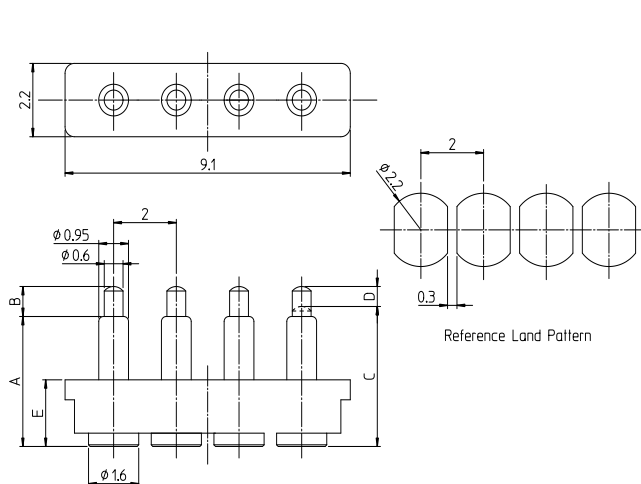


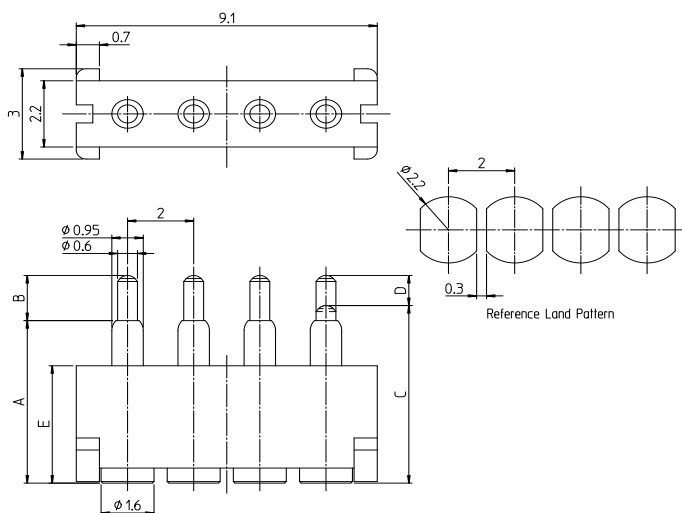
## Pogo Pin Connectors\_4Pin\_2.0mm Pitch\_SMD Vertical Series

### Basic Specifications

- Rated Current : 1A
- Rated Voltage : AC/DC12V
- Contact Resistance: 50mΩmax
- Operation Temp. : -40°C~+85°C
- Pin Force : 4.9N on a pin from any direction
- Cycle Durability: 20,000 times



**Type 3206-3909**



**Type 4109-5415**

Type	Working Height(mm)	Reference Working Range (mm)	Spring Force	Rated Current	Dim.					Part Number
					A	B	C	D	E	
3206	3.4	(3.3-3.5)	1.0N	1A	3.2	0.6	3.4	0.4	2.0	J-3206H-4-20-0000
3306	3.5	(3.4-3.6)	1.0N	1A	3.3	0.6	3.5	0.4	2.0	J-3306H-4-20-0000
3406	3.6	(3.5-3.7)	1.0N	1A	3.4	0.6	3.6	0.4	2.0	J-3406H-4-20-0000
3507	3.7	(3.6-3.85)	1.0N	1A	3.5	0.7	3.7	0.5	2.0	J-3507H-4-20-0000
3607	3.8	(3.7-3.95)	1.0N	1A	3.6	0.7	3.8	0.5	2.0	J-3607H-4-20-0000
3709	4.0	(3.8-4.15)	1.0N	1A	3.7	0.9	4.0	0.6	2.0	J-3709H-4-20-0000
3909	4.2	(4.0-4.35)	1.0N	1A	3.9	0.9	4.2	0.6	2.0	J-3909H-4-20-0000
4109	4.4	(4.2-4.55)	1.0N	1A	4.1	0.9	4.4	0.6	3.9	J-4109H-4-20-0000
4309	4.55	(4.35-4.7)	1.0N	1A	4.25	0.9	4.55	0.6	3.9	J-4309H-4-20-0000
4509	4.75	(4.55-4.9)	1.0N	1A	4.45	0.9	4.75	0.6	3.9	J-4509H-4-20-0000
4709	4.95	(4.75-5.1)	1.0N	1A	4.65	0.9	4.95	0.6	3.9	J-4709H-4-20-0000
4812	5.2	(4.9-5.4)	1.0N	1A	4.8	1.2	5.2	0.8	3.9	J-4812H-4-20-0000
5112	5.5	(5.2-5.7)	1.0N	1A	5.1	1.2	5.5	0.8	3.9	J-5112H-4-20-0000
5415	5.9	(5.5-6.15)	1.0N	1A	5.4	1.5	5.9	1.0	3.9	J-5415H-4-20-0000

### Electrical Characteristic

- Rated Current : AC/DC 12V 1A**
- Contact Resistance : 50mΩ**
- Insulation Resistance : 100M Ω MIN**
- Dielectric Strength : 3mA (MAX) leakage**

### Mechanical Characteristics

- Pin Force: 1.0N ± 0.2N**
- Pin Strength : 9.8N force on pin from any direction for 1min.**
- Pin Pulling Force : 4.9N force on a pin from axis direction for 1 min**

## Other Characteristic

**Operational Durability : 20,000 cycles**

**Low Temp. Durability : Store in temp.  $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$  for 96 hours  
then ,leaves in the ambient temp. for 1 hour**

**High Temp. Durability: Store in temp.  $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for 96 hours  
then ,leaves in the ambient temp. for 1 hour**

**Humidity Durability : Store in temp.  $+60^{\circ}\text{C} \pm 2^{\circ}\text{C}$  with humidity of 90~95% for 96 hours**

**Temp. Cycle Test : Cycle 5 times (Table 1. shows test condition for 1 cycle)  
Leave in the ambient temp. for 1 hour.**

**Temp. And Humidity Cycle Test: 10 times of a cycle test based on JIS C60068-2-38**

**Anti-corrosion (Salt Water Spray) :** The electrical performance shall measured after continuous spray of salt water with  $5 \pm 1\%$  density and  $35 \pm 2^{\circ}\text{C}$  temp. for 48 hours, cleaning with lukewarm water and dry, and leaving in ambient temperature for 1 hours

**Vibration Test :** Connect each connector pin in series, conducting current of 0.1A. After that the vibration described below is added.  
\* Amplitude 1.5mm  
\* Sweeping cycle 10~55~10Hz/minute,  
\* Duration of test: 2hours for each of X,Y,Z axis

**Shock Test :** Connect each connector pin in series, conducting current of 0.1A. After that , the shock described below is added.  
\* Accelerating rate:  $490\text{m/s}^2$   
\* Operating time of the test: 11ms  
\* The number of operating times: \*3shocks at X,Y,Z axis both.  
\*In negative and positive direction.

**Heat Resistance :** The electrical performance shall be measured in ambient temperature after soldering in accordance with the reflow profile Fig 2.

- The specifications shown in this catalogue are subject to change without notice.
- Storage conditions: 35days max in room temperature

**Table 1. Temperature Cycle**

Step	Temperature( $^{\circ}\text{C}$ )	Time(minites)
1	$-40 \pm 3$	30 - 35
2	5 - 35	10 - 15
3	$85 \pm 2$	30 - 35
4	5 - 35	10 - 15

**Fig 1. Temp. and Humidity Cycle**



**Fig 2. Reflow Profile**

