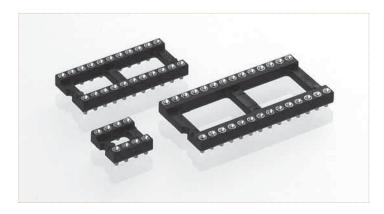
MECHANICAL LIFE Min. 100 cycles

RATED CURRENT 1 A

CONTACT RESISTANCE Max. 10 m□

DIELECTRIC STRENGTH Min. 1'000 VRMS

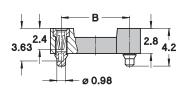
COPLANARITY
SMD TERMINATIONS Max. 0.10 mm

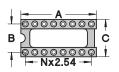


Other plating on request (see page 178 for plating specs).

#### **ORDERING INFORMATION ROHS COMPLIANT PARTS**

PP PLATING CODESLEEVECLIP87TinFlash gold83Tin0.75 μm gold

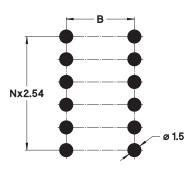




NO. OF POLES

		_	•	02217102 120	0110211 00020
10	12.6	5.08	7.6	Fig. 1	114- <b>PP</b> -210-41-117101
4	5.0	7.62	10.1	Fig. 2	114- <b>PP</b> -304-41-117101
6	7.6	7.62	10.1	Fig. 3	114- <b>PP</b> -306-41-117101
8	10.1	7.62	10.1	Fig. 4	114- <b>PP</b> -308-41-117101
10	12.6	7.62	10.1	Fig. 5	114- <b>PP</b> -310-41-117101
12	15.2	7.62	10.1	Fig. 6	114- <b>PP</b> -312-41-117101
14	17.7	7.62	10.1	Fig. 7	114- <b>PP</b> -314-41-117101
16	20.3	7.62	10.1	Fig. 8	114- <b>PP</b> -316-41-117101
18	22.8	7.62	10.1	Fig. 9	114- <b>PP</b> -318-41-117101
20	25.3	7.62	10.1	Fig. 10	114- <b>PP</b> -320-41-117101
22	27.8	7.62	10.1	Fig. 11	114- <b>PP</b> -322-41-117101
24	30.4	7.62	10.1	Fig. 12	114- <b>PP</b> -324-41-117101
28	35.5	7.62	10.1	Fig. 13	114- <b>PP</b> -328-41-117101
20	25.4	10.16	12.6	Fig. 14	114- <b>PP</b> -420-41-117101
22	27.8	10.16	12.6	Fig. 15	114- <b>PP</b> -422-41-117101
24	30.4	10.16	12.6	Fig. 16	114- <b>PP</b> -424-41-117101
28	35.5	10.16	12.6	Fig. 17	114- <b>PP</b> -428-41-117101
32	40.6	10.16	12.6	Fig. 18	114- <b>PP</b> -432-41-117101
24	30.5	15.24	17.7	Fig. 20	114- <b>PP</b> -624-41-117101
28	35.5	15.24	17.7	Fig. 21	114- <b>PP</b> -628-41-117101
32	40.6	15.24	17.7	Fig. 22	114- <b>PP</b> -632-41-117101
36	45.7	15.24	17.7	Fig. 23	114- <b>PP</b> -636-41-117101
40	50.8	15.24	17.7	Fig. 24	114- <b>PP</b> -640-41-117101
42	53.3	15.24	17.7	Fig. 25	114- <b>PP</b> -642-41-117101
48	60.9	15.24	17.7	Fig. 26	114- <b>PP</b> -648-41-117101

SEE PAGE 128 ORDER CODES





OPEN FRAME / SURFACE MOUNT PICK AND PLACE

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

Specially designed for reflow soldering including vapor phase with unique self-aligning floating contacts.

CLIP

Flash gold

0.75 µm gold

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVEBrass CuZn36Pb3 (C36000)CONTACT CLIP (4 FINGER)Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.56 mm

FORCES 2 N typ. insertion 1 N typ. withdrawal

ORDERING INFORMATION ROHS COMPLIANT PARTS

SLEEVE

Tin

(polished steel gauge Ø 0.43 mm)

MECHANICAL LIFE Min. 100 cycles

RATED CURRENT 1 A

PP PLATING CODE

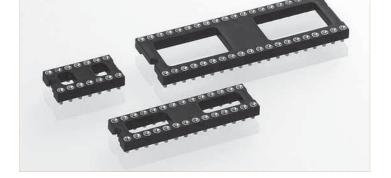
87

83

CONTACT RESISTANCE Max. 10 m

DIELECTRIC STRENGTH Min. 1'000 VRMS

COPLANARITY
SMD TERMINATIONS Max. 0.10 mm



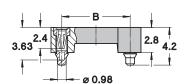
Other plating on request (see page 178 for plating specs).

#### Tape & Reel packaging:

replace 161 by suffix 191 to part number Other pin counts please consult.

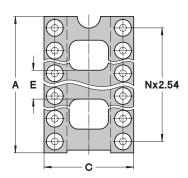


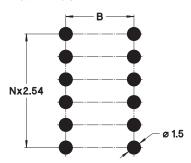
T & R Packaging



NO. OF POLES	Α	В	С	E	ORDER CODES
6	7.6	7.62	10.1	7.6	114- <b>PP</b> -306-41-134161
8	10.1	7.62	10.1	10.1	114- <b>PP</b> -308-41-134161
10	12.6	7.62	10.1	12.6	114- <b>PP</b> -310-41-134161
14	17.8	7.62	10.1	5.3	114- <b>PP</b> -314-41-134161
16	20.3	7.62	10.1	5.3	114- <b>PP</b> -316-41-134161
18	22.9	7.62	10.1	5.3	114- <b>PP</b> -318-41-134161
20	25.4	7.62	10.1	8.3	114- <b>PP</b> -320-41-134161
24	30.4	7.62	10.1	8.3	114- <b>PP</b> -324-41-134161
28	35.6	7.62	10.1	8.3	114- <b>PP</b> -328-41-134161
28	35.5	15.24	17.7	10.0	114- <b>PP</b> -628-41-134161
32	40.6	15.24	17.7	10.0	114- <b>PP</b> -632-41-134161
40	50.8	15.24	17.7	10.0	114- <b>PP</b> -640-41-134161
42	53.4	15.24	17.7	10.0	114- <b>PP</b> -642-41-134161

#### **INSULATOR**

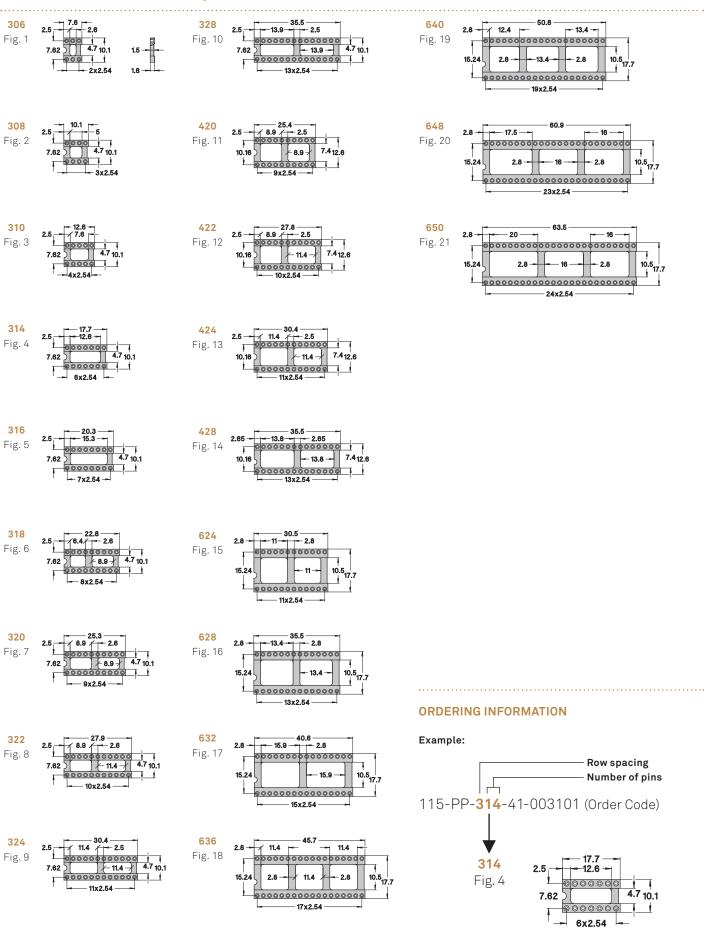






INSULATOR BODIES / ULTRALOW, OPEN FRAME

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM





ULTRALOW AND VERY LOW PROFILE / OPEN FRAME / SOLDER TAIL

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

"Ultralow" sockets have specially designed contacts for reduced socket height above PCB.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVEBrass CuZn36Pb3 (C36000)CONTACT CLIP (4 FINGER)Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.52 mm

FORCES 3 N typ. insertion 1.5 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

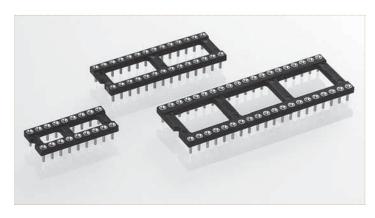
MECHANICAL LIFE Min. 100 cycles

RATED CURRENT 1 A

**CONTACT RESISTANCE** Max. 10 m Min. 1'000 V<sub>RMS</sub>

#### **ORDERING INFORMATION ROHS COMPLIANT PARTS**

PP PLATING CODESLEEVECLIP87TinFlash gold83Tin0.75 μm gold



Other plating on request (see page 178 for plating specs).

#### **ULTRALOW SOCKET**

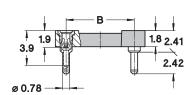
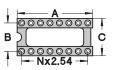


Fig. 1



NO. OF POLES	Α	В	С	SEE PAGE 136	ORDER CODES
6	7.6	7.62	10.1	Fig. 1	115- <b>PP</b> -306-41-003101
8	10.1	7.62	10.1	Fig. 2	115- <b>PP</b> -308-41-003101
10	12.6	7.62	10.1	Fig. 3	115- <b>PP</b> -310-41-003101
14	17.7	7.62	10.1	Fig. 4	115- <b>PP</b> -314-41-003101
16	20.3	7.62	10.1	Fig. 5	115- <b>PP</b> -316-41-003101
18	22.8	7.62	10.1	Fig. 6	115- <b>PP</b> -318-41-003101
20	25.3	7.62	10.1	Fig. 7	115- <b>PP</b> -320-41-003101
22	27.9	7.62	10.1	Fig. 8	115- <b>PP</b> -322-41-003101
24	30.4	7.62	10.1	Fig. 9	115- <b>PP</b> -324-41-003101
28	35.5	7.62	10.1	Fig. 10	115- <b>PP</b> -328-41-003101
20	25.4	10.16	12.6	Fig. 11	115- <b>PP</b> -420-41-003101
22	27.8	10.16	12.6	Fig. 12	115- <b>PP</b> -422-41-003101
24	30.4	10.16	12.6	Fig. 13	115- <b>PP</b> -424-41-003101
28	35.5	10.16	12.6	Fig. 14	115- <b>PP</b> -428-41-003101
24	30.5	15.24	17.7	Fig. 15	115- <b>PP</b> -624-41-003101
28	35.5	15.24	17.7	Fig. 16	115- <b>PP</b> -628-41-003101
32	40.6	15.24	17.7	Fig. 17	115- <b>PP</b> -632-41-003101
36	45.7	15.24	17.7	Fig. 18	115- <b>PP</b> -636-41-003101
40	50.8	15.24	17.7	Fig. 19	115- <b>PP</b> -640-41-003101
48	60.9	15.24	17.7	Fig. 20	115- <b>PP</b> -648-41-003101
50	63.5	15.24	17.7	Fig. 21	115- <b>PP</b> -650-41-003101

#### OPTIONS: VERY LOW VERSION

Very low version (Fig. 2) is optional; change suffix 003101 to 001101. Insulator body dimensions see page 128 Fig. 1 to 31. Same number of poles as standard series 110.

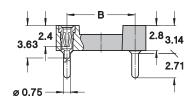


Fig. 2



INTERCONNECT / OPEN FRAME / SOLDER TAIL

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

For mechanical and electrical interconnection, PCB stacking or elevated positioning of display modules.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVEBrass CuZn36Pb3 (C36000)CONTACT CLIP (4 FINGER)Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.56 mm

FORCES 2 N typ. insertion 1 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

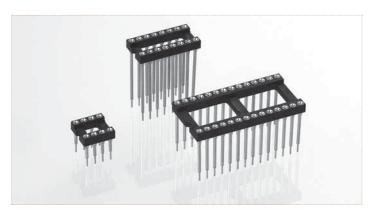
MECHANICAL LIFE Min. 100 cycles

RATED CURRENT 1 A

**CONTACT RESISTANCE** Max. 10 m DIELECTRIC STRENGTH Min. 1'000 VRMS

#### ORDERING INFORMATION ROHS COMPLIANT PARTS

PP PLATING CODESLEEVECLIP87TinFlash gold83Tin0.75 μm gold



Other plating on request (see page 178 for plating specs). For complete part number replace **XXX** with the code given below left for the required contact length **L**.

SEE PAGE 128

Fig. 1

Fig. 2

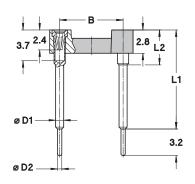
Fig. 3

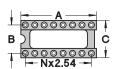
ORDER CODES

116-**PP**-210-41-**XXX**101

116-**PP**-304-41-**XXX**101

116-**PP**-306-41-**XXX**101





12.6

5.0

7.6

5.08

7.62

7.62

10.1

10.1

NO. OF POLES

4

6

8	10.1	7.62	10.1	Fig. 4	116- <b>PP</b> -308-41- <b>XXX</b> 101
10	12.6	7.62	10.1	Fig. 5	116- <b>PP</b> -310-41 <b>-XXX</b> 101
12	15.2	7.62	10.1	Fig. 6	116- <b>PP</b> -312-41- <b>XXX</b> 101
14	17.7	7.62	10.1	Fig. 7	116- <b>PP</b> -314-41 <b>-XXX</b> 101
16	20.3	7.62	10.1	Fig. 8	116- <b>PP</b> -316-41- <b>XXX</b> 101
18	22.8	7.62	10.1	Fig. 9	116- <b>PP</b> -318-41 <b>-XXX</b> 101
20	25.3	7.62	10.1	Fig. 10	116- <b>PP</b> -320-41- <b>XXX</b> 101
22	27.8	7.62	10.1	Fig. 11	116- <b>PP</b> -322-41 <b>-XXX</b> 101
24	30.4	7.62	10.1	Fig. 12	116- <b>PP</b> -324-41 <b>-XXX</b> 101
28	35.5	7.62	10.1	Fig. 13	116- <b>PP</b> -328-41- <b>XXX</b> 101
20	25.4	10.16	12.6	Fig. 14	116- <b>PP</b> -420-41- <b>XXX</b> 101
22	27.8	10.16	12.6	Fig. 15	116- <b>PP</b> -422-41 <b>-XXX</b> 101
24	30.4	10.16	12.6	Fig. 16	116- <b>PP</b> -424-41 <b>-XXX</b> 101
28	35.5	10.16	12.6	Fig. 17	116- <b>PP</b> -428-41- <b>XXX</b> 101
32	40.6	10.16	12.6	Fig. 18	116- <b>PP</b> -432-41- <b>XXX</b> 101
10	12.7	15.24	17.7	Fig. 19	116- <b>PP</b> -610-41- <b>XXX</b> 101
24	30.5	15.24	17.7	Fig. 20	116- <b>PP</b> -624-41- <b>XXX</b> 101
28	35.5	15.24	17.7	Fig. 21	116- <b>PP</b> -628-41- <b>XXX</b> 101
32	40.6	15.24	17.7	Fig. 22	116- <b>PP</b> -632-41- <b>XXX</b> 101
36	45.7	15.24	17.7	Fig. 23	116- <b>PP</b> -636-41- <b>XXX</b> 101
40	50.8	15.24	17.7	Fig. 24	116- <b>PP</b> -640-41- <b>XXX</b> 101
42	53.3	15.24	17.7	Fig. 25	116- <b>PP</b> -642-41- <b>XXX</b> 101
48	60.9	15.24	17.7	Fig. 26	116- <b>PP</b> -648-41- <b>XXX</b> 101
50	63.5	15.24	17.7	Fig. 27	116- <b>PP</b> -650-41- <b>XXX</b> 101
52	66.0	15.24	17.7	Fig. 28	116- <b>PP</b> -652-41- <b>XXX</b> 101
50	63.5	22.86	25.3	Fig. 29	116- <b>PP</b> -950-41- <b>XXX</b> 101
52	66.0	22.86	25.3	Fig. 30	116- <b>PP</b> -952-41- <b>XXX</b> 101
64	81.2	22.86	25.3	Fig. 31	116- <b>PP</b> -964-41- <b>XXX</b> 101

#### AVAILABLE CONTACT LENGTHS

CONTACT LENGTH L1 (mm)	L2 (mm)	CONTACT DIAMETE D1 (mm)	ER D2 (mm)	XXX CODE
6	4.2	1	0.51	006
7	4.2	1	0.51	018
8	4.2	1	0.51	003
9	4.85	1	0.46	012
10	4.2	1	0.51	007
11	4.2	0.85	0.51	002
12	4.2	1	0.51	800
13	4.2	1	0.51	009
15	4.2	1	0.51	001
18	4.2	1	0.51	011
22	4.2	1	0.51	004
33	4.2	1.18	0.51	013



OPEN FRAME / WIRE-WRAP

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

Solderless wire-wrap terminals are firmly fitted in the insulator body to withstand torque of wrapping tool.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVEBrass CuZn36Pb3 (C36000)CONTACT CLIP (4 FINGER)Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.56 mm

FORCES 2 N typ. insertion 1 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

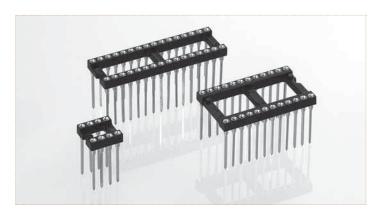
MECHANICAL LIFE Min. 100 cycles

RATED CURRENT 1 A

**CONTACT RESISTANCE** Max. 10 m DIELECTRIC STRENGTH Min. 1'000 VRMS

#### **ORDERING INFORMATION ROHS COMPLIANT PARTS**

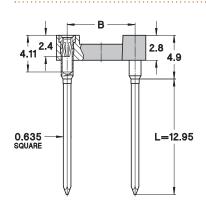
PP PLATING CODESLEEVECLIP87TinFlash gold83Tin0.75 μm gold

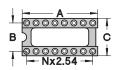


**SEE PAGE 128** 

ORDER CODES

Other plating on request (see page 178 for plating specs).





NO. OF POLES

10	12.6	5.08	7.6	Fig. 1	123- <b>PP</b> -210-41-001101
4	5.0	7.62	10.1	Fig. 2	123- <b>PP</b> -304-41-001101
6	7.6	7.62	10.1	Fig. 3	123- <b>PP</b> -306-41-001101
8	10.1	7.62	10.1	Fig. 4	123- <b>PP</b> -308-41-001101
10	12.6	7.62	10.1	Fig. 5	123- <b>PP</b> -310-41-001101
12	15.2	7.62	10.1	Fig. 6	123- <b>PP</b> -312-41-001101
14	17.7	7.62	10.1	Fig. 7	123- <b>PP</b> -314-41-001101
16	20.3	7.62	10.1	Fig. 8	123- <b>PP</b> -316-41-001101
18	22.8	7.62	10.1	Fig. 9	123- <b>PP</b> -318-41-001101
20	25.3	7.62	10.1	Fig. 10	123- <b>PP</b> -320-41-001101
22	27.8	7.62	10.1	Fig. 11	123- <b>PP</b> -322-41-001101
24	30.4	7.62	10.1	Fig. 12	123- <b>PP</b> -324-41-001101
28	35.5	7.62	10.1	Fig. 13	123- <b>PP</b> -328-41-001101
20	25.4	10.16	12.6	Fig. 14	123- <b>PP</b> -420-41-001101
22	27.8	10.16	12.6	Fig. 15	123- <b>PP</b> -422-41-001101
24	30.4	10.16	12.6	Fig. 16	123- <b>PP</b> -424-41-001101
28	35.5	10.16	12.6	Fig. 17	123- <b>PP</b> -428-41-001101
32	40.6	10.16	12.6	Fig. 18	123- <b>PP</b> -432-41-001101
10	12.7	15.24	17.7	Fig. 19	123- <b>PP</b> -610-41-001101
24	30.5	15.24	17.7	Fig. 20	123- <b>PP</b> -624-41-001101
28	35.5	15.24	17.7	Fig. 21	123- <b>PP</b> -628-41-001101
32	40.6	15.24	17.7	Fig. 22	123- <b>PP</b> -632-41-001101
36	45.7	15.24	17.7	Fig. 23	123- <b>PP</b> -636-41-001101
40	50.8	15.24	17.7	Fig. 24	123- <b>PP</b> -640-41-001101
42	53.3	15.24	17.7	Fig. 25	123- <b>PP</b> -642-41-001101
48	60.9	15.24	17.7	Fig. 26	123- <b>PP</b> -648-41-001101
50	63.5	15.24	17.7	Fig. 27	123- <b>PP</b> -650-41-001101
52	66.0	15.24	17.7	Fig. 28	123- <b>PP</b> -652-41-001101
50	63.5	22.86	25.3	Fig. 29	123- <b>PP</b> -950-41-001101
52	66.0	22.86	25.3	Fig. 30	123- <b>PP</b> -952-41-001101
64	81.2	22.86	25.3	Fig. 31	123- <b>PP</b> -964-41-001101

#### OPTION

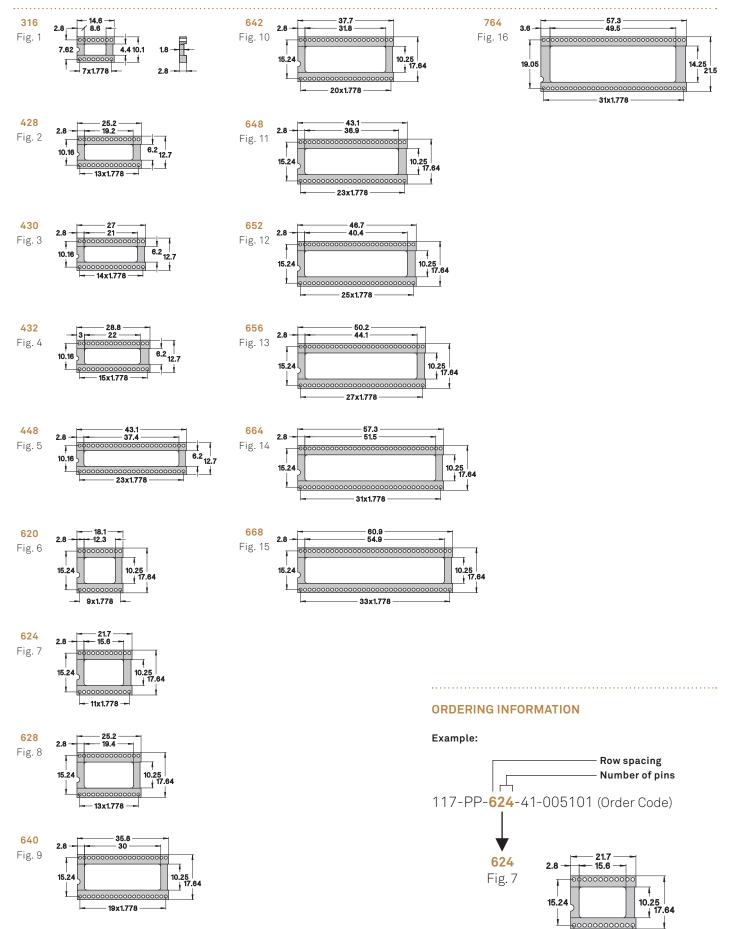
Other lengths for 1-level, 2-level or 4-level wrapping available on request

Replace 123-... in order code by

<b>- 121</b> -83	for 1-level	L = 6.6  mm
<b>- 122</b>	for 2-level	L = 9.4  mm
<b>- 124</b> -83002101	for 4-level	L = 16 mm

INSULATOR BODIES / SHRINKDIP, OPEN FRAME

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- 11x1.778



# SHRINKDIP SOCKETS

OPEN FRAME / SOLDER TAIL

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

High density DIL sockets for devices featuring 0.07" (1.778 mm) lead spacing.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVE Brass CuZn36Pb3 (C36000)
CONTACT CLIP (4 FINGER) Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.56 mm

FORCES 2 N typ. insertion 1 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

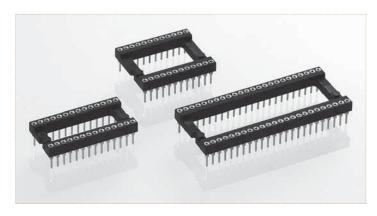
MECHANICAL LIFE Min. 100 cycles

RATED CURRENT 1 A

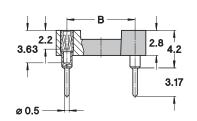
**CONTACT RESISTANCE** Max. 10 m DIELECTRIC STRENGTH Min. 1'000 VRMS

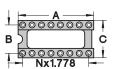
#### ORDERING INFORMATION ROHS COMPLIANT PARTS

PP PLATING CODESLEEVECLIP87TinFlash gold83Tin0.75 μm gold



Other plating on request (see page 178 for plating specs).





NO. OF POLES	Α	В	С	SEE PAGE 140	ORDER CODES
16	14.6	7.62	10.10	Fig. 1	117- <b>PP</b> -316-41-005101
28 30 32	25.2 27.0 28.8	10.16 10.16 10.16	12.70 12.70 12.70	Fig. 2 Fig. 3 Fig. 4	117- <b>PP</b> -428-41-005101 117- <b>PP</b> -430-41-005101 117- <b>PP</b> -432-41-005101
48	43.1	10.16	12.70	Fig. 5	117- <b>PP</b> -448-41-005101
20	18.1	15.24	17.64	Fig. 6	117- <b>PP</b> -620-41-005101
24	21.7	15.24	17.64	Fig. 7	117- <b>PP</b> -624-41-005101
28	25.2	15.24	17.64	Fig. 8	117- <b>PP</b> -628-41-005101
40	35.8	15.24	17.64	Fig. 9	117- <b>PP</b> -640-41-005101
42	37.7	15.24	17.64	Fig. 10	117- <b>PP</b> -642-41-005101
48	43.1	15.24	17.64	Fig. 11	117- <b>PP</b> -648-41-005101
52	46.7	15.24	17.64	Fig. 12	117- <b>PP</b> -652-41-005101
56	50.2	15.24	17.64	Fig. 13	117- <b>PP</b> -656-41-005101
64	57.3	15.24	17.64	Fig. 14	117- <b>PP</b> -664-41-005101
68	60.9	15.24	17.64	Fig. 15	117- <b>PP</b> -668-41-005101
64*	57.3	19.05	21.50	Fig. 16	117- <b>PP</b> -764-41-005101

#### **OPTIONS AVAILABLE ON REQUEST**

- \* Socket 117-PP-764-41-005101 available with closed frame insulator PN **2**17-PP-764-41-005101
- Surface mount Shrinkdip socket with gull wing terminations Series 117-...-41-105101
- Shrinkdip pin header, solder tail Series 150-10...-00-012101 or 150-80...-00-012101

Please consult



OPEN FRAME / PRESS-FIT

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

DIL Sockets with compliant press-fit pin for solderless mount in PCB plated through holes.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVE Bronze CuSn4Pb4Zn4 (C54400)
CONTACT CLIP (4 FINGER) Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.56 mm

FORCES 2 N typ. insertion 1 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

MECHANICAL LIFE Min. 500 cycles

RATED CURRENT 1 A

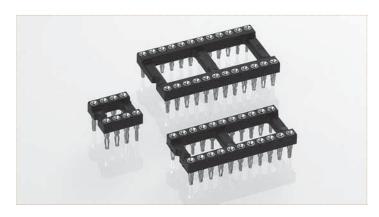
**CONTACT RESISTANCE** Max. 10 m Min. 1'000 VRMs

PCB HOLE Ø 1 +0.09/-0.06 mm finished

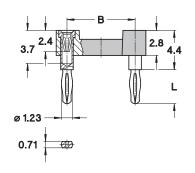
 $(1.15 \pm 0.025 \text{ mm drill})$ 

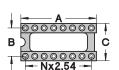
#### ORDERING INFORMATION ROHS COMPLIANT PARTS

PP PLATING CODESLEEVECLIP87TinFlash gold83Tin0.75 μm gold



Other plating on request (see page 178 for plating specs). For complete part number replace **XXX** with the code given below left for the required contact length **L**.





NO. OF POLES

10	12.6	5.08	7.6	Fig. 1	146- <b>PP</b> -210-41- <b>XXX</b> 101
4	5.0	7.62	10.1	Fig. 2	146- <b>PP</b> -304-41- <b>XXX</b> 101
6	7.6	7.62	10.1	Fig. 3	146- <b>PP</b> -306-41- <b>XXX</b> 101
8	10.1	7.62	10.1	Fig. 4	146- <b>PP</b> -308-41- <b>XXX</b> 101
10	12.6	7.62	10.1	Fig. 5	146- <b>PP</b> -310-41- <b>XXX</b> 101
12	15.2	7.62	10.1	Fig. 6	146- <b>PP</b> -312-41- <b>XXX</b> 101
14	17.7	7.62	10.1	Fig. 7	146- <b>PP</b> -314-41- <b>XXX</b> 101
16	20.3	7.62	10.1	Fig. 8	146- <b>PP</b> -316-41- <b>XXX</b> 101
18	22.8	7.62	10.1	Fig. 9	146- <b>PP</b> -318-41- <b>XXX</b> 101
20	25.3	7.62	10.1	Fig. 10	146- <b>PP</b> -320-41- <b>XXX</b> 101
22	27.8	7.62	10.1	Fig. 11	146- <b>PP</b> -322-41- <b>XXX</b> 101
24	30.4	7.62	10.1	Fig. 12	146- <b>PP</b> -324-41- <b>XXX</b> 101
28	35.5	7.62	10.1	Fig. 13	146- <b>PP</b> -328-41- <b>XXX</b> 101
20	25.4	10.16	12.6	Fig. 14	146- <b>PP</b> -420-41- <b>XXX</b> 101
22	27.8	10.16	12.6	Fig. 15	146- <b>PP</b> -422-41- <b>XXX</b> 101
24	30.4	10.16	12.6	Fig. 16	146- <b>PP</b> -424-41- <b>XXX</b> 101
28	35.5	10.16	12.6	Fig. 17	146- <b>PP</b> -428-41- <b>XXX</b> 101
32	40.6	10.16	12.6	Fig. 18	146- <b>PP</b> -432-41- <b>XXX</b> 101
24	30.5	15.24	17.7	Fig. 20	146- <b>PP</b> -624-41- <b>XXX</b> 101
28	35.5	15.24	17.7	Fig. 21	146- <b>PP</b> -628-41- <b>XXX</b> 101
32	40.6	15.24	17.7	Fig. 22	146- <b>PP</b> -632-41- <b>XXX</b> 101
36	45.7	15.24	17.7	Fig. 23	146- <b>PP</b> -636-41- <b>XXX</b> 101
40	50.8	15.24	17.7	Fig. 24	146- <b>PP</b> -640-41- <b>XXX</b> 101

SEE PAGE 128

ORDER CODES

## AVAILABLE CONTACT LENGTH

CONTACT LENGTH L (mm)	PCB THICKNESS (mm)	XXX CODE
2.8	1.5-2.0	036
3.8	2.1-3.2	035



# **DUAL-IN-LINE PIN CARRIER ASSEMBLIES**

LOW PROFILE / LOW PROFILE ULTRA THIN / SOLDER TAIL

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

Easy mounting due to the disposable plastic carrier, no solder or flux wicking problems.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

UL 94V-0 FLAMMABILITY

Brass CuZn36Pb3 (C36000) SLEEVE CONTACT CLIP (4 FINGER) Beryllium copper (C17200)

(3 FINGER) (Series 614...012101) ACCEPTED PIN Ø 0.40 to 0.56 mm

FORCES 2 N typ. (1.0 N typ. 614...012001) insertion

1 N typ. (0.4 N typ. 614...012001) withdrawal (polished steel gauge Ø 0.43 mm)

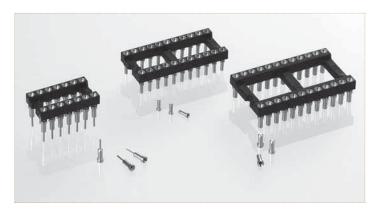
Min. 100 cycles MECHANICAL LIFE

1 A RATED CURRENT

CONTACT RESISTANCE Max. 10 m∏ Min. 1'000 VRMS DIELECTRIC STRENGTH

#### ORDERING INFORMATION ROHS COMPLIANT PARTS

PP PLATING CODE CLIP 87 Tin Flash gold 83 Tin  $0.75 \, \mu m \, gold$ 



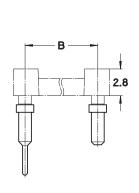
Other plating on request (see page 178 for plating specs). For complete part number replace X-...-XX-XXX with the code given below left.

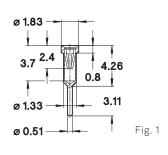
SEE PAGE 128

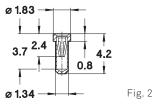
Fig. 1

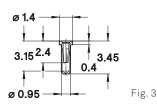
ORDER CODES

61**X-PP-**210-**XX-XXX**101









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5.08

NO. OF POLES

4	5.0	7.62	10.1	Fig. 2	61 <b>X-PP-</b> 304- <b>XX-XXX</b> 101
6	7.6	7.62	10.1	Fig. 3	61 <b>X-PP-</b> 306- <b>XX-XXX</b> 101
8	10.1	7.62	10.1	Fig. 4	61 <b>X-PP</b> -308- <b>XX-XXX</b> 101
10	12.6	7.62	10.1	Fig. 5	61 <b>X-PP-</b> 310- <b>XX-XXX</b> 101
12	15.2	7.62	10.1	Fig. 6	61 <b>X-PP-</b> 312 <b>-XX-XXX</b> 101
14	17.7	7.62	10.1	Fig. 7	61 <b>X-PP</b> -314- <b>XX-XXX</b> 101
16	20.3	7.62	10.1	Fig. 8	61 <b>X-PP-</b> 316- <b>XX-XXX</b> 101
18	22.8	7.62	10.1	Fig. 9	61 <b>X-PP</b> -318- <b>XX-XXX</b> 101
20	25.3	7.62	10.1	Fig. 10	61 <b>X-PP-</b> 320- <b>XX-XXX</b> 101
22	27.8	7.62	10.1	Fig. 11	61 <b>X-PP-</b> 322 <b>-XX-XXX</b> 101
24	30.4	7.62	10.1	Fig. 12	61 <b>X-PP</b> -324 <b>-XX-XXX</b> 101
28	35.5	7.62	10.1	Fig. 13	61 <b>X-PP</b> -328- <b>XX-XXX</b> 101
20	25.4	10.16	12.6	Fig. 14	61 <b>X-PP-</b> 420- <b>XX-XXX</b> 101
22	27.8	10.16	12.6	Fig. 15	61 <b>X-PP-</b> 422 <b>-XX-XXX</b> 101
24	30.4	10.16	12.6	Fig. 16	61 <b>X-PP</b> -424- <b>XX-XXX</b> 101
28	35.5	10.16	12.6	Fig. 17	61 <b>X-PP-</b> 428- <b>XX-XXX</b> 101
32	40.6	10.16	12.6	Fig. 18	61 <b>X-PP-</b> 432 <b>-XX-XXX</b> 101
10	12.7	15.24	17.7	Fig. 19	61 <b>X-PP</b> -610- <b>XX-XXX</b> 101
24	30.5	15.24	17.7	Fig. 20	61 <b>X-PP</b> -624- <b>XX-XXX</b> 101
28	35.5	15.24	17.7	Fig. 21	61 <b>X-PP</b> -628 <b>-XX-XXX</b> 101
32	40.6	15.24	17.7	Fig. 22	61 <b>X-PP</b> -632- <b>XX-XXX</b> 101
36	45.7	15.24	17.7	Fig. 23	61 <b>X-PP-</b> 636- <b>XX-XXX</b> 101
40	50.8	15.24	17.7	Fig. 24	61 <b>X-PP</b> -640- <b>XX-XXX</b> 101
42	53.3	15.24	17.7	Fig. 25	61 <b>X-PP-</b> 642 <b>-XX-XXX</b> 101
48	60.9	15.24	17.7	Fig. 26	61 <b>X-PP</b> -648- <b>XX-XXX</b> 101
50	63.5	15.24	17.7	Fig. 27	61 <b>X-PP-</b> 650- <b>XX-XXX</b> 101
52	66.0	15.24	17.7	Fig. 28	61 <b>X-PP-</b> 652 <b>-XX-XXX</b> 101
50	63.5	22.86	25.3	Fig. 29	61 <b>X-PP-</b> 950 <b>-XX-XXX</b> 101
52	66.0	22.86	25.3	Fig. 30	61 <b>X-PP-</b> 952 <b>-XX-XXX</b> 101
64	81.2	22.86	25.3	Fig. 31	61 <b>X-PP-</b> 964- <b>XX-XXX</b> 101

#### **AVAILABLE VERSIONS**

see Fig. 3 for PCB hole Ø 1.0-1.3 mm

- Standard carrier 612...-41-001101 see Fig. 1 - Low profile 614...-41-001101 see Fig. 2 for PCB hole Ø 1.4-1.8 mm 614...-31-012101 - Low profile, ultra thin



RIGHT ANGLE VERSION / CLOSED FRAME / SOLDER TAIL

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

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVEBrass CuZn36Pb3 (C36000)CONTACT CLIP (4 FINGER)Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.56 mm

FORCES 2 N typ. insertion 1 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

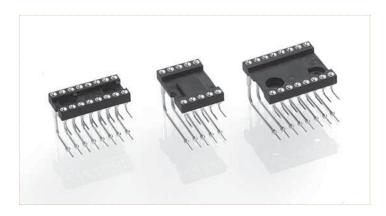
MECHANICAL LIFE Min. 100 cycles

RATED CURRENT 1 A

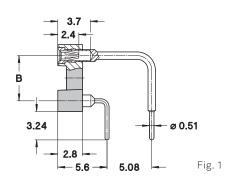
**CONTACT RESISTANCE** Max. 10 m Min. 1'000 VRMs

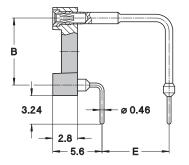
#### ORDERING INFORMATION ROHS COMPLIANT PARTS

PP PLATING CODESLEEVECLIP87TinFlash gold83Tin0.75 μm gold



Other plating on request (see page 178 for plating specs). For complete part number replace **XX** with the code given below left.





#### **ROW SPACING E**

 E (mm)
 ORDER CODE XX

 7.62
 299...10-001101

 2.54
 299...11-001101



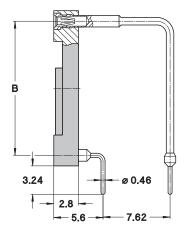
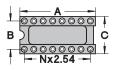


Fig. 3



10 12.6 5.08 7.6 Fig. 1 299-PP-210-10-001 6 7.6 7.62 10.1 Fig. 2 299-PP-306-XX-00 8 10.1 7.62 10.1 Fig. 2 299-PP-308-XX-00 10 12.6 7.62 10.1 Fig. 2 299-PP-310-XX-00 12 15.2 7.62 10.1 Fig. 2 299-PP-312-XX-00 14 17.7 7.62 10.1 Fig. 2 299-PP-314-XX-00	)1101 )1101 1101
8       10.1       7.62       10.1       Fig. 2       299-PP-308-XX-00         10       12.6       7.62       10.1       Fig. 2       299-PP-310-XX-00         12       15.2       7.62       10.1       Fig. 2       299-PP-312-XX-00	1101 1101
10 12.6 7.62 10.1 Fig. 2 299- <b>PP</b> -310- <b>XX</b> -00 12 15.2 7.62 10.1 Fig. 2 299- <b>PP</b> -312- <b>XX</b> -00	1101
12 15.2 7.62 10.1 Fig. 2 299- <b>PP</b> -312- <b>XX</b> -00	
9	1101
14 17.7 7.62 10.1 Fig. 2 299- <b>PP</b> -314- <b>XX</b> -00	1101
	1101
16 20.3 7.62 10.1 Fig. 2 299- <b>PP</b> -316- <b>XX</b> -00	1101
18 22.8 7.62 10.1 Fig. 2 299- <b>PP</b> -318- <b>XX</b> -00	1101
20 25.3 7.62 10.1 Fig. 2 299- <b>PP</b> -320- <b>XX</b> -00	1101
22 27.8 7.62 10.1 Fig. 2 299- <b>PP</b> -322- <b>XX</b> -00	1101
24 30.4 7.62 10.1 Fig. 2 299 <b>-PP</b> -324 <b>-XX</b> -00	1101
8 10.1 15.24 17.7 Fig. 3 299- <b>PP</b> -608-10-00	2101
10 12.6 15.24 17.7 Fig. 3 299- <b>PP</b> -610-10-00	
12 15.2 15.24 10.1 Fig. 3 299 <b>-PP</b> -612-10-000	
14 17.7 15.24 10.1 Fig. 3 299- <b>PP</b> -614-10-00	
16 20.1 15.24 17.7 Fig. 3 299- <b>PP</b> -616-10-00	2101
18 22.8 15.24 17.7 Fig. 3 299- <b>PP</b> -618-10-00	2101
20 25.3 15.24 17.7 Fig. 3 299- <b>PP</b> -620-10-00	2101
22 27.8 15.24 17.7 Fig. 3 299- <b>PP</b> -622-10-00	2101
24 30.4 15.24 17.7 Fig. 3 299- <b>PP</b> -624-10-00	2101
26 33.0 15.24 17.7 Fig. 3 299- <b>PP</b> -626-10-00	2101
28 35.5 15.24 17.7 Fig. 3 299- <b>PP</b> -628-10-00	2101
30 38.0 15.24 17.7 Fig. 3 299- <b>PP</b> -630-10-00	2101
32 40.6 15.24 17.7 Fig. 3 299- <b>PP</b> -632-10-00	2101
36 45.7 15.24 17.7 Fig. 3 299- <b>PP</b> -636-10-00	2101
40 50.6 15.24 17.7 Fig. 3 299- <b>PP</b> -640-10-00	2101
48 61.0 15.24 17.7 Fig. 3 299- <b>PP</b> -648-10-00	2101



# **DUAL-IN-LINE PIN HEADERS**

OPEN FRAME / SOLDER TAIL

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

DIL pin headers with male contacts pluggable into standard female socket contacts.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

UL 94V-0 FLAMMABILITY

Brass CuZn36Pb3 (C36000) CONTACT

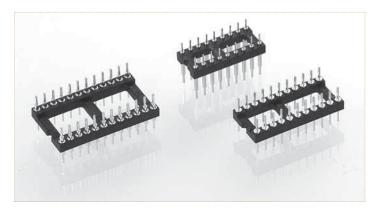
CONNECTING PIN Ø 0.47 mm / 0.76 mm Min. 100 cycles MECHANICAL LIFE

RATED CURRENT 1 A

Min. 1'000 VRMS DIELECTRIC STRENGTH

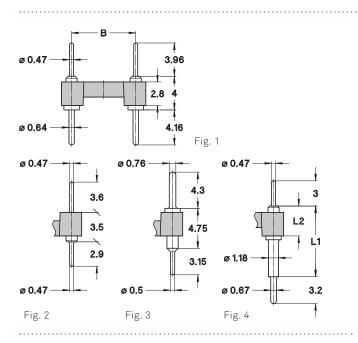
#### ORDERING INFORMATION ROHS COMPLIANT PARTS

CONNECTING PIN TERMINATION PP PLATING CODE  $0.25~\mu m$  gold 0.25 µm gold 80 Tin Tin



Other plating on request (see page 178 for plating specs). For complete part number replace X-...-XXX with the code given below left.

SEE PAGE 128



	- A	
	0000000	4
В	51 11	Ċ
_	0000000	į į
1	- Nx2.54 -	

NO. OF POLES

10	12.6	5.08	7.6	Fig. 1	15 <b>X-PP</b> -210-00- <b>XXX</b> 101
4	5.0	7.62	10.1	Fig. 2	15 <b>X-PP</b> -304-00- <b>XXX</b> 101
6	7.6	7.62	10.1	Fig. 3	15 <b>X-PP-</b> 306-00- <b>XXX</b> 101
8	10.1	7.62	10.1	Fig. 4	15 <b>X-PP-</b> 308-00- <b>XXX</b> 101
10	12.6	7.62	10.1	Fig. 5	15 <b>X-PP-</b> 310-00- <b>XXX</b> 101
12	15.2	7.62	10.1	Fig. 6	15 <b>X-PP-</b> 312-00- <b>XXX</b> 101
14	17.7	7.62	10.1	Fig. 7	15 <b>X-PP-</b> 314-00 <b>-XXX</b> 101
16	20.3	7.62	10.1	Fig. 8	15 <b>X-PP-</b> 316-00- <b>XXX</b> 101
18	22.8	7.62	10.1	Fig. 9	15 <b>X-PP-</b> 318-00- <b>XXX</b> 101
20	25.3	7.62	10.1	Fig. 10	15 <b>X-PP-</b> 320-00- <b>XXX</b> 101
22	27.8	7.62	10.1	Fig. 11	15 <b>X-PP-</b> 322-00- <b>XXX</b> 101
24	30.4	7.62	10.1	Fig. 12	15 <b>X-PP-</b> 324-00- <b>XXX</b> 101
28	35.5	7.62	10.1	Fig. 13	15 <b>X-PP-</b> 328-00- <b>XXX</b> 101
20	25.4	10.16	12.6	Fig. 14	15 <b>X-PP-</b> 420-00 <b>-XXX</b> 101
22	27.8	10.16	12.6	Fig. 15	15 <b>X-PP-</b> 422-00- <b>XXX</b> 101
24	30.4	10.16	12.6	Fig. 16	15 <b>X-PP-</b> 424-00- <b>XXX</b> 101
28	35.5	10.16	12.6	Fig. 17	15 <b>X-PP-</b> 428-00- <b>XXX</b> 101
32	40.6	10.16	12.6	Fig. 18	15 <b>X-PP-</b> 432-00- <b>XXX</b> 101
10	12.7	15.24	17.7	Fig. 19	15 <b>X-PP</b> -610-00- <b>XXX</b> 101
24	30.5	15.24	17.7	Fig. 20	15 <b>X-PP-</b> 624-00- <b>XXX</b> 101
28	35.5	15.24	17.7	Fig. 21	15 <b>X-PP</b> -628-00- <b>XXX</b> 101
32	40.6	15.24	17.7	Fig. 22	15 <b>X-PP</b> -632-00- <b>XXX</b> 101
36	45.7	15.24	17.7	Fig. 23	15 <b>X-PP</b> -636-00- <b>XXX</b> 101
40	50.8	15.24	17.7	Fig. 24	15 <b>X-PP</b> -640-00- <b>XXX</b> 101
42	53.3	15.24	17.7	Fig. 25	15 <b>X-PP</b> -642-00- <b>XXX</b> 101
48	60.9	15.24	17.7	Fig. 26	15 <b>X-PP</b> -648-00- <b>XXX</b> 101
50	63.5	15.24	17.7	Fig. 27	15 <b>X-PP</b> -650-00- <b>XXX</b> 101
52	66.0	15.24	17.7	Fig. 28	15 <b>X-PP</b> -652-00- <b>XXX</b> 101
50	63.5	22.86	25.3	Fig. 29	15 <b>X-PP</b> -950-00- <b>XXX</b> 101
52	66.0	22.86	25.3	Fig. 30	15 <b>X-PP</b> -952-00 <b>-XXX</b> 101
64	81.2	22.86	25.3	Fig. 31	15 <b>X-PP</b> -964-00 <b>-XXX</b> 101

STANDARD HEADER

150-...-001101 See Fig. 1 150-...-006101 See Fig. 2 See Fig. 3 150-...-018101

**AVAILABLE VERSIONS** 

#### INTERCONNECT HEADER

151-...-XXX101 See Fig. 4 CONTACT LENGTH L1 (mm) L2 (mm) XXX CODE 6.2 4.7 8.4 3.55 004 15.3 3.55 21.2 3.55 016 27.4 3.55

Other lengths on request



# **DUAL-IN-LINE PIN HEADERS**

OPEN FRAME / SURFACE MOUNT

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

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

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

CONTACT Brass CuZn36Pb3 (C36000)

connecting pin Ø 0.47 mm

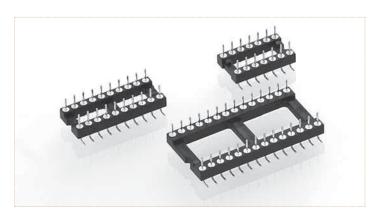
MECHANICAL LIFE Min. 100 cycles

RATED CURRENT 1 A

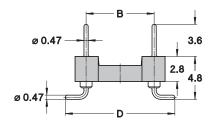
DIELECTRIC STRENGTHMin. 1'000 VRMSCOPLANARITY<br/>SMD TERMINATIONSMax. 0.10 mm

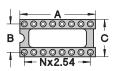
#### ORDERING INFORMATION ROHS COMPLIANT PARTS

PP PLATING CODE	TERMINATION	CONNECTING PIN
10	0.25 µm gold	0.25 µm gold
80	Tin	Tin
V3	Tin	0.75 µm gold



Other plating on request (see page 178 for plating specs).

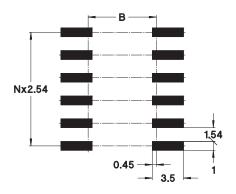




NO. OF POLES A

10	)	12.6	5.08	7.6	9.76	Fig.	1	150- <b>PP</b> -210-00-106101
_	<b>4</b>	5.0	7.62	10.1	12.30	Fig.	2	150 <b>-PP</b> -304-00-106101
6	3	7.6	7.62	10.1	12.30	Fig.	3	150- <b>PP</b> -306-00-106101
8	3	10.1	7.62	10.1	12.30	Fig.	4	150- <b>PP</b> -308-00-106101
10	)	12.6	7.62	10.1	12.30	Fig.	5	150- <b>PP</b> -310-00-106101
12	2	15.2	7.62	10.1	12.30	Fig.	6	150- <b>PP</b> -312-00-106101
14	<b>'</b>	17.7	7.62	10.1	12.30	Fig.	7	150- <b>PP</b> -314-00-106101
16	3	20.3	7.62	10.1	12.30	Fig.	8	150- <b>PP</b> -316-00-106101
18	3	22.8	7.62	10.1	12.30	Fig.	9	150- <b>PP</b> -318-00-106101
20	)	25.3	7.62	10.1	12.30	Fig.	10	150- <b>PP</b> -320-00-106101
22	2	27.8	7.62	10.1	12.30	Fig.	11	150- <b>PP</b> -322-00-106101
24	4	30.4	7.62	10.1	12.30	Fig.	12	150- <b>PP</b> -324-00-106101
28	3	35.5	7.62	10.1	12.30	Fig.	13	150- <b>PP</b> -328-00-106101
20	)	25.4	10.16	12.6	14.84	Fig.	14	150- <b>PP</b> -420-00-106101
22	2	27.8	10.16	12.6	14.84	Fig.	15	150- <b>PP</b> -422-00-106101
24	4	30.4	10.16	12.6	14.84	Fig.	16	150- <b>PP</b> -424-00-106101
28	3	35.5	10.16	12.6	14.84	Fig.	17	150- <b>PP</b> -428-00-106101
32	2	40.6	10.16	12.6	14.84	Fig.	18	150- <b>PP</b> -432-00-106101
24	4	30.5	15.24	17.7	19.92	Fig.	20	150- <b>PP</b> -624-00-106101
28	3	35.5	15.24	17.7	19.92	Fig.	21	150- <b>PP</b> -628-00-106101
32	2	40.6	15.24	17.7	19.92	Fig.	22	150- <b>PP</b> -632-00-106101
36	3	45.7	15.24	17.7	19.92	Fig.	23	150- <b>PP</b> -636-00-106101
4(	)	50.8	15.24	17.7	19.92	Fig.	24	150- <b>PP</b> -640-00-10610
42	2	53.3	15.24	17.7	19.92	Fig.	25	150- <b>PP</b> -642-00-106101
48	3	60.9	15.24	17.7	19.92	Fig.	26	150- <b>PP</b> -648-00-10610

SEE PAGE 128 ORDER CODES





# **DUAL-IN-LINE HEADERS**

OPEN FRAME / SURFACE MOUNT PICK AND PLACE

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

Specially designed for reflow soldering including vapor phase with male contact pluggable into standard socket contacts.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

Black glass filled polyester PCT-GF30-FR INSULATOR

UL 94V-0 FLAMMABILITY

Brass CuZn36Pb3 (C36000) CONTACT

CONNECTING PIN Ø 0.47 mm Min. 100 cycles MECHANICAL LIFE

RATED CURRENT 1 A

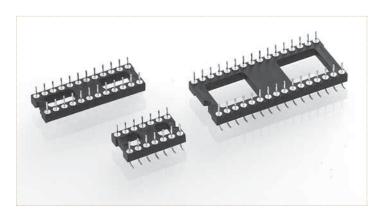
Min. 1'000 VRMS DIELECTRIC STRENGTH COPLANARITY SMD TERMINATIONS Max. 0.10 mm

#### ORDERING INFORMATION ROHS COMPLIANT PARTS

PP PLATING CODE TERMINATION CONNECTING PIN 0.25 µm gold 0.25 µm gold 80 Tin Tin

V3\* Tin 0.75 µm gold

\*only for 150-PP-XXX-00-106161



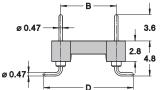
Other plating on request (see page 178 for plating specs).

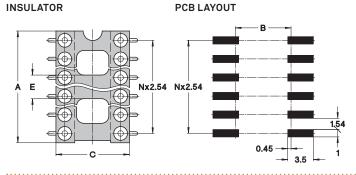
#### Tape & Reel packaging:

replace 161 by suffix 191 to part number Other pin counts please consult.



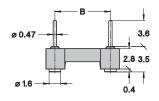
T & R Packaging





#### **HEADER WITH GULL-WING TERMINATION**

NO. OF POLES	Α	В	С	D	E	ORDER CODES
6	7.6	7.62	10.1	12.30	7.6	150- <b>PP</b> -306-00-106161
8	10.1	7.62	10.1	12.30	10.1	150- <b>PP</b> -308-00-106161
10	12.6	7.62	10.1	12.30	12.6	150- <b>PP</b> -310-00-106161
14	17.8	7.62	10.1	12.30	5.3	150- <b>PP</b> -314-00-106161
16	20.3	7.62	10.1	12.30	5.3	150- <b>PP</b> -316-00-106161
18	22.9	7.62	10.1	12.30	5.3	150- <b>PP</b> -318-00-106161
20	25.4	7.62	10.1	12.30	8.3	150- <b>PP</b> -320-00-106161
24	30.4	7.62	10.1	12.30	8.3	150- <b>PP</b> -324-00-106161
28	35.6	7.62	10.1	12.30	8.3	150- <b>PP</b> -328-00-106161
28	35.5	15.24	17.7	19.22	10.0	150- <b>PP</b> -628-00-106161
32	40.6	15.24	17.7	19.22	10.0	150- <b>PP</b> -632-00-106161
40	50.8	15.24	17.7	19.22	10.0	150- <b>PP</b> -640-00-106161
42	53.4	15.24	17.7	19.22	10.0	150- <b>PP</b> -642-00-106161



# **INSULATOR PCB LAYOUT** Nx2.54 Nx2.54

#### **HEADER WITH FLOATING PIN TERMINATION**

NO. OF POLES	Α	В	С	D	E	ORDER CODES
6	7.6	7.62	10.1	12.30	7.6	150- <b>PP</b> -306-01-899161
8	10.1	7.62	10.1	12.30	10.1	150- <b>PP</b> -308-01-899161
10	12.6	7.62	10.1	12.30	12.6	150- <b>PP</b> -310-01-899161
14	17.8	7.62	10.1	12.30	5.3	150- <b>PP</b> -314-01-899161
16	20.3	7.62	10.1	12.30	5.3	150- <b>PP</b> -316-01-899161
18	22.9	7.62	10.1	12.30	5.3	150- <b>PP</b> -318-01-899161
20	25.4	7.62	10.1	12.30	8.3	150- <b>PP</b> -320-01-899161
24	30.4	7.62	10.1	12.30	8.3	150- <b>PP</b> -324-01-899161
28	35.6	7.62	10.1	12.30	8.3	150- <b>PP</b> -328-01-899161
28	35.5	15.24	17.7	19.22	10.0	150- <b>PP</b> -628-01-899161
32	40.6	15.24	17.7	19.22	10.0	150- <b>PP</b> -632-01-899161
40	50.8	15.24	17.7	19.22	10.0	150- <b>PP</b> -640-01-899161
42	53.4	15.24	17.7	19.22	10.0	150- <b>PP</b> -642-01-899161



# **DUAL-IN-LINE HEADERS**

SLOTTED HEAD / TURRET / SOLDER CUP / OPEN FRAME / SOLDER TAIL

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

DIL headers for wiring applications.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

CONTACT Brass CuZn36Pb3 (C36000)

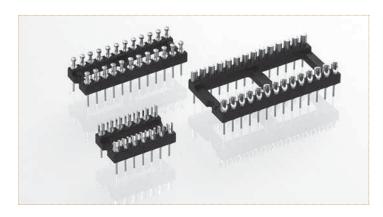
**CONNECTING PIN Ø** 0.5 mm **MECHANICAL LIFE** Min. 100 cycles

RATED CURRENT 1 A

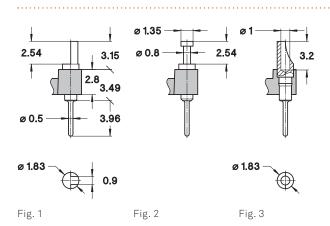
DIELECTRIC STRENGTH Min. 1'000 VRMS

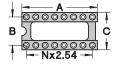
#### **ORDERING INFORMATION ROHS COMPLIANT PARTS**

PP PLATING CODETERMINATIONCONNECTING PIN100.25 µm gold0.25 µm gold80TinTin



Other plating on request (see page 178 for plating specs). For complete part number replace **XX** with the code given below left.





NO. OF POLES	Α	В	С	SEE PAGE 128	ORDER CODES
10	12.6	5.08	7.6	Fig. 1	1 <b>XX-PP</b> -210-00-001101
4	5.0	7.62	10.1	Fig. 2	1 <b>XX-PP</b> -304-00-001101
6	7.6	7.62	10.1	Fig. 3	1 <b>XX-PP</b> -306-00-001101
8	10.1	7.62	10.1	Fig. 4	1 <b>XX-PP</b> -308-00-001101
10	12.6	7.62	10.1	Fig. 5	1 <b>XX-PP</b> -310-00-001101
12	15.2	7.62	10.1	Fig. 6	1 <b>XX-PP-</b> 312-00-001101
14	17.7	7.62	10.1	Fig. 7	1 <b>XX-PP</b> -314-00-001101
16	20.3	7.62	10.1	Fig. 8	1 <b>XX-PP</b> -316-00-001101
18	22.8	7.62	10.1	Fig. 9	1 <b>XX-PP</b> -318-00-001101
20	25.3	7.62	10.1	Fig. 10	1 <b>XX-PP</b> -320-00-001101
22	27.8	7.62	10.1	Fig. 11	1 <b>XX-PP</b> -322-00-001101
24	30.4	7.62	10.1	Fig. 12	1 <b>XX-PP</b> -324-00-001101
28	35.5	7.62	10.1	Fig. 13	1 <b>XX-PP-</b> 328-00-001101
20	25.4	10.16	12.6	Fig. 14	1 <b>XX-PP-</b> 420-00-001101
22	27.8	10.16	12.6	Fig. 15	1 <b>XX-PP-</b> 422-00-001101
24	30.4	10.16	12.6	Fig. 16	1 <b>XX-PP</b> -424-00-001101
28	35.5	10.16	12.6	Fig. 17	1 <b>XX-PP</b> -428-00-001101
32	40.6	10.16	12.6	Fig. 18	1 <b>XX-PP</b> -432-00-001101
10	12.7	15.24	17.7	Fig. 19	1 <b>XX-PP</b> -610-00-001101
24	30.5	15.24	17.7	Fig. 20	1 <b>XX-PP</b> -624-00-001101
28	35.5	15.24	17.7	Fig. 21	1XX-PP-628-00-001101
32	40.6	15.24	17.7	Fig. 22	1 <b>XX-PP</b> -632-00-001101
36	45.7	15.24	17.7	Fig. 23	1XX-PP-636-00-001101
40	50.8	15.24	17.7	Fig. 24	1XX-PP-640-00-001101
42	53.3	15.24	17.7	Fig. 25	1XX-PP-642-00-001101
48	60.9	15.24	17.7	Fig. 26	1XX-PP-648-00-001101
50	63.5	15.24	17.7	Fig. 27	1XX-PP-650-00-001101
52	66.0	15.24	17.7	Fig. 28	1 <b>XX-PP</b> -652-00-001101
50	63.5	22.86	25.3	Fig. 29	1 <b>XX-PP</b> -950-00-001101
50	66.0			Fig. 29 Fig. 30	
IJZ	00.0	22.86	25.3	rig. 30	1 <b>XX-PP</b> -952-00-001101

#### **AVAILABLE VERSIONS**

Replace 1XX-... in order code by

ORDER CODE	DESCRIPTION	DIMENSIONS
160	Header with slotted head to accept wires or component leads	See Fig. 1
1 <b>70</b>	Header with turret head	See Fig. 2
180	Header with solder cup	See Fig. 3

Fig. 31

81.2 22.86 25.3

64

1**XX-PP**-964-00-001101



# TO SOCKETS

SOLDER TAIL / SURFACE MOUNT

WWW.PRECIDIP.COM TEL +41 32 421 04 00 SALES@PRECIDIP.COM

Sockets for packages with contacts arranged on .200" (5.08 mm) and .230" (5.84 mm) diameter acc. to JEDEC TO-Series outlines.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

UL 94V-0 FLAMMABILITY

Brass CuZn36Pb3 (C36000) SLEEVE **CONTACT CLIP (4 FINGER)** Beryllium copper (C17200)

0.40 to 0.56 mm ACCEPTED PIN Ø

2 N typ. insertion 1 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

MECHANICAL LIFE Min. 100 cycles

1 A RATED CURRENT

Max. 10 m□ CONTACT RESISTANCE Min. 1'000 VRMS DIELECTRIC STRENGTH

#### **ORDERING INFORMATION ROHS COMPLIANT PARTS**

PP PLATING CODE SLEEVE 87 Tin Flash gold 83 Tin  $0.75\,\mu m$  gold



Other plating on request (see page 178 for plating specs).

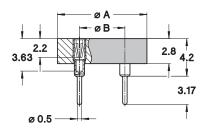


Fig. 1

#### SOCKETS, SOLDER TAIL, FIG. 1

NO. OF POLES	Α	В	SEE	ORDER CODES
3	10.0	5.08	Fig. 3	917- <b>PP</b> -103-41-005101
4	10.0	5.08	Fig. 4	917- <b>PP</b> -104-41-005101
8	10.0	5.08	Fig. 5	917- <b>PP</b> -108-41-005101
8	10.0	5.84	Fig. 6	917- <b>PP</b> -208-41-005101
10	10.0	5.84	Fig. 7	917- <b>PP</b> -210-41-005101

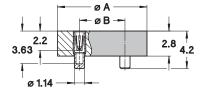


Fig. 2

#### **SOCKETS, SMD MOUNT, FIG. 2**

NO. OF POLES	Α	В	SEE	ORDER CODES
3	10.0	5.08	Fig. 3	917- <b>PP</b> -103-41-053101
4	10.0	5.08	Fig. 4	917- <b>PP</b> -104-41-053101
8	10.0	5.08	Fig. 5	917- <b>PP</b> -108-41-053101
8	10.0	5.84	Fig. 6	917- <b>PP</b> -208-41-053101
10	10.0	5.84	Fig. 7	917- <b>PP</b> -210-41-053101















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# SPECIFIC APPLICATIONS SOCKETS

SOLDER TAIL / STAGGERED DIL AND SIL SOCKETS

Quad-in-line sockets and staggered (zig-zag) strips are suitable for IC's with staggered double row Dual-in-line type pin patterns.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

FLAMMABILITY UL 94V-0

SLEEVEBrass CuZn36Pb3 (C36000)CONTACT CLIP (4 FINGER)Beryllium copper (C17200)

ACCEPTED PIN Ø 0.40 to 0.56 mm

**FORCES** 2 N typ. insertion 1 N typ. withdrawal

(polished steel gauge Ø 0.43 mm)

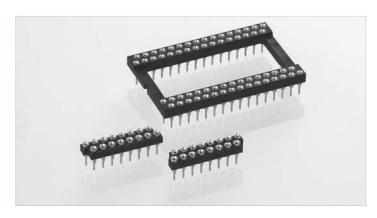
MECHANICAL LIFE Min. 100 cycles

RATED CURRENT 1 A

**CONTACT RESISTANCE** Max. 10 m DIELECTRIC STRENGTH Min. 1'000 VRMS

#### ORDERING INFORMATION ROHS COMPLIANT PARTS

PP PLATING CODESLEEVECLIP87TinFlash gold83Tin0.75 μm gold



Other plating on request (see page 178 for plating specs).

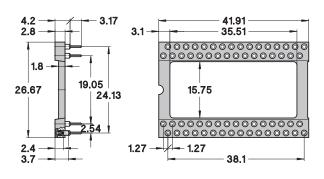


Fig. 1

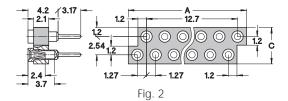
#### **QUAD-IN-LINE SOCKET**

NO. OF POLES	SEE	ORDER CODES
64	Fig. 1	110- <b>PP</b> -064-01-505101

#### Note:

Suitable for quad-in-line packages with 19.05 / 23.50 mm row spacing acc. to JEDEC MO-030.

Quad-in-line socket layout requires 19.05 / 24.13 mm row spacing.





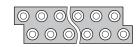


Fig. 3

#### STAGGERED ZIG-ZAG STRIPS

NO. OF POLES	Α	С	VERSION	SEE	ORDER CODES
14*	19.00	5.0	left	Fig. 2	410- <b>PP</b> -214-10-001101
14	10.00	0.0	right	Fig. 3	410- <b>PP</b> -214-10-002101
16	21.50	5.0	left	Fig. 2	410- <b>PP</b> -216-10-001101
10	21.50	5.0	right	Fig. 3	410- <b>PP</b> -216-10-002101
0.0	00.57	F 0	left	Fig. 2	410- <b>PP</b> -220-10-001101
20	26.57	5.0	right	Fig. 3	410- <b>PP</b> -220-10-002101
24	04.05	ΕO	left	Fig. 2	410- <b>PP</b> -224-10-001101
24	31.65	5.0	right	Fig. 3	410- <b>PP</b> -224-10-002101
28	36.73	5.0	left	Fig. 2	410- <b>PP</b> -228-10-001101
28	30./3	5.0	right	Fig. 3	410- <b>PP</b> -228-10-002101
30	39.27	5.0	left	Fig. 2	410- <b>PP</b> -230-10-001101
30	39.27		right	Fig. 3	410- <b>PP</b> -230-10-002101
4.0	E2 00	5 O	left	Fig. 2	410- <b>PP</b> -240-10-001101
40	52.00	5.0	right	Fig. 3	410- <b>PP</b> -240-10-002101

<sup>\* 14-</sup>pin strips are not stackable end to end



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# SPECIFIC APPLICATIONS

CRYSTAL, RELAY AND DISPLAY SOCKETS / SOLDER TAIL

Partially equipped DIL sockets and display sockets.

#### TECHNICAL SPECIFICATIONS (FOR GENERAL SPECS, SEE PAGE 127)

INSULATOR Black glass filled polyester PCT-GF30-FR

UL 94V-0 FLAMMABILITY

Brass CuZn36Pb3 (C36000) SLEEVE Beryllium copper (C17200) (Series 510...504101) CONTACT CLIP (4 FINGER)

(6 FINGER) ACCEPTED PIN Ø 0.40 to 0.56 mm

FORCES

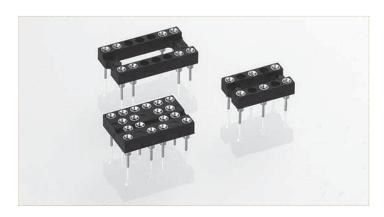
2 N typ. (0.7 N typ. 510...504101) insertion 1 N typ. (0.4 N typ. 510...504101) withdrawal (polished steel gauge Ø 0.43 mm) (6 finger: Ø 0.46 mm)

Min. 100 cycles

MECHANICAL LIFE

RATED CURRENT CONTACT RESISTANCE Max. 10 m

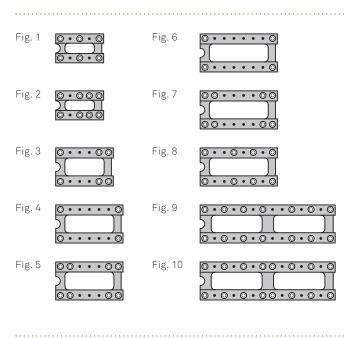
DIELECTRIC STRENGTH Min. 1'000 VRMS



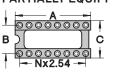
Other plating on request (see page 178 for plating specs).

#### **ORDERING INFORMATION ROHS COMPLIANT PARTS**

PP PLATING CODE	SLEEVE	CLIP
87	Tin	Flash gold
83	Tin	0.75 µm gold



#### PARTIALLY EQUIPPED DIL SOCKETS



TOTAL EQUIPPED	Α	В	С	SEE	ORDER CODES
10 / 6	12.6	5.08	7.6	Fig. 1	110- <b>PP</b> -210-01-742101
10 / 8	12.6	5.08	7.6	Fig. 2	110- <b>PP</b> -210-01-839101
12 / 6	15.2	7.62	10.1	Fig. 3	110- <b>PP</b> -312-01-680101
14 / 4	17.7	7.62	10.1	Fig. 4	110- <b>PP</b> -314-10-001101
14 / 8	17.7	7.62	10.1	Fig. 5	110- <b>PP</b> -314-10-002101
16 / 4	20.3	7.62	10.1	Fig. 6	110- <b>PP</b> -316-01-822101
16 / 8	20.3	7.62	10.1	Fig. 7	110- <b>PP</b> -316-01-931101
16 / 8	20.3	7.62	10.1	Fig. 8	110- <b>PP</b> -316-10-003101
28 / 14	35.5	7.62	10.1	Fig. 9	110- <b>PP</b> -328-01-777101
28 / 16	35.5	7.62	10.1	Fig. 10	110- <b>PP</b> -328-01-762101

Other pin count and arrangement please consult

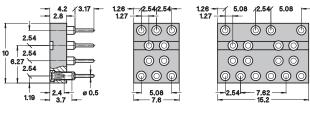


Fig. 11 Fig. 12

#### **DISPLAY SOCKETS FOR 7 SEGMENT DISPLAYS (1 OR 2 DIGITS)**

NO. OF POLES	SEE	ORDER CODES
10	Fig. 11	510- <b>PP</b> -010-01-504101
18	Fig. 12	510- <b>PP</b> -018-01-504101

Please consult for other display sockets, single or multidigits