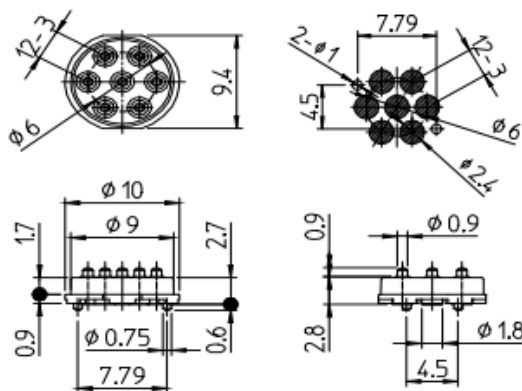


# Yokowo SPRING LOADED CONNECTOR

## Pogo Pin Connectors\_7Pin\_3.0mm Pitch\_SMD Vertical Series

### Basic Specification

Part Number :	S-J-2809H-7-30-0000
Rated Current :	2A
Rated Voltage :	AC/DC12V
Contact Resistance:	50mΩmax
Operation Temp. :	-40°C~+85°C
Pin Strength :	9.8N on a pin from any direction
Cycle Durability:	20,000 times



### Electrical Characteristic

Rated Current :	AC/DC 12V 2A
Contact Resistance :	50mΩ
Insulation Resistance :	100M Ω MIN
Dielectric Strength :	3mA (MAX) leakage

### Mechanical Characteristics

Pin Force :	1.05N ± 0.25N
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°C ± 3°C for 96 hours then ,leaves in the ambient temperature. for 1 hour.
High Temp. Durability :	Store in temp. +85°C ± 2°Cfor 96 hours then ,leaves in the ambient temperature. for 1 hour.
Humidity Durability :	Store in temp. +60°C ± 2°C with humidity of 90~95% for 96 hours, then leave in the ambient temperature for 1 hours.
Temp. Cycle Test :	Cycle 5 times (Table1. shows test condition for 1cycle) 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.

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### Other Characteristic

**Anti-corrosion(Salt Water Spray) :** The electrical performance shall be measured after continuous spray of salt water with  $5 \pm 1\%$  density and  $35 \pm 2^\circ\text{C}$  temperature 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: 2hrs for each of X,Y,Z axis.

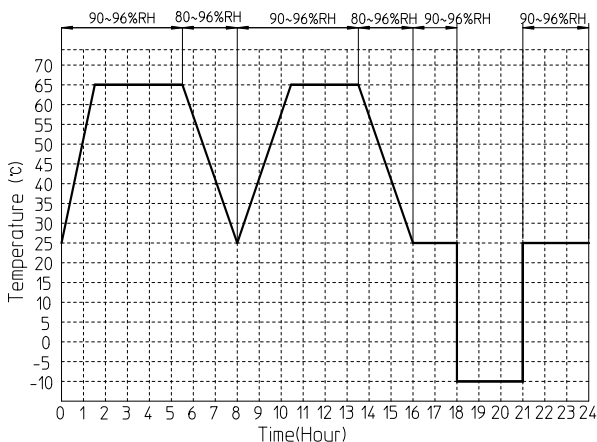
**Shock Test :** Connect each connector pin in series, conducting current of 0.1A. After that , the shock described below is added.  
 \* Accelerating rate:  $490\text{m/s}^2$   
 \* Operating time of the test: 11ms  
 \* The number of operating times: 3shocks at X,Y,Z axis both In negative and positive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

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

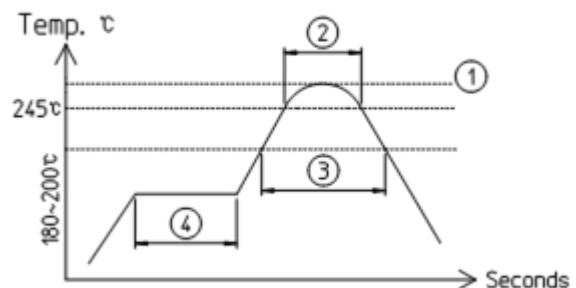
**Table 1. Temperature Cycle**

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**



- ① MAX Temp. 250°C
- ② Peak time (245°C): 10sec. MAX
- ③ 220°C time: 80sec.
- ④ 190°C ± 10°C time: 120sec. ± 30sec.

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