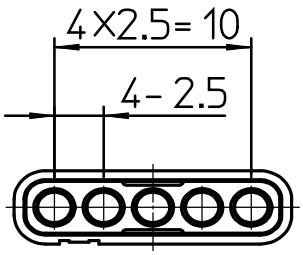
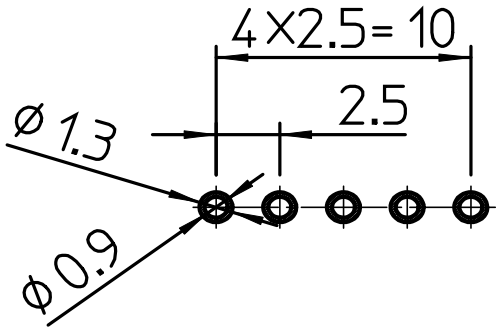
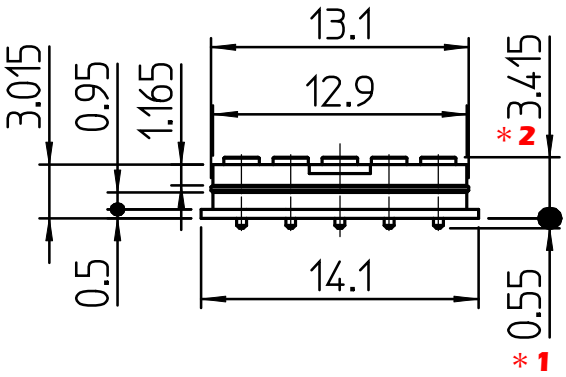
S Series: Waterproof Receptacle Connector [IPX7]

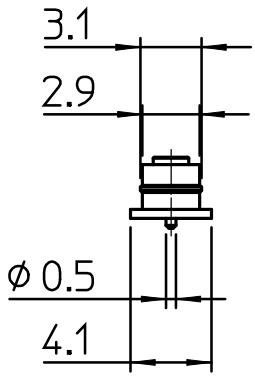
Basic Specifications

- Rated Current : 2A
- Rated Voltage : AC/DC12V
- Contact Resistance: 50mΩmax
- Operation Temp. : -40℃~+85℃
- Waterproof Rating: IPX7









- Part Number: S-J-2200X-5-25-0000 / S-J-2200XL-5-25-0000
  S-J-2200XL-5-25-0000: *1.1.8mm, *2. 3.015mm

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: 0.9N ± 0.2N / 1.08N ± 0.25N (See Above Table)
Pin Pulling Force : 4.9N force on a pin from axis direction for 1 min

Other Characteristic

Low Temp. Durability : Store in temp. -40℃ ± 3℃ for 96 hours
then ,leaves in ambient temp. for 1 hour

High Temp. Durability: Store in temp. +85℃ ± 2℃for 96 hours
then ,leaves in ambient temp. for 1 hour

Humidity Durability : Store in temp. +60℃ ± 2℃ with humidity of 90~95% for 96 hours

Temp. Cyclic Test : Cycle 5 times (Table1. shows test condition for 1cycle)
Leave in ambient temp. for 1 hour.

Temp. And Humidity Cyclic 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 ± 1% density and 35 ± 2℃ temp. for 48 hours, 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: 2hours for each of X,Y,Z axis

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

Waterproof Test (IPX7): After exposure in reflow(Refer to Fig2),set a connector with the testing fixture(Refer to Fig3) and submerge it in water at 1m depth for 30min.

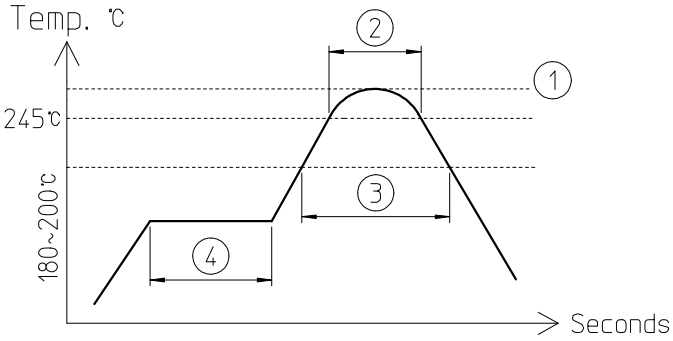
Table 1. Temperature Cycle

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

Fig 1. Temp. and Humidity Cycle



Fig 2. Reflow Profile



①MAX Temp.250℃ ②Peak time (245℃):10sec.MIN
③220℃ time:80sec. ④190℃ ± 10℃ time:120sec. ± 30sec.

Fig 3. Waterproof Fixture

