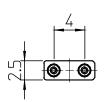


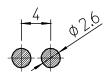
# Pogo Pin Connectors\_2Pin\_4.0mm Pitch\_SMD Vertical Series

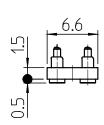
## **Basic Specification**

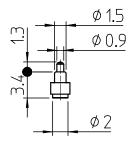
Part Number: S-J-3413H-2-40-0000

Rated Current: AC/DC 12V 2A Contact Resistance:  $50m\Omega$  MAX Operation Temp.:  $-40^{\circ}C^{+}85^{\circ}C$  Cycle Durability: 20,000cycles









## **Electrical Characteristic**

Rated Current : AC/DC 12V 2A Contact Resistance : 50mΩ MAX

Insulation Resistance:  $100M\Omega$  MIN

Dielectric Strength : 3mA (MAX) leakage

## **Mechanical Characteristics**

Pin Force : 1.08N ± 0.22N

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 1min.

#### **Other Characteristic**

Operational Durability: 20,000cycles

Low Temp. Durability: Store in temp.  $-40^{\circ}C \pm 3^{\circ}C$  for 96hours

then ,leaves in the ambient temperature. for 1hour.

High Temp. Durability: Store in temp.  $+85^{\circ}C \pm 2^{\circ}C$  for 96hours

then ,leaves in the ambient temperature. for 1hour.

Humidity Durability: Store in temp.  $+60^{\circ}C \pm 2^{\circ}C$  with humidity of

90~95% for 96hours, then leave in the ambient

temperature for 1hours.

Temp. Cycle Test: Cycle 5times (Table 1. shows test condition for

1cycle) Leave in the ambient temp. for 1hour.

Temp. And Humidity Cycle Test: Operate cycle test 10times.(Fig1)

Then leave in the ambient temp for 1hour.

The other issues are in conformity to 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°C temperature for 48hours, cleaning with lukewarm water and dry, and leaving in ambient temperature for 1hours.

**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: 490m/s<sup>2</sup>

\* 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.

**Temperature Cycle** Table 1.

Step	Temperature(°C)	Time(minites)
1	-40 ± 3	30 - 35
2	5 - 35	10 - 15
3	85 ± 2	30 - 35
4	5 - 35	10 - 15

Fig 1. Temp. and Humidity Cycle

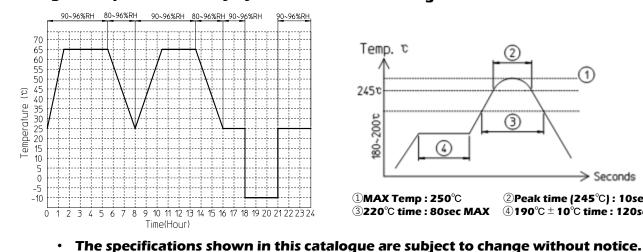
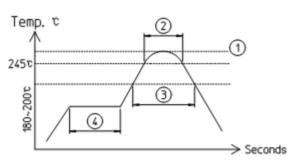


Fig 2. Reflow Profile



- **①MAX Temp: 250°**C
- **②Peak time (245°C): 10sec MAX**
- $3220^{\circ}$ C time: 80sec MAX  $4190^{\circ}$ C  $\pm 10^{\circ}$ C time: 120sec.  $\pm 30$ sec
- Storage conditions: 35days max in room temperature