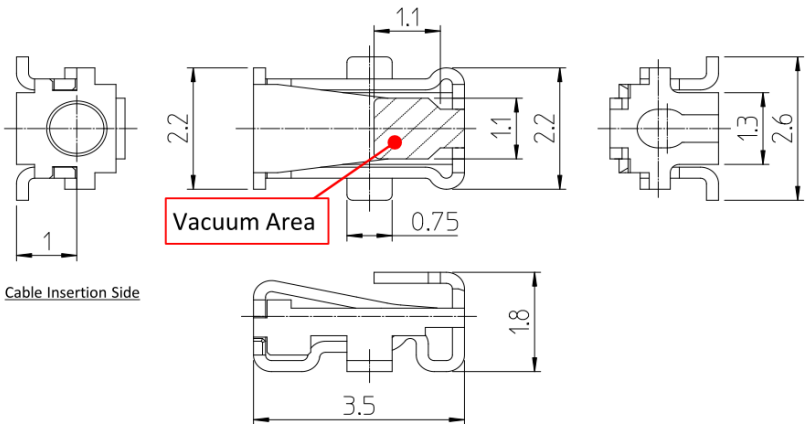
Yokowo SPRING LOADED CONNECTOR

Lead Socket_1Pin_SMD Vertical Series

~For single wire Terminal Only type~

Basic Specification

Part Number :	**LWS-2422P-1-00-0000**
Rated Current :	**AC/DC 4A**
Contact Resistance :	**30mΩMAX**
Operation Temp. :	**-40℃~+105℃**
Recommended Cable :	**Equivalent to AWG#22-#24 (Single wire or twisted wire)**



Electrical Characteristic

Rated Current :	**AC/DC 4A**
Contact Resistance :	**30mΩ (without cable conductor resistance)**

Mechanical Characteristics

Insertion Force :	**5.0N MAX**
Withdrawal force :	**0.1N MIN**

Other Characteristic

Operational Durability :	**insert and withdraw cable consecutively 5 times.**
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. +105℃ ± 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 be 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.**

Lead Socket_1Pin_SMD Vertical Series

~For single wire Terminal Only type~

Other Characteristic

Vibration Test :

Using recommended cable, 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 :

Using recommended cable, Connect each connector pin in series, conducting current of 0.1A.
After that , the shock described below is added.
* Accelerating rate: 490m/s2
* 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.

Solder Wettability :

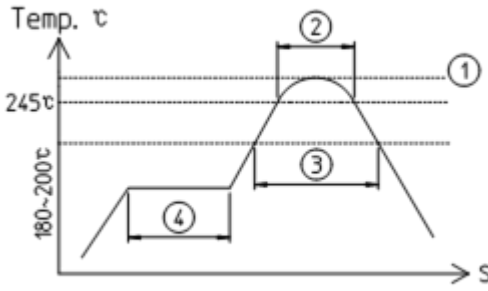
Dip a cable in the flux bath 5 to 10 seconds, Afterwards, dip a cable in the solder bath 3 seconds with the temperature of 245 ± 5℃ and measure.

Table 1. Temperature Cycle

Step	Temperature(℃)	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℃ ②Peak time (245℃):10sec.MAX
③220℃ time:80sec. ④190℃ ± 10℃ time:120sec. ± 30sec.

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

Lead Socket_1Pin_SMD Vertical Series

~For single wire Terminal Only type~

Handling Instructions

-1.Cable jacket peeling length
In order to properly insert the cable, cable jacket peeling length needs to be longer than this connector (about 3.5mm).
Recommended length is about 5mm.
Also, please avoid over bending while peeling off the tip of cable jacket.

-2.Insert cable
In order to securely connect cable with connector, core wire needs to pass all the way through the connector and is stuck out.
Otherwise, it may cause insufficient engagement which leads to discontinuity.
Also, please avoid insert the different size cables which is not listed.
It may also cause malfunction.
Please insert cable from proper direction and do not insert the cable from opposite direction.

-3.Cable withdrawal
When cable is withdrawn, please slowly pull it off horizontally.
Cable may deform if it is pulled off forcibly.
Rotating the cable may help withdraw the cable if it is tightly holded.

-4.Cable re-insertion
Please do not re-insert the same cable if it is withdraw.
Please use brand new cable or cut the portion where it is already peeled off and peel off the jacket properly once again.

-5.Cable retention after cable is inserted
After cable is inserted into the connector, please avoid putting any stress onto cable until cable is withdrawn(only if withdrawn is necessary).

-6.Cable AWG change
In case cable needs to be changed with different AWG size, please use brand new product.
If product is re-used, it may cause insufficient engagement or discontinuity.
Even if the core wire is the same, changing the wire type(single, overcoat twisted wire, number of wire, diameter of wire, material, etc) may also lead to the same result.

-7.Soldering
Please follow the recommended reflow condition.
Otherwise, it may lead to product malfunction or discontinuity caused by flux scattering around.

-8.Place of use
This product is intended to use inside of device for cabling, Please avoid expose this connector outside of device while it is used.

Lead Socket_1Pin_SMD Vertical Series

~For single wire Terminal Only type~

Handling Instructions

-9.Twisted wire(out of warranty)
Twisted wire is not intended to use.
In some cases, twisted wire can be used if core wire is dipped in the bath and pre-soldered.
If that is the case, please keep the core diameter within Φ0.5～Φ0.65mm range.

-10.Inset something other than cable(out of warranty)
Inserting something other than cable within Φ0.5～Φ0.65mm range is possible, but not intended and out of warranty.